East Sussex

Addressing the Health Effects and Impacts of Climate Change

Addressing Environment, Climate and Health
A Systemwide Health Impact Assessment for East Sussex (ECH-HIA)

Taking a Whole Systems Approach for Integrating and Advancing Population and Planetary Health in All of Our Approaches

Main Technical Report

Part 3C: Considerations, Opportunities and Actions Steps for Systemwide Sectors, Services and Stakeholders to Address the Health Effects of a Changing Climate



East Sussex
County Council

Contents

1. Explanation, Rationale and Principles for Formulation and Implementation of the Consideration and Opportunities for the whole of the East Sussex System 8

2. Introduction..... 10

3. Overview and Wider Context..... 11

4. Agriculture 14

High Level Strategic Opportunity: 14

Rationale: 14

Considerations, Opportunities and Action Steps 15

Context and impacts: 16

Current International and National Response(s): 20

Local East Sussex Response to Build From: 21

Gaps 23

Barriers..... 24

Tensions 25

Opportunities..... 26

5. Community Voluntary Sector (CVS) 27

High Level Strategic Opportunity: 27

Rationale: 27

Considerations, Opportunities and Action Steps 28

Context and impacts: 31

Current International and National Response(s): 33

Local East Sussex Response to Build From: 36

Gaps 40

Barriers..... 41

Tensions 41

Opportunities..... 42

6. Economic Development, Regeneration, Employment and Skills 43
High Level Strategic Opportunity: 43
Rationale: 44
Considerations, Opportunities and Action Steps 44
Context and impacts: 50
Current International and National Response(s): 51
Local East Sussex Response to Build From: 53
Gaps 56
Barriers 57
Tensions 57
Opportunities 58

7. Education 59
High Level Strategic Opportunity: 59
Rationale: 59
Considerations, Opportunities and Action Steps 60
Context and impacts: 63
Current International and National Response(s): 66
Local East Sussex Response to Build From: 68
Gaps 72
Barriers 73
Tensions 74
Opportunities 74

8. Environmental Services 76
High Level Strategic Opportunity: 76
Rationale: 76
Considerations, Opportunities and Action Steps 76
Context and impacts: 79
Current International and National Response(s): 83
Local East Sussex Response to Build From: 86

Gaps 87
Barriers 88
Tensions 88
Opportunities 89

9. Emergency Services 90
High Level Strategic Opportunity: 90
Rationale: 90
Considerations, Opportunities and Action Steps 91
Context and impacts: 95
Current International and National Response(s): 99
Local East Sussex Response to Build From: 102
Gaps 104
Barriers 105
Tensions 105
Opportunities 106

10. Health and Social Care (Adults and Children) 107
High Level Strategic Opportunity: 107
Rationale: 108
Considerations, Opportunities and Action Steps 110
Context and impacts: 118
Local East Sussex Response to Build From: 124
Gaps 126
Barriers 126
Tensions 127
Opportunities 127

11. Housing 129
High Level Strategic Opportunity: 129
Rationale: 129

Considerations, Opportunities and Action Steps 130
Context and impacts: 135
Current International and National Response(s): 138
Local East Sussex Response to Build From: 141
Gaps 142
Barriers 143
Tensions 143
Opportunities 144

12. Media 144
High Level Strategic Opportunity: 144
Rationale: 144
Considerations, Opportunities and Action Steps 145
Context and impacts: 148
Current International and National Response(s): 151
Local East Sussex Response to Build From: 154
Gaps 157
Barriers 158
Tensions 159
Opportunities 160

13. Members of the Public 161
High Level Strategic Opportunity: 161
Rationale: 161
Considerations, Opportunities and Action Steps 162
Context and impacts: 164
Current International and National Response(s): 165
Local East Sussex Response to Build From: 169
Gaps 172
Barriers 173
Tensions 174

Opportunities 174

14. Planning 176

High Level Strategic Opportunity: 176

Rationale: 176

Considerations, Opportunities and Action Steps 177

Context and impacts: 179

Current International and National Response(s): 181

Local East Sussex Response to Build From: 186

Gaps 187

Barriers 188

Tensions 188

Opportunities 189

15. Private Industry and Procurement 190

High Level Strategic Opportunity: 190

Rationale: 190

Considerations, Opportunities and Action Steps 191

Context and impacts: 194

Current International and National Response(s): 198

Local East Sussex Response to Build From: 202

Gaps 204

Barriers 204

Tensions 205

Opportunities 205

16. Transport 207

High Level Strategic Opportunity: 207

Rationale: 207

Considerations, Opportunities and Action Steps 208

Context and Impacts 212

Current International and National Response(s) 216
Local East Sussex Response to Build From: 220
Gaps 222
Barriers..... 223
Tensions 223
Opportunities..... 223

17. Utilities 225
High Level Strategic Opportunity: 225
Rationale: 225
Considerations, Opportunities and Action Steps 226
Context and Impacts: 232
Current International and National Response(s): 237
Local East Sussex Response to Build From: 239
Gaps 240
Barriers..... 240
Tensions 240
Opportunities..... 241

18. 3C Section Conclusion 242

1. Explanation, Rationale and Principles for Formulation and Implementation of the Consideration and Opportunities for the whole of the East Sussex System

The following **considerations, opportunities and action steps** have been co-developed by partners from across the East Sussex system, representing the wide range of organisations, services and sectors described in the Introduction (Part 1). Collectively, they reflect a shared ambition to strengthen climate resilience, improve population and planetary health, reduce inequalities and support sustainable development across the county.

The consideration, opportunities and action steps have been developed through an extensive programme of collaboration, evidence gathering and system-wide engagement, including:

- Individual climate and health conversations with organisations and sector representatives.
- A comprehensive review of policies, strategies and plans relating to environment, a changing climate and health across the East Sussex system.
- Three multi-agency systemwide workshops with most sectors and services.
- Wider stakeholder engagement and consultation activities.
- Multiple validation and refinement stages, during which considerations, opportunities and action steps were developed, challenged, reviewed, validated and revalidated by partners from across the East Sussex system.

This collaborative process has ensured that the considerations, opportunities and action steps reflect collective expertise, shared ownership and a common commitment to implementation. Rather than developing them solely within individual sectors, partners worked beyond their own organisational responsibilities to identify opportunities for collaboration, remove barriers, challenge assumptions and act as critical friends. This systems-based approach enabled participants to identify shared priorities, maximise co-benefits and developed considerations, opportunities and action steps that deliver value across multiple organisations and sectors.

The process of undertaking an **Environment, Climate and Health – A Systemwide Health Impact Assessment for East Sussex (ECH-HIA)** has encouraged partners to think beyond individual organisational priorities and consider how the wider East

Sussex system can work more effectively as a whole. It has helped identify gaps, barriers, tensions, dependencies and further opportunities that may not have been recognised through a single lens and single-organisation planning. This approach has worked to strengthen understanding of the interconnected relationships between a changing climate, health, inequalities, the environment and sustainable development.

Although the East Sussex County Council Public Health Team – Healthy Places Team facilitated and coordinated the development of this HIA and these opportunities, responsibility for their implementation rests collectively with all partner organisations. Delivery will be taken forward through **Phase 2 (2026–2030)**, with organisations adopting relevant action steps through their own governance arrangements and collectively through the **East Sussex Whole System Climate and Health Partnership**.

The considerations, opportunities and action steps have been intentionally developed to be ambitious whilst remaining grounded in practical implementation. They are designed not only to address current climate and health challenges, but also to articulate what should be made possible through long-term collaboration, innovation and systems leadership.

In developing these considerations, opportunities and action steps, partners sought to:

- Promote a positive, hopeful and solutions-focused narrative around climate and health.
- Balance ambition with realism, recognising financial, organisational and political constraints.
- Reflect emerging national, regional and local policy developments.
- Identify opportunities to influence policy and advocate for wider system change.
- Demonstrate the "art of the possible" by encouraging innovation and collaborative problem-solving.
- Align organisations around shared priorities, reducing duplication and maximising collective impact.
- Provide a confident and collective voice for partners committed to protecting health, reducing inequalities and strengthening resilience in response to a changing climate.

The considerations, opportunities and action steps presented within this report are intended to provide a strategic framework for action rather than a prescriptive implementation plan. During **Phase 2 (2026–2030)** they will be translated into organisation-specific delivery plans, including SMART objectives (Specific, Measurable, Achievable, Realistic and Time-bound) objectives, enabling partners to implement

actions in ways that reflect their individual responsibilities while contributing to the shared vision for a healthier, fairer, more resilient and climate-ready East Sussex.

2. Introduction

The following chapters apply the collaborative framework described above to each of the principal sectors, services and stakeholders identified through the East Sussex Environment, Climate and Health Impact Assessment (ECH-HIA). Together, they provide the evidence base for understanding how a changing climate is affecting population health today, how these risks are expected to evolve over coming decades, and where coordinated action across the East Sussex system can have the greatest impact.

The considerations, opportunities and action steps are organised by **sector, service and stakeholder** to provide practical entry points for implementation. The systemwide sectoral stakeholders are listed in alphabetical order for ease of navigation and are:

- Agriculture
- Community Voluntary Sector
- Economic Development, Regenerations, Employment and Skills
- Education
- Environmental Services
- Emergency Services
- Health and Social Care
- Housing
- Media
- Members of the Public
- Planning
- Private Industry and Procurement
- Transport
- Utilities

Arts and Culture as a sector is covered under the opportunities, considerations and action steps within Part 3B (addressing the Wider Determinants of Health) but also is relevant to this section. See Part 3B for details.

This section and its sub-sections follow a consistent structure to support both strategic decision-making and practical implementation.

To support interpretation and implementation, each sector follows a consistent structure comprising:

- **A High-Level Strategic Opportunity**, setting out the overarching ambition for the sector.
- **A Rationale**, explaining why the sector is important in addressing the health effects of a changing climate.
- **Considerations, Opportunities and Action Steps**, identifying practical measures to strengthen climate resilience, improve health and reduce inequalities.
- **Context and Health Impacts**, describing how a changing climate affects the sector and, in turn, population health.
- **International and National Responses**, summarising the wider policy context and emerging evidence.
- **The Current East Sussex Response**, highlighting existing strengths and activity that can be built upon.
- **Gaps, Barriers, Tensions and Opportunities**, identifying where further collaboration, system development and investment may be required.

Although each sector and or service is presented separately, they should not be considered in isolation. Sectors and services are highly interconnected, with many sharing common drivers, vulnerable populations, health outcomes and opportunities for intervention. For example, housing, planning and health. Recognising these interdependencies is fundamental to a systems-based approach, enabling partners to identify actions that deliver multiple health, environmental, social and economic co-benefits across the county.

Taken together, the chapters that follow provide both the strategic context and practical framework for strengthening climate resilience across East Sussex. They are intended to support informed decision-making, encourage collaboration across organisational boundaries and provide a shared evidence base for the development of coordinated local action throughout Phase 2 (2026–2030).

3. Overview and Wider Context

“You haven't got to sell it to us. I think we get it and my service will get it too. But it'd be interesting to see how that pans out elsewhere... I hope there's a willingness between different organisations to pull their own weight in this.” (East Sussex Stakeholder- Emergency Services).

A changing climate affects every part of society and, consequently, every sector has a role to play in protecting and improving health. While its impacts are often associated with health and care services, they are equally shaped by decisions relating to housing, transport, planning, economic development, education, agriculture, infrastructure, emergency planning, the natural environment, community development and many other sectors. Building climate resilience therefore requires a coordinated whole-system response that recognises the interconnected nature of health, the environment, society and the economy, and the shared responsibility of organisations across East Sussex.

This section and its sub-sections present the **sector-specific considerations, opportunities and action steps** developed through this systemwide HIA for East Sussex (ECH-HIA). Together they represent a shared ambition to strengthen climate resilience, improve population and planetary health, reduce health inequalities and support sustainable development across the county. They provide a strategic framework for action that enables organisations to understand both their individual contribution and their collective role in creating a healthier, fairer and more climate-resilient East Sussex.

The consideration, opportunities and action steps have been co-developed by partners from across the East Sussex system through an extensive programme of collaboration, evidence synthesis and stakeholder engagement. This has included individual climate and health conversations with organisations and sector representatives, comprehensive reviews of local, regional and national policies and strategies, three multi-agency systemwide workshops, wider stakeholder engagement and consultation activities, and multiple stages of technical review, challenge and validation. Throughout this process, partners acted not only as representatives of their own organisations but also as critical friends, working collectively to identify opportunities for collaboration, challenge assumptions, remove barriers, maximise co-benefits and strengthen system-wide responses. As a result, the recommendations reflect shared ownership, collective expertise and a common commitment to implementation.

Undertaking a Systemwide HIA has encouraged organisations to think beyond individual organisational priorities and consider how the East Sussex system can work more effectively as a whole. The process has strengthened understanding of the complex relationships between a changing climate, health, inequalities, the environment and sustainable development, whilst identifying gaps, interdependencies, opportunities and leverage points that may not have been recognised through single-organisation planning. In doing so, it has demonstrated the value of systems thinking in developing coordinated responses to complex challenges that no single organisation or sector can address independently.

Many organisations do not identify primarily as climate or health organisations, yet their decisions, investments and day-to-day activities have a significant influence on both. Presenting the consideration, opportunities and action steps in this way enables each organisation to identify how it can contribute through its existing responsibilities, assets, expertise and partnerships whilst supporting a shared system-wide ambition. Although the sectors are presented alphabetically to aid navigation, this does not indicate priority. Every sector contributes to climate resilience and population health, and meaningful progress will depend upon collaboration across organisational and professional boundaries.

The considerations, opportunities and action steps should not be viewed as isolated actions or immediate organisational obligations. They are intentionally ambitious whilst remaining grounded in practical implementation and are designed to support long-term system transformation between 2026 and 2080 and beyond. Many reflect opportunities to strengthen collaboration, align existing programmes, embed climate and health within current policy and practice, reduce duplication, remove barriers and influence future policy and investment, rather than requiring entirely new initiatives. They demonstrate the *art of the possible* by encouraging innovation, systems leadership and collaborative problem-solving whilst balancing ambition with the financial, organisational and political realities facing partners.

The considerations and opportunities are also intentionally cross-cutting and interdependent. Climate risks, health outcomes and the wider determinants of health are closely connected, meaning that progress within one sector frequently delivers benefits across many others. This interconnectedness should be viewed as a strength, creating opportunities for prevention, mitigation, adaptation, resilience-building and sustainable development whilst maximising health, environmental, social and economic co-benefits through coordinated action.

Although the East Sussex County Council Public Health Team has facilitated and coordinated the development of this Systemwide HIA, these recommendations are **owned by the East Sussex system** rather than by any single organisation. Responsibility for implementation rests collectively with partner organisations, each adopting the recommendations most relevant to their statutory responsibilities, assets and influence whilst contributing to the wider system ambition. Delivery will be supported through the **Mobilisation Phase (2026–2030)**, during which the recommendations will be prioritised and translated into organisation-specific SMART delivery plans, supported by agreed governance arrangements, lead organisations, performance measures and monitoring frameworks. Collectively, these arrangements will be overseen through the proposed **East Sussex Whole System Climate and Health Partnership**, helping to coordinate delivery, monitor progress and support continuous learning and adaptation as climate risks evolve.

This section demonstrates that addressing the health effects of a changing climate is not the responsibility of any single system, organisation or sector. Rather, it is a shared endeavour requiring collective leadership, partnership working and coordinated action across the whole system. By embedding health, equity, resilience and sustainability across all sectors, East Sussex has the opportunity to strengthen its ability to anticipate, prepare for and respond to a changing climate whilst creating healthier people, stronger communities, a more resilient economy and a thriving natural environment for current and future generations.

4. Agriculture

High Level Strategic Opportunity:

Advance a climate-resilient, adapted, and health-protective land use system by fostering cross-sector collaboration, supporting regenerative local food production, integrating multi-purpose and adaptive land management, and safeguarding communities from environmental and disease-related risks while strengthening ecosystem services.

Rationale:

Land use underpins environmental sustainability, food security, biodiversity, climate resilience and many of the wider determinants of health. Decisions about how land is managed influence exposure to climate-related hazards such as flooding, drought, heat, poor water quality, soil degradation, air pollution and emerging infectious and vector-borne diseases, while also affecting access to green space, local food production, ecosystem services and community wellbeing. A changing climate is placing increasing pressure on land resources, requiring integrated approaches that balance competing demands for housing, agriculture, nature recovery, infrastructure and economic development. Advancing a climate-resilient, adapted and health-protective land use system through cross-sector collaboration, regenerative land management, sustainable local food production, nature-based solutions and adaptive planning will help strengthen ecosystem resilience, reduce environmental and health risks, protect vulnerable communities, enhance biodiversity and natural capital, and deliver healthier, more resilient and sustainable places for current and future generations.

Considerations, Opportunities and Action Steps

Opportunity 1. Foster, Support and Encourage Systemwide Collaboration and Community Engagement

Action Steps:

- Foster **multi-agency collaboration** to promote awareness and education around sustainable agriculture.
- Support and advocate for **catchment partnerships and river trusts** to engage landowners in integrated land use.
- Encourage **community participation** through open farms, volunteer programmes, and innovation in local food systems.

Opportunity 2. Promote Adaptative Transition and Land Use Adaptation

Action steps:

- Where applicable, promote **multi-purpose land use** (e.g., combining solar energy with grazing or shade-tolerant crops).
- Implement **natural flood management** using underutilised land.
- Develop a **land use framework** to balance food production with ecosystem services like flood mitigation.

Opportunity 3. Support Local Food Systems and Regenerative Agriculture

Action Steps:

- Support **local food growing** through community farms, vertical farming, and partnerships with schools, businesses, and the third sector.
- Embrace **regenerative practices/agriculture**: where possible eliminate chemical fertilisers. Work alongside farmers and encourage the adoption of nutrient management plans and new technologies which improve precision applications of fertilisers.
- Prioritise soil health, use companion planting, and avoid food waste through surplus schemes.
- Innovate with ideas such as **“school farms”** and agroecology to build resilience and community connection to food.

Opportunity 4. Minimise and Prepare for Climate and Environmental Health Hazards

Action Steps:

- **Aeroallergens**: Choose crop types that minimise allergen exposure near residential areas.
- **Wildfire Risk**: Adapt land management with fire-resilient crops, hedgerows, forest gardens, and fire action plans.
- **Air Quality**: The use of red diesel is currently critical to the agriculture sector, but where possible alternative fuels should be explored and used as part of future efforts to phase out red diesel, increase hedgerows (via funded schemes) and trees to improve local air quality.

Opportunity 5. Include considerations for Vector-borne and Infectious Disease Control

Action Steps:

- Use **DEFRA environmental schemes** to reduce risk of disease outbreaks through land management.
- Protect biodiversity while avoiding habitats that promote disease vectors.

Context and impacts:

The agricultural sector is both highly vulnerable to a changing climate and critically important to population health. Agriculture underpins food production, rural employment, environmental management, biodiversity, landscape character and local economies. As a changing climate accelerates, the sector is experiencing increasing pressure from rising temperatures, changing rainfall patterns, extreme weather events, water scarcity, emerging pests and diseases, and environmental degradation.

Internationally, organisations such as the World Health Organization, Food and Agriculture Organization and Intergovernmental Panel on Climate Change recognise agriculture as one of the key pathways through which climate change affects human health. The relationship is complex because climate impacts on agriculture influence not only food availability but also nutrition, employment, mental wellbeing, community resilience, environmental quality and economic security.

Key Health Risks for the Agricultural Sector:

Climate Impact	Health Impact
Heatwaves	Heat stress, dehydration, reduced productivity
Flooding	Injury, mental health impacts, economic stress
Drought	Food insecurity, financial pressure, anxiety
Crop failure	Economic insecurity, stress, nutritional impacts
Biodiversity loss	Reduced environmental resilience and food system stability
Water scarcity	Public health risks and agricultural disruption
Changing pests and diseases	Increased production pressures and economic uncertainty
Landscape change	Loss of place, ecological grief, reduced wellbeing

A changing climate affects health through agriculture via five interconnected pathways: food security and nutrition; employment and livelihoods; environmental determinants of health; mental health and wellbeing; and community resilience.

Agriculture directly influences the **availability, quality and affordability of food**, as well as wider nutritional outcomes. Climate-related disruption to agricultural production can reduce the stability of local and national food supplies, affecting food security and dietary health. Agriculture is also an important source of **direct and seasonal employment**, supporting rural businesses and food supply chains. Climate pressures therefore threaten livelihoods, increase economic insecurity and have wider implications for health and wellbeing.

Agricultural land management plays a fundamental role in shaping the **environmental determinants of health**, influencing air quality, water quality, biodiversity, flood risk and access to green space. These factors have direct and indirect effects on physical and mental health. In addition, farming communities are often among the first to experience the impacts of a changing climate, creating significant emotional and psychological pressures. Agriculture also contributes to rural identity, community cohesion and local economic resilience, meaning that climate-related disruption can weaken these important protective factors.

Direct Health Impacts on Agricultural Workers

Agricultural workers are among the occupational groups most directly exposed to a changing climate. Increasing temperatures, heatwaves and humidity create significant risks of **heat exhaustion, heatstroke, dehydration, kidney stress, fatigue, reduced concentration and increased accident risk**, particularly during physically demanding outdoor work. These risks are especially relevant given the ageing agricultural workforce in many parts of the UK. Heat exposure can also reduce physical productivity, working hours and labour efficiency, creating additional economic pressures that may further affect health and wellbeing.

Workers are also increasingly exposed to storms, flooding, high winds, prolonged drought and wildfire risks. These hazards increase the likelihood of physical injury, occupational hazards, damage to equipment and infrastructure, and heightened stress and uncertainty. A changing climate may also worsen air quality through increased dust during droughts, higher pollen levels, wildfire smoke and airborne particulates, contributing to asthma exacerbations, respiratory illness and allergic reactions.

Mental Health Impacts on the Agricultural Sector

A changing climate is placing growing psychological pressures on farming communities. Increasing uncertainty relating to weather variability, future crop viability, water availability, market stability and regulatory change can contribute to anxiety, stress, depression and burnout. International evidence increasingly identifies a changing climate as a significant source of psychological distress within the agricultural sector.

Many farmers and land managers have strong cultural and emotional connections to the landscapes they manage. Climate-related biodiversity decline, landscape change, crop failure, tree loss and species decline can generate feelings of grief, loss and sadness, often described as **ecological grief** or **solastalgia**. These impacts are compounded by increasing production costs, insurance premiums, infrastructure repair costs and income uncertainty, with financial insecurity remaining a well-established determinant of poor mental health. Existing challenges associated with geographic isolation, limited access to services and reduced social opportunities within rural communities may further amplify these impacts.

Indirect Population Health Impacts

The health effects of a changing climate on agriculture extend beyond the farming sector. Reduced yields, supply chain disruption and rising food prices can increase food insecurity, reduce dietary quality and widen health inequalities, particularly among lower-income households, older people and families with children. Reduced availability of fresh fruit, vegetables and locally produced food may also contribute to obesity, cardiovascular disease and diabetes.

Agricultural systems are closely linked to water management, and a changing climate can increase soil erosion, nutrient runoff and water contamination, placing greater pressure on water resources and environmental health. At the same time, biodiversity loss—including pollinator decline, habitat loss and ecosystem disruption—threatens agricultural productivity, environmental resilience and long-term public health.

Agricultural land management also plays an important role in flood management. Climate adaptation measures such as **soil restoration, woodland creation and wetland restoration** can reduce both surface water and river flooding whilst delivering significant environmental and health co-benefits.

Economic and Community Impacts

Agriculture remains an important contributor to the economy of many rural communities. A changing climate may affect employment opportunities, business viability, workforce retention and future skills requirements, with economic insecurity itself representing a major determinant of health and wellbeing.

Conversely, adapting agriculture to a changing climate presents significant opportunities to develop **green jobs**, environmental land management, nature recovery, sustainable food production and climate resilience skills. These interventions can strengthen rural economies whilst simultaneously improving environmental quality, supporting healthier communities and increasing resilience.

Overall, there is growing recognition nationally and internationally that agriculture is both **highly vulnerable to a changing climate and central to the solution**. Building climate resilience within the agricultural sector offers opportunities to improve food security, protect livelihoods, strengthen environmental resilience, support rural economies and deliver substantial health, environmental and economic co-benefits. However, significant gaps, tensions and barriers remain in policy, investment and delivery, highlighting the need for a coordinated, whole-system approach.

Current International and National Response(s):

Internationally, there is growing recognition that a changing climate affects health through food systems, agriculture and rural communities. The World Health Organization identifies agriculture as a key pathway through which a changing climate impacts health, highlighting risks such as food insecurity, malnutrition, rising food prices, heat-related illness, mental health impacts, water insecurity and emerging diseases. In response, the WHO promotes climate-resilient health systems and food systems, alongside a **One Health** approach that recognises the interdependence of human, animal and environmental health.

The Food and Agriculture Organization has championed **Climate-Smart Agriculture**, focusing on helping farms adapt to drought, flooding and changing growing conditions while maintaining food security, supporting rural livelihoods and improving nutritional outcomes. Similarly, the Intergovernmental Panel on Climate Change argues that incremental adaptation will not be enough and calls for wider food system transformation through sustainable agriculture, regenerative farming, nature-based solutions, water resilience and landscape-scale adaptation.

Alongside these developments, there is increasing international attention on farmer wellbeing, climate anxiety and rural resilience, with countries such as Australia, Canada and New Zealand developing targeted programmes to support the mental health of farming communities affected by climate pressures.

National Response (England)

Nationally, agriculture is recognised as a priority sector within the UK's climate adaptation agenda. The National Adaptation Programme focuses on strengthening water security, soil health, flood resilience, biodiversity, food security and farm business resilience, reflecting the growing understanding that agricultural resilience is closely linked to public health and wellbeing.

A major policy shift has been the introduction of **Environmental Land Management (ELM)** schemes, which reward farmers for delivering environmental outcomes such as biodiversity recovery, improved water quality, carbon sequestration, soil restoration and natural flood management. These measures also provide wider public health benefits through cleaner environments, reduced flood risk and greater access to nature.

National food policy increasingly emphasises resilient and sustainable food systems, recognising a changing climate as a growing threat to food security and affordability. At the same time, the National Health Service is embedding sustainable food systems

into its Green Plan through sustainable procurement, local sourcing and improved nutritional outcomes.

Agriculture is also playing a growing role in nature recovery, catchment management and climate adaptation strategies, with increasing emphasis on multifunctional landscapes that deliver food production, biodiversity, environmental resilience and health benefits simultaneously. Supporting this transition is a growing focus on green skills and workforce development, including regenerative farming, environmental management, carbon accounting, water management and new technologies.

Emerging Themes

Across both international and national policy, a number of common themes are emerging. These include building resilient food systems, strengthening the links between food, nutrition and public health, using farming to support nature recovery and climate adaptation, improving farmer wellbeing and rural resilience, adopting One Health approaches, and developing the skills and workforce needed to support a climate-resilient agricultural sector. The overall direction of travel is towards viewing agriculture not simply as a food production sector, but as a critical component of health, environmental resilience, economic prosperity and climate adaptation.

Local East Sussex Response to Build From:

East Sussex does not currently have a dedicated a changing climate, agriculture and health strategy. However, many of the components of the national and international response are reflected across the county's economic, environmental, rural and climate policies. The response is largely delivered through partnership working between East Sussex County Council, the district and borough councils, the South Downs National Park Authority, farming and land management organisations, environmental partners and public health stakeholders.

Agriculture is recognised as an important part of the county's economy, natural environment and rural communities. The East Sussex Prosperity Strategy identifies a changing climate, environmental sustainability and adaptation as key drivers of economic change and highlights the importance of supporting rural businesses, developing green skills, strengthening resilience and protecting the county's natural capital. Within this context, agriculture is increasingly viewed as contributing not only to food production but also to biodiversity recovery, carbon reduction, water management and sustainable economic growth.

A significant part of the local response is linked to landscape-scale environmental management. The South Downs National Park and High Weald areas support initiatives

focused on nature recovery, regenerative land management, soil health, water conservation and biodiversity enhancement. These activities align with national Environmental Land Management schemes and contribute to wider public health objectives by improving environmental quality, reducing flood risk and enhancing access to nature.

The county is also increasingly engaged in food system resilience. Local food production, sustainable farming, shorter supply chains and support for rural enterprises are recognised as important for economic resilience and food security. This reflects growing concerns about the vulnerability of food systems to climate-related disruption and the implications for food affordability and healthy diets.

From a health perspective, the response is currently more indirect. Public health priorities around healthy weight, physical activity, mental wellbeing, social connectedness and reducing inequalities overlap with agricultural and environmental objectives, particularly through access to green space, nature recovery and rural wellbeing initiatives. However, there is currently limited explicit integration between climate adaptation, agricultural resilience and public health planning.

The response also includes growing recognition of the role of agriculture in delivering multiple benefits through natural flood management, catchment management and biodiversity recovery. These approaches seek to improve resilience to flooding and extreme weather while also supporting ecosystem health and community wellbeing.

There is increasing attention to workforce and skills development through the East Sussex Prosperity Strategy and wider economic development programmes. This includes support for green skills, environmental land management, sustainable farming practices and rural enterprise development, helping prepare the agricultural sector for future climate challenges.

Overall, East Sussex's response reflects many of the themes emerging internationally and nationally: strengthening agricultural resilience, supporting nature recovery, improving food system sustainability, developing green skills and promoting environmental stewardship. However, these activities are often delivered through separate economic, environmental and rural programmes rather than through a single integrated agriculture, climate and health framework.

Key Features of the East Sussex Response

The current response can be characterised by five interconnected priorities:

Building resilient rural economies through support for agriculture, land-based businesses and green growth.

Promoting sustainable land management through nature recovery, biodiversity enhancement, soil health and water management.

Strengthening climate adaptation and resilience through flood management, catchment approaches and environmental stewardship.

Supporting sustainable food systems and local food production as part of wider economic and community resilience.

Developing future skills and workforce capacity in sustainable farming, environmental management and the green economy.

Taken together, these actions position agriculture as an important contributor to East Sussex's wider ambitions around climate adaptation, environmental sustainability, economic prosperity and community wellbeing, even though the health impacts of a changing climate on agriculture are not yet addressed through a dedicated, integrated public health approach.

The agricultural sector should be viewed not only as vulnerable to a changing climate but as a critical component of East Sussex's climate-health response. A resilient agricultural sector supports:

- Food security
- Healthy diets
- Mental wellbeing
- Rural livelihoods
- Environmental quality
- Flood resilience
- Biodiversity recovery
- Community resilience

Protecting and supporting agriculture is therefore not simply an economic or environmental objective; it is a public health priority that contributes to the long-term health, wellbeing and resilience of communities across East Sussex.

Gaps

Despite increasing recognition that a changing climate affects health through food systems, agriculture and rural communities, significant gaps remain in how these issues are addressed locally. In East Sussex, agriculture is reflected across climate, environmental, economic and rural policies, but there is currently no single framework that explicitly connects agricultural resilience, climate adaptation and

public health outcomes. As a result, the health dimensions of climate impacts on farming communities and food systems can become fragmented across different policy areas, limiting opportunities for coordinated action.

There is also a notable gap in understanding the local health impacts of a changing climate on the agricultural sector. While international evidence highlights risks associated with heat exposure, mental health pressures, food insecurity, water scarcity and changing disease patterns, there is limited local data on how these issues are affecting farmers, agricultural workers and rural communities in East Sussex. This makes it more difficult to identify vulnerable groups, monitor emerging risks and prioritise interventions.

Farmer health and wellbeing represent another area where current responses remain relatively underdeveloped. Although climate anxiety, financial stress, ecological grief and social isolation are increasingly recognised internationally as important challenges for farming communities, these issues are not yet strongly embedded within local climate adaptation or public health planning. Similarly, while food security and sustainable food systems are increasingly recognised as important priorities, there is no overarching local strategy that fully links climate resilience, food production, nutritional outcomes, affordability and public health.

Workforce resilience also presents a gap. The agricultural sector faces an ageing workforce and increasing demands for new knowledge and skills relating to climate adaptation, water management, biodiversity enhancement and regenerative farming. While green skills development is receiving growing attention, there is still a need for a more coordinated approach to workforce planning, training and succession within the sector.

Barriers

A range of barriers may limit the agricultural sector's ability to adapt effectively to a changing climate. Economic barriers are among the most significant. Increasing costs associated with energy, inputs, insurance, infrastructure maintenance and climate-related damage can reduce the financial capacity of farms to invest in adaptation measures. Smaller farms may face particular difficulties in accessing the resources needed to implement resilience measures at scale.

Knowledge and skills barriers also remain important. Climate adaptation can involve complex changes to farming practices, land management approaches and business models. While awareness of climate risks is increasing, levels of confidence, technical knowledge and access to specialist advice vary across the sector. Ensuring that farmers have access to the information, training and support required to make informed decisions remains a continuing challenge.

Infrastructure constraints may further restrict resilience. Water storage capacity, irrigation systems, transport networks and digital connectivity all influence the ability of agricultural businesses to respond to changing climatic conditions. Existing infrastructure may not be designed for the increasing frequency and severity of extreme weather events, creating additional vulnerabilities.

Institutional barriers are equally important. Responsibilities for agriculture, climate adaptation, environmental management, economic development and public health often sit within different organisations and policy frameworks. This can lead to fragmented decision-making and reduce opportunities to address interconnected risks in a coordinated way.

Social factors can also act as barriers. Farming can be an isolated occupation, and many rural communities experience reduced access to services, support networks and healthcare. Stigma around seeking support for mental health challenges may further limit access to assistance for individuals experiencing stress, anxiety or burnout associated with climate-related pressures.

Tensions

Agriculture sits at the centre of several competing priorities, creating tensions that are likely to become more pronounced as climate impacts increase. One of the most significant tensions is the balance between food production and environmental recovery. Farmers are increasingly expected to contribute to biodiversity enhancement, carbon sequestration, woodland creation and natural flood management while continuing to maintain productive and economically viable farming businesses. Delivering multiple environmental outcomes from the same land can create difficult decisions regarding how land is managed and used.

There is also an ongoing tension between short-term economic pressures and long-term climate adaptation. Many of the actions required to increase resilience, such as improving soil health, investing in water storage, adopting regenerative farming practices or diversifying production systems, often require substantial up-front investment. For farm businesses already facing rising costs, fluctuating markets and uncertain returns, prioritising adaptation can be challenging despite the longer-term benefits.

Water is likely to become an increasingly important source of tension. A changing climate is expected to increase demand for water while simultaneously reducing availability during hotter and drier periods. This creates competing pressures between agricultural production, public water supplies, environmental protection and ecosystem restoration. Balancing these demands fairly and sustainably will become increasingly complex.

Another tension arises between the need for locally produced, environmentally sustainable food and the challenge of maintaining affordability. More resilient and sustainable farming systems can support climate adaptation and environmental goals, but they may also increase production costs. Ensuring that healthy and sustainable food remains affordable, particularly for lower-income households, will require careful consideration to avoid widening health inequalities.

Opportunities

Despite the challenges, there are substantial opportunities to strengthen resilience and improve health outcomes through the agricultural sector. One of the most significant opportunities is to recognise agriculture not only as an economic sector but also as a critical contributor to public health. A resilient agricultural sector supports access to nutritious food, protects rural livelihoods, strengthens community cohesion, enhances environmental quality and contributes to both physical and mental wellbeing.

East Sussex has an opportunity to develop a more integrated agriculture, climate and health approach that brings together public health, environmental management, rural development and food system planning. Such an approach could help maximise the co-benefits of adaptation measures while improving coordination across sectors and organisations.

The transition towards more resilient local food systems also presents significant opportunities. Strengthening local food production, supporting shorter supply chains and increasing food system resilience can contribute to improved food security, economic stability and healthier diets while reducing vulnerability to external disruptions.

Nature-based solutions offer another major opportunity. Agricultural land has the potential to play a central role in flood risk reduction, biodiversity recovery, soil restoration, water management and carbon sequestration. These interventions can deliver multiple benefits simultaneously, improving environmental resilience while also supporting community wellbeing and reducing health risks associated with a changing climate.

There is also growing potential to support farmer wellbeing more directly through targeted mental health initiatives, peer support networks, resilience programmes and advisory services focused on climate adaptation. International experience suggests that investing in wellbeing can strengthen both individual resilience and the long-term sustainability of farming businesses.

Finally, the transition to climate-resilient agriculture creates opportunities for economic growth and workforce development. Expanding green skills in areas such as

regenerative agriculture, water management, environmental monitoring, habitat restoration and carbon management can support employment, attract new entrants into the sector and help ensure that the agricultural workforce is equipped to respond to future climate challenges. Through these opportunities, agriculture can become a central component of East Sussex's wider climate adaptation, health improvement and sustainable development ambitions.

5. Community Voluntary Sector (CVS)

High Level Strategic Opportunity:

Empower and integrate the Community Voluntary Sector (CVS) as a central partner in countywide climate–health resilience by establishing a unified vision, building climate–health literacy, fostering grassroots ownership, embedding CVS into statutory systems, leveraging research and lived experience, strengthening emergency readiness, and supporting inclusive, peer-led, and youth-driven initiatives that reach all communities.

Rationale:

The Community and Voluntary Sector (CVS) plays a vital role in strengthening community resilience, reducing health inequalities and supporting people who are most vulnerable to the impacts of a changing climate. Through trusted relationships, local knowledge and strong community networks, CVS organisations are often best placed to engage underserved populations, respond rapidly during emergencies, provide peer support and address the wider social determinants of health. As climate-related risks become more frequent and complex, closer integration of the CVS within statutory planning, emergency preparedness and climate adaptation will strengthen local resilience, improve the reach and effectiveness of public services, and ensure that responses are informed by lived experience and community priorities. Building climate–health literacy, supporting grassroots leadership, empowering young people and fostering collaborative partnerships across sectors will help create more inclusive, equitable and resilient communities, enabling climate adaptation to deliver lasting improvements in health, wellbeing, social cohesion and environmental sustainability across East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1. Establish a Countywide 'Memorandum of Understanding' (MOU) for Community Voluntary Sector (CVS) Alignment which supports the creation of a unified, place-based vision for addressing the health effects of a changing climate across all community actors

Action Steps:

- Develop a shared commitment framework for CVS organizations to address climate-health challenges.
- Include principles on equity, inclusion, co-production, and recognition of community knowledge.
- Align charter with local climate resilience strategies, Sustainable Development Goals (SDGs), and NHS Greener Plans.

Opportunity 2. Provide Climate-Health Literacy and Training for CVS Staff and Volunteers which supports building capacity to act as local climate-health ambassadors

Action Steps:

- Offer modular training on heat health, air quality, mental health impacts, and food insecurity under climate stress.
- Embed cultural competence and trauma-informed approaches in training.
- Certify CVS groups as "climate-ready organizations" through micro-credential programs.
- Build a countywide knowledge commons - share toolkits, stories, events, and training

Partnership Opportunity: Co-design training with local health protection units and adult education services.

Opportunity 3. Foster grassroots ownership of climate-health action by co-developing Community Climate-Health Events and Participatory Projects

Action Steps:

- Host pop-up wellness and climate days, intergenerational green skills workshops, or eco-therapy sessions.
- Support citizen science projects (e.g., air quality mapping, community hydration audits).
- Provide microgrants for hyperlocal climate-health innovation (e.g., shade creation, community cooling networks).

Opportunity 4. Break silos and embed CVS into statutory climate-health systems by strengthening CVS-Public Sector Integration for Resilience Building

Action Steps:

- Formalize joint CVS–Council resilience task forces and planning groups.
- Establish shared funding streams (e.g., climate-health community innovation funds).
- Involve CVS in joint commissioning processes for health and climate co-benefit interventions.

Opportunity 5. Generate evidence and scale what works by partnering with Universities and Health/Planning Authorities on Research and Pilots

Action Steps:

- Co-design research on barriers and enablers to household climate-health resilience (e.g., air cooling access, flood anxiety).
- Implement community-led pilot projects—like walking audits for walkability in heat-affected neighbourhoods or "climate buddy" programs.
- Ensure open access publication of findings and feedback loops to communities.

Opportunity 6. Document and Share Community Insights on Climate Resilience Barriers and make use of lived experience as data for policy and design

Action Steps:

- Train CVS organizations in community-based participatory research and data collection.
- Use tools like resilience journaling, storytelling, and surveys to gather insights.
- Create a countywide dashboard or repository of climate-health lived experience to influence planning and funding.

Opportunity 7. Ensure inclusive and locally trusted response systems by involving CVS in Emergency Planning and Scenario Drills via the proper resourcing and the development of expertise in small community voluntary sector organisations

Action Steps:

- Include CVS reps in Local Resilience Forums and simulation exercises from the start.
- Co-develop climate-emergency protocols for vulnerable populations, including continuity of care.
- Fund CVS-led rapid response hubs for heatwaves, floods, and power outages.

Opportunity 8. Reach communities historically excluded from formal systems through Support Peer-Led Programs for Trust and Reach

Action Steps:

- Train peer facilitators in climate-health risk literacy and navigation.
- Support mutual aid networks for delivering cooling supplies, medications, or wellness checks during emergencies.
- Fund trusted community anchors (e.g., churches, food banks) to host resilience-building programs.

Opportunity 9. Encourage Youth Leadership through Climate-Health Networks to build the next generation of local climate-health stewards

Action Steps:

- Create Youth Action Network(s) for co-leading projects on green space access, air quality, and climate anxiety.
- Where possible, offer paid internships and ambassador roles in CVS and local climate-health programs.
- Support youth-led participatory budgeting for climate-health community improvements.

Monitoring, Investment and Partnership

Strategic Integration - CVS efforts should be embedded into:

- East Sussex Resilience Forum community response strategy
- Public Health and ICS community engagement plans
- Local Green Infrastructure and Food Strategies

Key Metrics:

- of volunteers trained in climate-health awareness
- % of alerts and messages disseminated via CVS channels
- of warm/cool spaces established
- of migrants supported through climate-health pathways
- Qualitative feedback from communities reached

Context and impacts:

The Community and Voluntary Sector (CVS) play a critical and increasingly recognised role in responding to the health effects of a changing climate. While much attention is often focused on the role of health services, local authorities and emergency responders, community and voluntary organisations are frequently the organisations closest to people and communities, particularly those experiencing vulnerability, disadvantage or social exclusion. Their ability to build trust, respond quickly to emerging needs and provide locally tailored support makes them an essential component of climate resilience and population health.

The CVS encompasses a diverse range of organisations including charities, voluntary groups, social enterprises, faith organisations, community associations and volunteer-

led initiatives. Collectively, these organisations contribute significantly to health improvement, social support, community development, social connectedness and the reduction of health inequalities. As a changing climate increasingly affects communities, the role of the sector is expanding beyond traditional service delivery towards climate adaptation, emergency response, resilience building and support for vulnerable populations.

A changing climate presents a wide range of direct and indirect health risks that are often experienced first at community level. Heatwaves, flooding, severe weather events, poor air quality, rising living costs, food insecurity and disruption to essential services all have implications for physical health, mental wellbeing and social resilience. These impacts are not distributed equally. Older people, people living alone, those with long-term health conditions, low-income households, disabled people, rural communities and socially isolated individuals are often disproportionately affected. Many of these groups are already supported by community and voluntary organisations, placing the sector at the forefront of identifying emerging needs and responding to climate-related challenges.

In practice, a changing climate is likely to increase demand for many services already provided by the sector. Heatwaves can increase the need for welfare checks, social contact and support for isolated residents. Flooding can result in displacement, housing insecurity, financial hardship and significant mental health impacts, creating demand for practical and emotional support. Rising energy costs and wider cost-of-living pressures associated with a changing climate can increase reliance on food banks, advice services and community support programmes. At the same time, extreme weather events may disrupt the ability of community organisations and volunteers to deliver services, creating additional challenges for the sector itself.

One of the most significant contributions of the CVS is its ability to reach populations that may have limited contact with statutory services. Community organisations often have established relationships with people who are socially isolated, culturally diverse, economically disadvantaged or distrustful of formal institutions. This makes them uniquely placed to support public health messaging, encourage behaviour change, identify vulnerability and provide targeted interventions during periods of increased climate risk. In many cases, they can access local knowledge and community intelligence that is unavailable through formal systems.

The sector also plays an increasingly important role in emergency preparedness, response and recovery. During flooding events, heatwaves, severe weather incidents and other emergencies, community organisations often provide welfare checks, practical support, emergency supplies, volunteer coordination and local communication. Their ability to mobilise quickly and respond flexibly allows them to

complement statutory emergency planning arrangements and provide support that is tailored to local circumstances.

A changing climate also has important implications for mental health and wellbeing, creating another area in which the CVS plays a vital role. Concerns about a changing climate, environmental degradation and future uncertainty are increasingly contributing to anxiety, stress and feelings of powerlessness. These impacts can be compounded by experiences of flooding, housing insecurity, social isolation and financial hardship. Community organisations help address these challenges through peer support networks, community activities, volunteering opportunities, social prescribing initiatives and nature-based interventions. Such activities can improve mental wellbeing while simultaneously strengthening resilience and social connectedness.

The importance of social capital and community resilience is increasingly recognised within climate adaptation policy. Research consistently shows that communities with strong social networks, high levels of trust and active community participation are better able to prepare for, respond to and recover from climate-related events. The Community and Voluntary Sector is central to building these forms of resilience. Through volunteering, community leadership, neighbourhood networks and local partnerships, the sector helps strengthen the relationships and support systems that protect health during times of disruption and uncertainty.

The sector also plays a critical role in addressing health inequalities. A changing climate acts as a threat multiplier, often worsening existing social, economic and health disadvantages. Community organisations frequently provide targeted support for those most affected by these inequalities, helping to reduce barriers to services, advocate for marginalised groups and ensure that vulnerable populations are not excluded from adaptation and resilience initiatives. In this way, the sector contributes not only to immediate support but also to broader goals around equity and social justice.

Current International and National Response(s):

Internationally, the role of civil society, community organisations and the voluntary sector in addressing the health effects of a changing climate has become increasingly recognised. Organisations such as the World Health Organization, United Nations Development Programme and United Nations Office for Disaster Risk Reduction increasingly emphasise that climate resilience cannot be delivered through governments and health systems alone. Communities themselves are recognised as critical assets in protecting health, reducing vulnerability and strengthening resilience.

A key theme emerging internationally is the importance of community resilience. Research consistently demonstrates that communities with strong social networks, trust, participation and local leadership are better able to prepare for, respond to and recover from climate-related events. Consequently, international climate adaptation policy increasingly focuses on strengthening social capital alongside physical infrastructure.

The WHO has highlighted the importance of community-centred approaches to climate adaptation, recognising that local organisations often have the strongest understanding of vulnerable populations and local risks. Community organisations are increasingly viewed as essential partners in delivering public health interventions, supporting mental wellbeing, addressing health inequalities and helping populations adapt to a changing climate.

Internationally there is also growing recognition of the relationship between a changing climate, social connectedness and mental health. Community organisations play a critical role in supporting people experiencing climate anxiety, ecological grief, isolation and distress following climate-related events. Nature-based activities, volunteering, peer support and community participation are increasingly recognised as important protective factors for health and wellbeing.

The international response increasingly aligns with concepts such as:

- Community-led adaptation.
- Climate justice.
- Health equity.
- Social resilience.
- Nature-based solutions.
- Community preparedness and disaster risk reduction.

There is also increasing emphasis on ensuring that vulnerable and marginalised communities are involved in climate decision-making rather than simply being recipients of support.

National Response (England)

Nationally, there has been growing recognition that the voluntary, community and social enterprise (VCSE) sector is a critical partner in both public health and climate adaptation.

Over the past decade, national policy has increasingly recognised the role of community organisations in:

- Addressing health inequalities.
- Supporting vulnerable populations.
- Strengthening community resilience.
- Delivering prevention and early intervention.
- Supporting emergency preparedness and recovery.

The experience of the COVID-19 pandemic reinforced the importance of community infrastructure, demonstrating how local organisations could rapidly identify vulnerable individuals, mobilise volunteers and provide support during periods of crisis. Many of the lessons from the pandemic are now being applied to climate resilience and adaptation.

The NHS, Integrated Care Systems (ICSs) and public health organisations increasingly recognise VCSE organisations as key partners in improving population health and reducing inequalities. National guidance on social prescribing, community-centred public health and prevention increasingly highlights the contribution of community organisations to health and wellbeing.

Climate adaptation policy is also beginning to recognise the importance of community resilience. The UK National Adaptation Programme identifies the need to strengthen local resilience, improve preparedness and support vulnerable populations. There is growing awareness that adaptation cannot rely solely on infrastructure and emergency services but must also build the social capacity of communities to respond to climate-related challenges.

A particular area of growth is the intersection between a changing climate, mental health and community wellbeing. Nationally there is increasing support for:

- Nature-based interventions.
- Social prescribing.
- Community wellbeing programmes.
- Volunteering and civic participation.
- Green social prescribing initiatives.

These approaches are recognised as delivering benefits for both health and environmental resilience.

Another important development is the growing recognition of the VCSE sector within emergency planning and resilience arrangements. Community organisations are increasingly involved in preparedness planning, local resilience forums, flood action groups, community emergency plans and support for vulnerable populations during extreme weather events.

Emerging Themes

Across both international and national policy, **four major themes** are emerging.

1. The first is a **shift from viewing communities as passive recipients of support towards recognising them as active contributors to resilience**. Local knowledge, social networks and community leadership are increasingly seen as assets rather than simply sources of need.
2. The second is growing recognition that **climate resilience depends as much on social infrastructure as physical infrastructure**. Strong relationships, trusted organisations, volunteers and community networks can be just as important as flood defences or emergency response systems in protecting health.
3. The third is increasing awareness that a changing climate will amplify existing inequalities. Community and voluntary organisations are therefore seen as essential partners in ensuring that adaptation efforts reach those most at risk.
4. The fourth is the growing integration of climate adaptation, mental wellbeing, social connectedness and community resilience. Increasingly, these issues are viewed as interconnected rather than separate policy agendas.

Overall Assessment

The international and national response increasingly recognises the Community and Voluntary Sector as a critical component of climate-health resilience. The sector's strengths lie in its trusted relationships, local knowledge, ability to reach vulnerable populations and capacity to strengthen social connectedness and community resilience.

The direction of travel is towards a more community-centred model of climate adaptation in which voluntary organisations are not viewed simply as service providers but as essential partners in protecting health, reducing inequalities and helping communities adapt to a changing climate. As climate impacts intensify, the importance of community resilience, social capital and local action is likely to become increasingly central to both public health and climate adaptation policy.

Local East Sussex Response to Build From:

The Community and Voluntary Sector (CVS) is increasingly recognised as a critical component of East Sussex's response to the health effects of a changing climate. Whilst much of the climate agenda has traditionally focused on infrastructure, environmental management, emergency planning and carbon reduction, there is growing recognition that community resilience, social connectedness and local support networks are equally important in protecting population health.

East Sussex benefits from a diverse and well-established voluntary and community sector comprising charities, community associations, social enterprises, faith organisations, volunteer groups, community hubs and infrastructure organisations. Collectively, these organisations support thousands of residents across the county and play a central role in addressing health inequalities, loneliness, poverty, food insecurity, mental health challenges, community wellbeing and social isolation. As a changing climate increasingly affects health, wellbeing and service demand, the role of the sector is becoming increasingly important.

A distinctive feature of the East Sussex response is the recognition that a changing climate will amplify many of the challenges that the sector already addresses. Heatwaves, flooding, coastal change, rising living costs, food insecurity, housing pressures and social isolation are all likely to increase demand for community-based support. Many of the groups most vulnerable to a changing climate are already supported by voluntary organisations, including older people, people with disabilities, carers, low-income households, rural communities, people with long-term conditions and those experiencing loneliness or social exclusion.

The sector therefore occupies a unique position within the local system. Community organisations often have long-standing relationships with residents and are frequently the first organisations to identify emerging needs, changing vulnerabilities and gaps in support. They provide an important bridge between statutory services and communities, particularly for people who may be less likely to engage with health, social care or local authority services.

A Critical Part of the Health and Resilience System

In East Sussex, the CVS increasingly contributes to climate-health resilience through a wide range of activities that support both individual wellbeing and community adaptation.

Many organisations already deliver services that indirectly help communities adapt to climate-related risks. These include welfare support, social prescribing, food programmes, community transport, advice services, energy support, befriending schemes, community development initiatives and activities that strengthen social connectedness.

Partnerships such as the Voluntary Action East Sussex, 3VA, local community networks, social prescribing programmes and voluntary sector forums provide important infrastructure that helps coordinate activity and connect communities with support.

The sector is also increasingly recognised within wider health and care partnerships. Through links with NHS Sussex, East Sussex County Council, Health and Wellbeing Boards, Adult Social Care, Public Health teams and community wellbeing programmes,

voluntary organisations contribute to prevention, early intervention and population health improvement.

Social Connectedness, Loneliness and Community Resilience

A particularly important aspect of the East Sussex response concerns social connectedness. East Sussex has already identified loneliness and social isolation as significant public health issues through programmes such as the Tackling Loneliness Project and wider community wellbeing initiatives.

A changing climate has the potential to increase social isolation through disruption to transport, reduced mobility during extreme weather, displacement following flooding and increased pressures on vulnerable households. Conversely, strong social networks are one of the most important protective factors during emergencies and periods of environmental stress.

The voluntary and community sector therefore contributes to climate adaptation by strengthening the social capital that enables communities to cope with and recover from shocks. Through volunteering, peer support, community activities, neighbourhood networks and local leadership, the sector helps build trust, resilience and collective capacity.

Mental Health and Wellbeing

There is also increasing recognition that a changing climate can affect mental health and wellbeing. Anxiety about a changing climate, uncertainty about the future, ecological grief, stress associated with flooding and financial pressures linked to climate impacts can all affect population wellbeing.

Many voluntary organisations already provide services that support mental health, emotional wellbeing and social inclusion. Community activities, peer support groups, arts and cultural programmes, nature-based activities and volunteering opportunities can help strengthen resilience and provide protective factors against climate-related mental health impacts.

The growth of social prescribing across East Sussex further highlights the importance of community organisations in supporting wellbeing through non-clinical interventions, including access to nature, community participation and social connection.

Community Intelligence and Local Knowledge

An increasingly important area of activity is the role of the CVS in providing local intelligence about climate-related vulnerability and resilience.

Community organisations often have detailed understanding of local circumstances and are able to identify emerging issues long before they appear in formal datasets. This includes understanding how rising living costs, poor housing, food insecurity, isolation and environmental changes are affecting residents.

There is growing interest in developing mechanisms that allow this local intelligence to inform wider planning across public health, social care, emergency planning, climate adaptation and environmental services. This could help create a more comprehensive understanding of vulnerability across East Sussex and improve the targeting of support.

Emergency Response and Preparedness

The sector also plays an important role in emergency preparedness and recovery. During flooding incidents, severe weather events and public health emergencies, voluntary organisations frequently provide practical support, volunteer mobilisation, welfare checks and assistance to vulnerable residents.

Through relationships with emergency planning teams, the Sussex Resilience Forum, local authorities and community resilience groups, voluntary organisations contribute to local preparedness and recovery arrangements. There is increasing recognition that community resilience should be viewed as a core component of climate adaptation rather than an optional addition to formal emergency planning.

Strategic Importance

The strategic implication for East Sussex is that the Community and Voluntary Sector should not be viewed solely as a delivery partner or provider of supplementary services. It is a critical component of the county's climate-health resilience infrastructure.

Through supporting vulnerable populations, strengthening social connectedness, reducing inequalities, improving mental wellbeing, building community resilience and providing local intelligence, the sector helps communities adapt to a changing climate and protect health and wellbeing. Many of the factors that make communities resilient to a changing climate — trust, participation, social networks, local leadership and community capacity — are areas where the voluntary sector already plays a leading role.

As climate impacts intensify, the role of the sector is likely to become even more important. Strengthening the capacity of community organisations, investing in voluntary sector infrastructure, improving links with statutory partners and embedding the sector more fully within climate adaptation, public health and

resilience planning will therefore be essential to developing a whole-system response to the health effects of a changing climate in East Sussex.

Ultimately, the Community and Voluntary Sector represents one of East Sussex's most important assets for climate adaptation. Its ability to reach vulnerable populations, understand local needs, build social resilience and support preventative approaches means it is uniquely positioned to help create healthier, more connected and more climate-resilient communities.

Gaps

A significant gap within East Sussex is that the Community and Voluntary Sector (CVS) is not yet consistently recognised as part of the county's climate adaptation and health resilience infrastructure. Whilst community organisations are heavily involved in supporting vulnerable residents, reducing isolation, addressing poverty and responding to crises, their contribution to climate adaptation is often implicit rather than formally acknowledged within climate, health and resilience planning.

There is also a gap in climate-health awareness and capability across the sector. Many organisations are already responding to the consequences of a changing climate through their work on food insecurity, fuel poverty, mental health, social isolation and emergency support, but do not necessarily identify this activity as climate-related. As a result, opportunities to connect local community action with wider climate adaptation objectives can be missed.

Another important gap concerns intelligence and evidence. Community organisations often have valuable insights into emerging vulnerabilities and local impacts, yet there are limited mechanisms for systematically capturing and integrating this knowledge into strategic planning. The sector frequently sees the effects of a changing climate on individuals and communities before they become visible in official datasets.

There is also limited integration between climate adaptation, community resilience and public health. Although there are strong partnerships around health and wellbeing, a changing climate is not yet consistently embedded within community development, social prescribing, loneliness strategies, voluntary sector commissioning or wider prevention programmes.

Finally, there is a gap in long-term resilience planning. Many community organisations are focused on responding to immediate pressures such as demand for food banks, welfare advice, mental health support and social care pressures. There is less capacity to plan for future climate-related risks such as overheating, displacement, flooding, changing population needs or increased demand during climate-related emergencies.

Barriers

Funding remains one of the most significant barriers. Many voluntary and community organisations operate with limited financial security, short-term grants and increasing demand for services. This restricts their ability to invest in climate adaptation, workforce development, training and resilience planning.

Workforce and volunteer capacity also present challenges. Many organisations rely heavily on volunteers and small staff teams. Climate-related events themselves may affect the availability of volunteers, particularly older volunteers who form a significant part of the voluntary sector workforce.

Another barrier is the lack of climate-health literacy across parts of the sector. Whilst awareness is increasing, many organisations would benefit from practical guidance, training and tools that help them understand how a changing climate may affect the communities they serve and how they can contribute to adaptation efforts.

Fragmented data and information-sharing systems can also limit effectiveness. Community organisations often hold valuable intelligence about vulnerable populations and emerging needs, but this information is not always shared effectively across sectors.

Finally, there is a risk that a changing climate is viewed as an environmental issue rather than a community wellbeing issue. This can result in climate adaptation being perceived as outside the remit of many voluntary organisations, despite the fact that much of their work already contributes to resilience and adaptation.

Tensions

One of the main tensions is between responding to immediate need and investing in long-term resilience. Community organisations are often dealing with rising demand linked to poverty, housing pressures, mental health needs and social isolation. This can make it difficult to prioritise climate adaptation activities when urgent needs require immediate attention.

There is also a tension between local flexibility and strategic coordination. One of the strengths of the voluntary sector is its ability to respond to local circumstances and emerging needs. However, this flexibility can sometimes sit uneasily alongside more structured approaches to climate adaptation, resilience planning and system-wide coordination.

Another tension exists between community-led approaches and formal systems. Community organisations often work at a pace and scale that differs from statutory organisations. Whilst communities can mobilise quickly and build trusted

relationships, formal governance and commissioning arrangements can sometimes limit flexibility and innovation.

There is also a tension around expectations. Increasingly, the voluntary sector is being recognised as a key partner in resilience and adaptation, yet many organisations remain under-resourced. Expectations of what the sector can deliver may grow faster than the resources available to support it.

Opportunities

The greatest opportunity is to formally recognise the Community and Voluntary Sector as a core component of East Sussex's climate-health resilience system. The sector's strengths in prevention, community engagement, trust-building and supporting vulnerable populations align closely with the objectives of climate adaptation and public health.

There is substantial opportunity to build climate resilience into existing programmes rather than creating entirely new initiatives. Activities focused on loneliness, social isolation, social prescribing, food insecurity, community transport, volunteering, mental wellbeing and community development all contribute to climate resilience and could be strengthened through a climate-health lens.

The sector also provides an opportunity to improve understanding of local vulnerability. Community organisations possess extensive knowledge about how climate-related risks interact with poverty, housing, disability, ageing and social isolation. Better mechanisms for capturing and using this intelligence could significantly strengthen local adaptation planning.

Social prescribing represents another major opportunity. East Sussex already has strong social prescribing networks that connect people with community activities, nature-based interventions, volunteering and peer support. These programmes can simultaneously improve health, strengthen social connectedness and increase resilience to climate-related stressors.

There is also considerable potential to expand the role of community organisations in emergency preparedness and resilience. Community resilience groups, local networks, volunteers and neighbourhood organisations could play a larger role in supporting vulnerable residents during heatwaves, flooding and other climate-related events.

Nature-based activities, community growing projects, green social prescribing, arts and culture programmes and local environmental initiatives also offer opportunities to address climate anxiety, improve mental wellbeing and strengthen community engagement with climate adaptation.

The greatest strategic opportunity is to move beyond viewing the Community and Voluntary Sector as a delivery partner and instead recognise it as essential climate-health infrastructure.

East Sussex already has many of the foundations required for this approach, including strong voluntary sector infrastructure, established health and wellbeing partnerships, social prescribing networks, community resilience programmes and active community organisations. By embedding climate considerations within these existing structures, strengthening collaboration between statutory and community partners, and investing in community capacity, East Sussex could develop a more preventative, equitable and community-led approach to climate adaptation.

In practice, this would mean recognising that resilience is not built solely through flood defences, infrastructure and emergency plans, but also through strong communities, trusted relationships, social connectedness and local organisations that help people cope with change. The Community and Voluntary Sector is therefore not simply part of the response to a changing climate—it is one of the county's most important assets for protecting health and wellbeing in a changing climate.

Finally, the voluntary sector is uniquely placed to help ensure that climate adaptation is equitable. Because community organisations often work with those most vulnerable to a changing climate, they can help ensure that adaptation efforts are informed by lived experience and reach populations who may otherwise be overlooked.

6. Economic Development, Regeneration, Employment and Skills

High Level Strategic Opportunity:

Transform East Sussex into a climate-resilient, low-carbon and inclusive economy by embedding health, climate and sustainability across economic development, regeneration and investment. Integrate climate risk into economic planning, safeguard vulnerable sectors, jobs and infrastructure, strengthen food, energy and resource security, foster green innovation and skills, and co-design healthy, resilient places. Align public and private investment around shared health, environmental and economic outcomes to drive adapting infrastructure, reduce inequalities, strengthen local resilience and support sustainable prosperity.

Rationale:

A changing climate presents increasing risks to East Sussex's economy, workforce, infrastructure and communities through extreme weather, flooding, overheating, supply chain disruption, rising energy costs and impacts on agriculture, tourism and other climate-sensitive sectors. At the same time, the transition to a low-carbon, climate-resilient economy offers significant opportunities to improve population health, reduce inequalities and stimulate sustainable economic growth. Embedding health, climate resilience and sustainability within economic development, regeneration and investment will help protect businesses and livelihoods, strengthen critical infrastructure and resource security, develop future workforce skills and support green innovation. Aligning public and private investment around shared health, environmental and economic outcomes will maximise co-benefits, reduce long-term costs, enhance community resilience and create healthier, more prosperous and sustainable places for current and future generations.

Considerations, Opportunities and Action Steps

Opportunity 1. Mainstream climate risk into local economic development strategies and develop Climate-Resilient Economic Planning Frameworks

Action Steps:

- Conduct Local Climate-Economic Risk Assessments (LCERA) integrating physical (e.g., floods) and transition risks (e.g., carbon pricing).
- Embed climate scenario analysis into local authority budget and infrastructure forecasting (e.g., +2°C, +4°C world).
- Create climate-adjusted Gross Local Product (GLP) metrics to evaluate economic health and resilience.
- Align Local Plans and Investment Zones with **Adaptation & Just Transition principles**.
- Develop **performance indicators** linking economic growth to health equity and sustainability outcomes.

Opportunity 2. Climate-Proof Critical Local Sectors and Safeguard industries and jobs most vulnerable to climate impacts

Action Steps:

- Identify and support **climate-sensitive sectors** (e.g., tourism, agriculture, construction, fisheries for example) through targeted resilience strategies.
- Offer **transition grants and retraining** for workers in high-risk sectors (e.g., coastal tourism after sea-level rise).
- Promote **economic diversification** into climate-aligned sectors (e.g., renewable energy, circular economy, green building).

Opportunity 3. Deliver Regeneration that Accelerates Adaptation for Infrastructure

Action Steps:

- Use town centre renewal and housing retrofits to:
- Create cooling corridors (urban greening, vegetation and treescapes providing shade and materials that are reflective of heat) and shaded active travel routes as outlined in the East Sussex Local Transport Plan for example.
- Reduce building emissions and fuel poverty.
- Require developers to integrate:
- Urban greening, heat adaptation, and SuDS in regeneration designs.
- Channel funding into **green job pipelines**, especially in retrofit, renewables, and resilience services. This requires the need to develop a pipeline of project proposals that can be considered as and when funding opportunities arise, namely from national government and via the new mayoral strategic combined authority. This is especially in relation to retrofit renewables and resilience services.

Opportunity 4. Foster Green Innovation and Enterprise

Action Steps:

- Launch climate-health innovation zones in partnership with:
- Local universities
- Local businesses
- Voluntary and Community Sector (VCSE)

(There is an action around the need to understand more about what the 'climate-health innovation zones' would look like, how they would function and their overall purpose and outcomes.)

- Offer grants or shared workspaces to **SMEs and social enterprises** delivering:
- Nature-based solutions
- Low-carbon products
- Circular economy services

Opportunity 5. Localise and Adapt Economic Systems

Action Steps:

- Explore opportunities to build **resilient local food economies**:
- Identify and explore investment opportunities in urban farming, seasonal food markets, and cooperative/sustainable distribution.
- Use public sector procurement to:
- Where possible support local green suppliers and low-carbon logistics.
- Create climate-resilient business districts with:
- Flood protections
- Passive cooling
- Backup energy and water

Opportunity 6. Plan Inclusive, Future-Proofed Regeneration Via the design of Economic and Sustainable Places that reduce Climate-Health Risks

Action Steps:

- Integrate **overheating prevention**, clean air, and water security into places.
- Plan for:
- Tree cover targets
- Green roofs and façades
- Access to shaded public spaces
- Use of materials in infrastructure design which are reflective of heat

Embed integrated sustainable travel infrastructure and services to reduce vehicle congestion and air pollution in line with the ambitions of the East Sussex Local Transport Plan.

Opportunity 7. Regeneration should be used to strengthen both climate resilience and population health by embedding inclusive, community-led design and responding to future demographic, environmental and health needs.

Action Steps:

- Co-design developments with residents from the outset, especially:
- Older adults
- Young people
- Climate-vulnerable groups
- Use regeneration to:
- Expand access to nature, housing, mobility, and care infrastructure.
- Reflect population ageing, migration, and health inequalities.
- Include **resilience hubs** in new builds (e.g. multipurpose community spaces with cooling, internet, medical access).

Opportunity 8. Implement Key Implementation Priorities for East Sussex

Action Steps:

- Align **Partnerships, Integrated Care System, and Planning Teams** with a shared framework for climate-health inclusive regeneration.
- Embed these criteria in:
- Coastal regeneration
- Town centre renewal
- Develop and track progress using a **climate-health-economic dashboard** shared across sectors.

Opportunity 9. Guide public and private investment toward a climate-smart local economy

Action Steps:

- Explore Green and Just Transition Local Investment Toolkits
- Launch Municipal Green Transition Bonds for funding low-carbon infrastructure and nature-based solutions.

Example: Green Finance Institute

Opportunity 10. Strengthen Sustainable Local Food & Resource Economies

Action Steps:

- Strengthen food, water, and resource self-reliance amid climate shocks
- Support **climate-smart agriculture** (e.g., drought-resistant crops, agroecology) and **short food supply chains**.
- Promote **circular economy models** for water, energy, and materials at the local level.
- Build **urban-rural linkages** to increase access to resilient food systems and green jobs.

Example: Milan Urban Food Policy Pact supports climate-resilient, low-carbon local food systems.

Opportunity 11. Reduce economic dependence on fossil energy and increase energy sovereignty through localized Renewable Energy Transition Plans

Action Steps:

- Incentivize installation of **microgrids**, **solar rooftops**, and **battery storage** with local labour.
- Use **carbon revenue-sharing schemes** to support vulnerable households and small businesses.

Opportunity 12. Future-proof the local workforce for climate-aligned economic shifts via a Climate-Adaptive Workforce and Skills Strategy

Action Steps:

- Conduct a **Climate Skills Gap Audit** at the local level.
- Create **vocational training programs** in areas like climate risk assessment, retrofitting, nature restoration, and disaster recovery.
- Build **apprenticeship pathways** for green careers in vulnerable neighbourhoods.
- Work with educational settings to increase education, training and work experience to deliver energy efficiency and retrofit in homes.

Example: Glasgow's Green Jobs Workforce Academy aligns training with net-zero targets and community needs.

Opportunity 13. Prevent climate disruptions from halting local commerce through a Resilient Infrastructure for Economic Continuity

Action Steps:

- Climate-proof transportation, logistics, and energy infrastructure essential for business continuity.
- Build **redundant systems** (e.g., backup power, alternative supply chains) for high-risk business zones.
- Incentivize **multi-use public infrastructure** (e.g., schools as storm shelters, markets as food hubs).

Example: Japan's compact city model enables economic continuity after earthquakes and typhoons.

Opportunity 14. Ensure inclusive economic resilience and empowerment via Social Enterprises and Community Wealth Models

Action Steps:

- Support community land trusts, cooperatives, and mutual aid groups as engines of resilient local wealth.
- Fund **climate services entrepreneurship** (e.g., local retrofit crews, neighbourhood cooling services).
- Protect **informal economies** through climate-adapted infrastructure and microfinance.

Opportunity 15. Enable evidence-based local economic resilience via Data and Digital Infrastructure for Resilient Decision-Making

Action Steps:

- Build **local climate-economic intelligence platforms** combining geospatial, economic, and environmental data.
- Develop and use **digital twin models** to simulate economic disruption from climate shocks (e.g., flooding, heat stress).

- Launch **open-data partnerships** for business, academia, and civil society to co-create adaptive solutions.

Example: Helsinki's Climate Watch platform integrates economic and environmental decision-making tools.

Context and impacts:

Economic development, regeneration, employment and skills are fundamental determinants of population health and wellbeing. They influence income, financial security, housing, education, investment, infrastructure, skills and access to opportunities, shaping the conditions in which people live and work. As a result, decisions relating to economic growth and regeneration have significant implications for health, health inequalities and climate resilience.

A changing climate is increasingly reshaping local economies. Rising temperatures, flooding, coastal change, extreme weather, water scarcity and biodiversity loss are placing growing pressure on businesses, infrastructure, tourism, agriculture, transport and public services. These impacts can disrupt economic activity, increase operating costs, damage infrastructure and reduce productivity, while rising energy prices and the costs associated with climate adaptation place additional financial pressures on households, businesses and local authorities. People on lower incomes are often least able to absorb these financial shocks, increasing their vulnerability to poorer physical and mental health and widening existing inequalities.

Employment is itself a key determinant of health, providing financial security, social connection, purpose and opportunities for personal development. However, a changing climate is transforming labour markets, creating both risks and opportunities. Workers in climate-sensitive sectors—including agriculture, construction, transport, tourism, emergency services and other outdoor occupations—are likely to experience increasing exposure to heat, flooding, severe weather and poor air quality, with implications for health, safety and productivity. At the same time, the transition to a low-carbon and climate-resilient economy is expected to create new employment opportunities across renewable energy, sustainable transport, retrofit programmes, environmental management, green infrastructure, nature recovery and climate adaptation services.

Regeneration programmes provide an important opportunity to embed health and climate resilience into the future development of East Sussex. Investment in climate-resilient infrastructure, healthy neighbourhoods, active travel, energy-efficient housing, sustainable town centres and green infrastructure can stimulate economic growth while delivering significant health co-benefits. Such investment can improve

air quality, reduce fuel poverty, encourage physical activity, enhance mental wellbeing and strengthen community resilience, whilst helping to avoid the long-term costs associated with climate-related illness, infrastructure damage and service disruption.

Realising these opportunities will require continued investment in skills, education and workforce development. Climate literacy, environmental awareness and practical adaptation skills will become increasingly important for individuals, employers and communities. Supporting equitable access to green skills, training and lifelong learning will help residents benefit from emerging employment opportunities, strengthen local workforce resilience and ensure that the economic and health benefits of the transition to a greener economy are shared fairly across all communities.

For East Sussex, economic development and regeneration should therefore be viewed as more than drivers of economic growth. They are powerful mechanisms for improving health, reducing inequalities and strengthening resilience. Embedding Health, Environment and Climate in All Approaches within economic development strategies will help ensure that future investment supports sustainable prosperity, healthier communities and a local economy that is better prepared to adapt to the challenges and opportunities of a changing climate.

Current International and National Response(s):

Internationally and across the UK, there is growing recognition that responding to the health effects of a changing climate is not solely an environmental or public health priority, but also an economic development imperative. A changing climate is increasingly recognised as affecting economic productivity, labour markets, workforce wellbeing and long-term prosperity through its impacts on heat, flooding, poor air quality, food insecurity, infectious diseases, mental health and disruption to infrastructure and essential services. Consequently, climate adaptation is no longer viewed simply as an environmental responsibility, but as an investment in economic resilience, workforce health and sustainable prosperity.

International organisations, including the **Organisation for Economic Co-operation and Development (OECD)**, the **World Health Organization (WHO)** and the **United Nations (UN)**, increasingly emphasise that resilient economies depend upon healthy populations, adaptable workforces and sustained investment in prevention. The OECD identifies climate change as already reducing labour productivity through heat stress, increasing occupational health risks, altering employment patterns and accelerating demand for new skills. In response, countries are investing in workforce adaptability,

lifelong learning and the development of green, digital, adaptation and resilience skills to ensure economies remain competitive in a changing climate.

Employment is also increasingly recognised as a public health intervention. Secure, meaningful employment improves income, wellbeing and social inclusion while reducing many of the wider determinants of poor health. Accordingly, the transition to a low-carbon economy is viewed as an opportunity to improve both population health and economic resilience through the creation of high-quality employment in renewable energy, sustainable construction, retrofit, environmental management, green infrastructure, nature recovery, sustainable transport and climate adaptation. At the same time, greater attention is being given to protecting workers employed in climate-sensitive sectors—including agriculture, construction, transport, tourism and emergency services—from increasing occupational risks associated with heat, flooding and extreme weather.

These priorities are reflected in UK policy, which anticipates substantial growth in demand for workers capable of delivering home energy improvements, flood resilience, heat adaptation, renewable energy and nature-based solutions. This has accelerated investment in green apprenticeships, technical education, retrofit programmes and workforce development, alongside growing recognition of the importance of climate literacy, environmental awareness and health resilience across the wider workforce.

Increasingly, international and national policy recognises that healthy populations underpin resilient economies. This principle is reflected within the United Nations Sustainable Development Goals, where Good Health and Wellbeing (SDG 3), Decent Work and Economic Growth (SDG 8) and Climate Action (SDG 13) are recognised as mutually reinforcing. Rather than pursuing environmental, health and economic objectives separately, governments are increasingly promoting interventions that deliver multiple co-benefits. For example, investment in active travel, green infrastructure, cleaner air, energy-efficient housing and nature-based solutions simultaneously reduces greenhouse gas emissions, improves physical and mental health, lowers healthcare costs, reduces fuel poverty, increases workforce productivity and strengthens local economies.

Collectively, this reflects an important shift in policy thinking. Climate adaptation is increasingly viewed as an economic strategy; green jobs are recognised as public health interventions; workforce transformation and green skills are seen as essential components of climate resilience; and investment in prevention is recognised as delivering long-term environmental, health and economic returns.

For East Sussex, these developments reinforce the importance of embedding climate resilience, health improvement and sustainable economic development within regeneration, employment and skills strategies. Investing in a healthy, skilled and

climate-resilient workforce will not only support adaptation to future climate risks but also strengthen economic productivity, reduce health inequalities and improve the long-term resilience of communities, businesses and public services.

Local East Sussex Response to Build From:

Economic development and regeneration can be powerful levers for improving public health, advancing climate resilience, and driving inclusive prosperity. East Sussex partners emphasise the need to embed adaptation infrastructure, health, and equity objectives into all economic growth strategies, while maximising innovation, skills development, and sustainable infrastructure. Economic development and regeneration should:

- Act as climate-health interventions
- Drive low-carbon innovation and employment
- Improve wellbeing and resilience in underserved communities
- Deliver benefits equitably across generations

The county's long-term economic vision is for East Sussex to be:

"*a place where people live and work well*" with well-paid jobs, thriving businesses and high quality of life in an outstanding natural environment as set out in the East Sussex Economic Prosperity Strategy.

Importantly, the strategy identifies adaptation to a changing climate and the transition to adaptation as one of the major economic transformations that will shape East Sussex through to 2050. Rather than viewing a changing climate purely as an environmental issue, it is treated as a driver of economic restructuring, workforce development and innovation.

East Sussex's economic response focuses on creating a more resilient economy that can adapt to climate-related risks while improving health and wellbeing.

Key priorities include:

- Supporting businesses to adapt to a changing climate.
- Promoting adaptive economic growth.
- Encouraging innovation and low-carbon industries.
- Developing circular economy approaches.
- Attracting responsible investment.
- Protecting and enhancing environmental assets that underpin tourism, wellbeing and quality of life.

This is directly relevant to health because climate-related impacts such as heatwaves, flooding, fuel poverty and poor air quality create costs for businesses, workers, communities and health services.

The strategy therefore positions climate adaptation as part of long-term economic resilience rather than solely environmental protection.

The Prosperity Strategy recognises several workforce challenges that intersect with climate and health:

- An ageing population.
- Labour shortages.
- Retaining young people.
- Workforce productivity.
- Health and wellbeing inequalities.
- Changing patterns of work.

The response includes:

- Creating higher-value employment opportunities.
- Improving career progression.
- Supporting lifelong learning.
- Attracting and retaining skilled workers.
- Helping businesses adapt to technological and environmental change.

From a health perspective, this aligns with evidence that secure employment, good working conditions and higher incomes are major determinants of health and resilience to climate-related shocks.

A major element of the East Sussex response is workforce and skills development. The strategy highlights the need for:

- Lifelong learning.
- Technical and vocational skills.
- Digital skills.
- Innovation skills.
- Workforce adaptation to emerging industries.
- Greater collaboration between employers, colleges and training providers.

In practice, this supports development of skills needed for:

- Retrofit and energy efficiency.

- Renewable energy.
- Sustainable construction.
- Flood resilience.
- Environmental management.
- Green infrastructure.
- Sustainable transport.
- Nature recovery.

These are increasingly recognised nationally as critical "green skills" that simultaneously support climate resilience, economic growth and population health.

East Sussex's response is not primarily through a standalone "climate-health-employment" strategy. Instead, it is embedded within the county's economic development framework, particularly the **East Sussex Prosperity Strategy**, which explicitly recognises that a changing climate, demographic change and economic resilience must be addressed together.

The East Sussex response mirrors international and national thinking by treating a changing climate, health, economy and skills as interconnected issues.

The county's approach can be summarised as:

Theme	East Sussex Response
Economy	Build a net-zero, climate-resilient and inclusive economy
Employment	Create better-quality jobs and improve workforce resilience
Skills	Develop green, digital and adaptation skills for future industries
Health	Improve wellbeing through employment, housing, environment and community resilience
Place	Protect natural assets while enabling sustainable growth
Partnerships	Deliver through County Council, district and borough councils, Team East Sussex, education providers, businesses and the South Downs National Park Authority

Place-based approaches are growing into a single strategy across climate action, economic development, skills planning and public health across many regions.

For East Sussex, the implication is that addressing the health effects of a changing climate is not simply an environmental objective. It is also about:

- Creating climate-resilient local jobs.
- Developing green and adaptation skills.
- Supporting sectors vulnerable to heat, flooding and coastal change.
- Reducing fuel poverty and health inequalities.
- Building workforce resilience.
- Strengthening community resilience and social connectedness.
- Aligning economic development, public health and climate action.

This aligns closely with the direction of the East Sussex economy, where priorities around adaptation, skills, healthy communities, housing, transport and resilience increasingly overlap and can be addressed through a health-in-all-policies and climate-resilient growth approach.

Gaps, Barriers, Tensions and Opportunities

Comparison of the international and national evidence with the current East Sussex response highlights a number of strategic gaps, barriers, tensions and opportunities for strengthening the integration of climate, health, economic development, employment and skills.

Gaps

East Sussex has made significant progress in embedding climate resilience, economic development and skills within its strategic planning. However, these agendas remain largely parallel rather than fully integrated. Whilst the East Sussex Prosperity Strategy addresses a changing climate, workforce development and economic resilience, there is currently no overarching framework that explicitly links climate adaptation, health improvement, employment, skills development and economic growth. Internationally, organisations such as the WHO increasingly view climate resilience as both a health and economic priority, suggesting an opportunity for East Sussex to move towards a shared climate-health-economic resilience framework.

The HIA also identified opportunities to strengthen workforce adaptation planning. Although workforce challenges are recognised, less attention has been given to the direct effects of a changing climate on workers, including heat stress, changing outdoor working conditions, flood-related disruption, occupational health risks, mental wellbeing and long-term productivity. Similarly, whilst future demand for green skills is recognised, greater understanding is needed of local workforce capacity, skills shortages, training pathways and labour market forecasting to ensure that residents can benefit from emerging employment opportunities.

Finally, many economic development initiatives—including active travel, retrofit programmes, green infrastructure, sustainable transport and nature recovery—deliver substantial health benefits. However, these co-benefits are not routinely measured or incorporated into economic appraisal, limiting opportunities to demonstrate the wider return on investment from climate-health interventions.

Barriers

Delivery is constrained by several practical barriers. Responsibility for climate, health and economic development is distributed across multiple organisations and sectors, making integrated governance and coordinated delivery more challenging despite strong partnership working.

Sustained investment also remains a significant constraint. Many climate adaptation initiatives—including retrofit, active travel, nature recovery, workforce development and community resilience—continue to rely on short-term or competitive funding rather than the long-term, preventative investment needed to deliver lasting change. National shortages of planners, engineers, retrofit specialists, environmental professionals and health workers further limit the capacity to implement climate adaptation at scale.

Persistent health inequalities present an additional challenge. Climate impacts are not experienced equally, with older people, lower-income households, people with disabilities, and rural and coastal communities often facing greater exposure and lower adaptive capacity. This means adaptation measures must be proportionate to need rather than universally applied.

Finally, limited evidence on the economic benefits of adaptation, healthcare savings and wider social returns can make it more difficult to demonstrate value for money and secure long-term investment.

Tensions

Alongside these barriers, East Sussex faces several strategic tensions that require careful balancing. Supporting economic growth, housing delivery and infrastructure investment must be achieved alongside biodiversity conservation, landscape protection and climate adaptation, particularly within environmentally sensitive areas such as the South Downs and other protected landscapes.

Coastal regeneration presents a further challenge. Towns such as Eastbourne, Hastings, Bexhill and Newhaven require continued regeneration, housing investment and economic growth whilst simultaneously facing increasing risks from sea level rise, coastal erosion, flooding and infrastructure vulnerability.

There is also a tension between ambitions to retain young people, improve productivity and create higher-value employment, and the continuing realities of an ageing workforce, skills shortages, recruitment difficulties and outward commuting. Without sufficient local training pathways, there is a risk that green employment opportunities will expand more rapidly than the local workforce can supply.

Finally, climate adaptation requires sustained, long-term investment, whereas public services continue to face immediate pressures associated with health and social care demand, housing affordability and the cost of living. Balancing these short-term priorities with the longer-term benefits of resilience and prevention remains one of the county's most significant strategic challenges.

Opportunities

Despite these challenges, East Sussex is well positioned to become a leader in climate-resilient economic development. The county benefits from exceptional environmental assets, a growing green economy, research and innovation networks, renewable energy opportunities and a strong visitor economy that together provide a strong foundation for sustainable growth.

There is considerable potential to develop an integrated **Green Skills and Workforce Programme**, bringing together employers, education providers, universities, the NHS and skills organisations to build workforce capacity in areas such as retrofit, sustainable construction, renewable energy, flood resilience, environmental management, nature recovery and sustainable healthcare.

The county's natural environment—including the South Downs National Park, the High Weald, coastal habitats and urban green spaces—also provides significant opportunities to use nature as health infrastructure, supporting heat resilience, flood management, air quality improvement, physical activity, mental wellbeing and green employment.

Building on existing partnership arrangements, East Sussex could further strengthen collaboration by developing a dedicated climate-health-economic resilience partnership, bringing together public health, economic development, businesses, education providers, environmental organisations, local authorities, the NHS and the voluntary sector to develop a shared vision, coordinated delivery and a long-term investment pipeline.

Strategic Opportunity for East Sussex

The greatest opportunity is to move beyond viewing climate adaptation, health improvement, economic development and skills planning as separate agendas.

Internationally, leading places increasingly recognise that **climate resilience, economic prosperity, population health and workforce development are mutually reinforcing**. East Sussex already has many of the necessary building blocks. The next step is to establish a more integrated, place-based approach that positions climate adaptation not only as an environmental necessity, but also as a means of reducing health inequalities, creating high-quality employment, developing future skills, strengthening communities and improving long-term prosperity and wellbeing across the county.

7. Education

High Level Strategic Opportunity:

Champion and transform education systems to equip every learner, educator, and school community with the skills, infrastructure, and practices needed for climate resilience, health, and equity—embedding climate literacy across the curriculum, future-proofing school environments, fostering sustainable travel and nutrition, integrating health and safety measures, and ensuring inclusive, community-connected learning that prepares young people for a net-zero, climate-adapted future.

Rationale:

Education has a critical role in preparing current and future generations to understand, respond to and thrive in a changing climate, while schools, colleges and other educational settings are essential community assets that influence health, wellbeing and resilience. A changing climate increasingly threatens education through extreme heat, flooding, poor air quality, severe weather, infrastructure disruption and impacts on children's physical and mental health, learning and attendance. At the same time, education provides a unique opportunity to develop climate literacy, environmental stewardship, healthy behaviours and the skills needed for a resilient, low-carbon economy. Strengthening climate resilience across education systems through climate-adapted learning environments, sustainable operations, active travel, healthy food systems, integrated health and safety measures, and inclusive, community-connected learning will help protect learners and staff, reduce inequalities, maintain educational continuity, support healthier lifestyles and equip young people with the knowledge, skills and confidence to contribute to a healthier, fairer and more climate-resilient future.

Considerations, Opportunities and Action Steps

Opportunity 1. Reform and Future-Ready Skills and Curriculum

Action Steps:

- Lobby for the reform of curriculum standards to prioritize:
- Systems thinking
- Environmental justice
- Intergenerational ethics
- Promote **cross-disciplinary climate education** (e.g. a changing climate in literature, art, economics).
- Lobby national accreditation bodies for the development of **climate-focused apprenticeships** and technical qualifications linked to green sectors.
- Establish **student-led climate innovation labs** for project-based learning.
- In line with any future changes to the national educational curriculum and resourcing, offer **teacher CPD in misinformation literacy**, eco-anxiety awareness, and climate pedagogy.

Opportunity 2. Develop Climate-Resilient School Infrastructure

Action Steps:

- Champion for the inclusion of **climate resilience audits** in school inspections (e.g. Ofsted, building reviews).
- Subject to resourcing, incentivise **low-carbon retrofitting** via green school funds or public-private partnerships.
- Subject to resourcing, build **net-zero new schools** with renewable energy, natural ventilation, and biophilic design.
- Integrate **real-time monitoring** of temperature, CO_2, humidity, and air pollution into classrooms.
- Create **cool zones** for heatwaves and warm shelters for winter energy shocks.
- Make use of and further develop considerations to help address the health effects of a changing climate in educational settings using the **'East Sussex Climate Charter for Education Settings'**.

Opportunity 3. Promote Active Travel and Air Quality

Action Steps:

- Include active travel targets in **school travel plans**.
- Co-develop **mobility equity strategies** for children with disabilities or long travel distances.
- Use **digital nudges and gamification (like '**Beat the Streets**')** to encourage walk-and-cycle-to-school programs.

Opportunity 4. Promote Food, Nutrition, and Growing Education

Action Steps:

- Support whole-school food approaches:
- Climate-smart menus
- Meat-free days
- Seasonal, plant-forward meals
- Link food education to mental health, inequality, and climate impacts.
- Launch **"Grow-Prepare-Share" programs** integrating gardening, nutrition, and community meals.
- Pilot **climate kitchens** for vocational learning and local outreach.

Opportunity 5. Integrate and Assimilate Health and Environmental Awareness

Action Steps:

- Partner with **public health and climate scientists** for school assemblies and teaching packs.
- Develop **early warning systems** for climate-sensitive illnesses in schools (e.g. asthma, heatstroke).
- Integrate **climate anxiety support** into pastoral care.
- Embed climate-health themes in school governance, safeguarding, and emergency plans.

Opportunity 6. Embed Sun, Heat and Ultraviolet (UV) Safety

Action Steps:

- Make **sun safety (sun exposure/dress as well as sunscreen) training** mandatory for staff and part of pupil health curriculum.
- Provide **sunscreen dispensers** and shaded areas in every playground.
- Develop early dismissal and altered timetable policies for extreme heat days.
- Adopt **UV-aware design codes** in new school landscaping and extensions.

Opportunity 7. Deliver Flooding, Drought, and Water Education

Action Steps:

- Deliver **experiential learning** using weather stations, rain gardens, and permeable paving.
- Simulate **extreme weather response drills** (e.g. flood shelter practice).
- Teach **local climate histories** (e.g. regional droughts, coastal erosion) to build personal relevance.
- Incorporate **GIS mapping** and digital tools into geography and design technology.

Opportunity 8. Teach about Circular Economy Principles, Chemicals and Soil Safety

Action Steps:

- Teach **circular economy principles**—safe material use, reduction, reuse, recycling.
- Embed **school chemical safety audits** (e.g. cleaning supplies, science labs) in operations.
- Run **citizen science projects** on local soil, air, or water quality with youth leadership.
- Offer **industry-linked STEM pathways** focusing on environmental protection and sustainability.

Opportunity 9. Support Inclusion, Migration, and Community Empowerment

Action Steps:

- Fund English as a foreign language-specialist climate teaching assistants for newcomer students.
- Develop **climate inclusion audits** to assess gaps in access, representation, and voice.
- Enable **intercultural exchanges** through storytelling, climate migration case studies, and global classroom partnerships.
- Support **community use of school spaces** for adaptation planning, language classes, and resilience training.

Cross-Cutting System Considerations, Opportunities and Action Steps:

- Include schools in local climate emergency response planning.
- Develop regional school climate hubs to support peer learning, innovation, and funding access.
- Evaluate impact through student health, equity, and climate literacy metrics.

Context and impacts:

Key Health Impacts Associated with Education and a Changing Climate

Climate-related issue	Health impact
Heat in schools	Reduced wellbeing, concentration and attainment
Flooding and disruption	Stress, anxiety, educational disadvantage
Air quality	Respiratory illness and reduced attendance
Climate anxiety	Mental health and wellbeing impacts
Educational disruption	Long-term health and social outcomes
Skills gaps	Reduced adaptation capacity
Health inequalities	Increased vulnerability to climate risks

Why Education Matters for a Changing Climate and Public Health

Education is one of the most important social determinants of health and plays a critical role in building resilience to a changing climate. Higher levels of education are associated with better health outcomes, longer life expectancy, higher incomes, improved employment opportunities and a greater capacity to respond to social, economic and environmental challenges. A changing climate has the potential to undermine these benefits through its impacts on learning environments, educational attainment and wellbeing. At the same time, education provides individuals and communities with the knowledge, skills and confidence needed to understand climate risks, make informed health decisions, support environmental sustainability and participate in adaptation and resilience-building efforts.

Direct Climate Impacts on Education Settings

Educational settings are increasingly exposed to the physical impacts of a changing climate. Rising temperatures and more frequent heatwaves present particular challenges because many school and college buildings were not designed to cope with prolonged periods of extreme heat. Overheating can reduce concentration, increase fatigue, contribute to heat-related illness, lower attendance and ultimately affect educational attainment. Young children, students with disabilities and those with existing health conditions are especially vulnerable. Poor learning environments can have lasting consequences for physical health, mental wellbeing and educational outcomes, all of which influence long-term health and life chances.

Flooding and extreme weather can also disrupt education through building damage, school closures, transport disruption and loss of learning time. These impacts can affect attainment, increase stress and anxiety, and place additional pressures on families, particularly in communities already experiencing disadvantage. A changing climate may also worsen air quality through increased pollution, pollen, allergens and wildfire smoke, contributing to respiratory illness, asthma, reduced attendance and poorer learning outcomes.

Mental Health and Wellbeing

One of the most significant emerging climate-related health concerns within the education sector is the impact on mental health. Many children and young people report increasing levels of concern about a changing climate, environmental degradation and uncertainty about the future. These concerns can contribute to anxiety, stress, feelings of helplessness and reduced wellbeing. Climate anxiety is now increasingly recognised as a public health issue.

Young people may also experience ecological grief associated with biodiversity loss, environmental decline and concerns about future opportunities. These feelings can affect mental wellbeing, educational engagement and overall resilience. Education settings therefore have an important role in helping young people understand a changing climate in ways that build hope, agency and problem-solving skills rather than fear and disengagement.

Education as a Climate and Health Intervention

Education is not only affected by a changing climate; it is also a powerful tool for addressing its health impacts. Climate literacy helps individuals understand the links between a changing climate, health, sustainability and adaptation, enabling informed decisions that support both personal and community resilience.

Education systems also play a crucial role in preparing future generations for a changing economy. Increasing demand for green skills, environmental management, climate adaptation expertise and sustainability knowledge means that schools, colleges and universities are central to developing the future workforce. This is increasingly recognised as both an economic and public health priority.

Education can also support healthier and more sustainable behaviours, including active travel, healthy eating, environmental stewardship and energy conservation. These behaviours deliver benefits for both health and climate resilience.

Social Connectedness and Community Resilience

Schools and colleges are often among the most important institutions within communities. They support social networks, family engagement, civic participation and community cohesion, all of which contribute to resilience during times of disruption. During emergencies, educational settings may also function as information hubs, community support centres or places of refuge.

Strong educational communities help build trust, social connectedness and collective capacity to respond to climate-related challenges. This is particularly important because social connection is increasingly recognised as one of the strongest protective factors during crises.

Reducing Health Inequalities

A changing climate and educational disadvantage frequently overlap. Children and young people experiencing poverty, poor housing, limited access to green space or existing health inequalities are often more vulnerable to climate impacts. Education

systems can help reduce these vulnerabilities through early intervention, health promotion, access to support services and skills development.

By supporting inclusion and opportunity, education can help ensure that a changing climate does not further widen existing health inequalities.

Workforce Health and Wellbeing

A changing climate also affects the health and wellbeing of teachers, support staff, early years workers and further education staff. Increasing temperatures, emergency response pressures, climate-related anxiety and additional workloads can all affect workforce wellbeing. Supporting workforce resilience is therefore becoming an increasingly important aspect of climate adaptation within the education sector.

Wider Public Health Benefits

Beyond its direct educational function, education strengthens resilience to climate-related health impacts by supporting economic, social and health outcomes. It improves employment prospects, income and economic mobility; strengthens civic participation, community engagement and social connectedness; and increases health literacy, access to information and the ability to respond effectively to risks.

Taken together, this means that education should be viewed not only as a sector vulnerable to a changing climate, but as one of the most important systems for protecting health, reducing inequalities and building long-term climate resilience across communities.

Current International and National Response(s):

Internationally, the response to the health effects of a changing climate within the education sector has moved beyond environmental awareness and sustainability education towards a broader focus on **climate resilience, health, wellbeing and adaptation**. Organisations such as the World Health Organization, United Nations Educational, Scientific and Cultural Organization and UNICEF increasingly recognise education as both vulnerable to a changing climate and essential to building resilience.

UNESCO promotes **Education for Sustainable Development (ESD)**, which aims to equip learners with the knowledge, skills, values and behaviours needed to address a changing climate and support sustainable development. Increasingly, this includes climate literacy, environmental stewardship, systems thinking and adaptation skills. The emphasis has shifted from simply teaching about a changing climate to empowering young people to participate in solutions and resilience-building.

Alongside this, WHO and UNICEF have highlighted the growing health impacts of a changing climate on children and young people, including heat exposure, disruption to education, worsening air quality and increasing levels of climate anxiety. International responses therefore increasingly focus on creating climate-resilient educational settings, protecting mental wellbeing, supporting healthy learning environments and strengthening the role of schools in community resilience.

A major theme emerging globally is the recognition that education is a key adaptation measure. Schools and colleges are being encouraged to prepare learners for future climate challenges through green skills, environmental awareness, health literacy and practical adaptation knowledge. This aligns with broader efforts to develop climate-resilient societies and economies.

National Response (England)

Nationally, a changing climate is increasingly reflected within education, public health and skills policy, although these agendas are not always fully integrated.

The Department for Education's **Sustainability and Climate Change Strategy** represents the most significant response in England. The strategy seeks to make the education sector more resilient to climate change while ensuring that all learners have access to high-quality climate education. Its objectives include improving the sustainability and resilience of educational estates, enhancing climate education and preparing children and young people for the opportunities and challenges associated with a changing climate.

There is also increasing recognition that educational buildings need to adapt to rising temperatures, flooding and extreme weather. Schools are being encouraged to consider climate resilience as part of estate management and long-term planning, particularly in relation to overheating, energy efficiency and flood risk.

Alongside environmental adaptation, there is growing concern about the mental health impacts of a changing climate on children and young people. National discussions increasingly acknowledge climate anxiety and eco-anxiety, with an emphasis on ensuring that climate education supports wellbeing, hope and agency rather than reinforcing feelings of fear or helplessness.

A second major area of focus is workforce development. The transition to a net-zero and climate-resilient economy is expected to create demand for green skills across sectors such as renewable energy, construction, environmental management, nature recovery and sustainable transport. Schools, colleges, universities and training providers are therefore being encouraged to support the development of climate-related skills and careers. This is increasingly viewed as both an economic and public

health priority because secure employment, skills development and economic resilience are important determinants of health.

National policy also increasingly promotes schools as community assets that can support resilience, social connectedness and health promotion. This aligns with wider public health objectives around reducing inequalities, supporting wellbeing and strengthening community capacity to respond to future challenges.

Emerging Themes

Across both international and national policy, several common themes are emerging. Education is increasingly viewed as a climate adaptation tool rather than simply a means of environmental awareness raising. There is growing emphasis on climate literacy, health literacy and sustainability education, alongside recognition of the need to protect the mental health and wellbeing of children and young people. Schools and colleges are also being seen as important community assets that contribute to social resilience and emergency preparedness.

Another significant trend is the increasing focus on green skills and workforce development, recognising that future generations will need the knowledge and capabilities to support climate adaptation and the transition to a more sustainable economy. At the same time, there is growing recognition that educational inequalities and climate vulnerabilities often overlap, meaning that climate action within education must also contribute to reducing health and social inequalities.

Overall, the direction of travel is towards a more holistic approach in which education is recognised not only as vulnerable to a changing climate, but also as one of the most powerful systems for improving health, reducing inequalities, building resilience and preparing communities for a changing climate.

Local East Sussex Response to Build From:

East Sussex has developed one of the more comprehensive local responses to a changing climate within the education sector, aligning closely with the Department for Education's Sustainability and Climate Change Strategy while tailoring action to local priorities around climate resilience, biodiversity, green skills, health and wellbeing. The county's approach recognises that education has a dual role: schools and colleges must both adapt to the impacts of a changing climate on learners and educational settings and equip children and young people with the knowledge, skills and resilience needed to thrive in a changing climate.

At the heart of this response is the East Sussex Climate Change Charter for Education Settings, which is arguably one of the strongest and most innovative elements of the

county's approach. Developed by East Sussex County Council and co-produced with children, young people and education settings, the Charter translates national ambitions into practical actions that schools can implement locally. It was designed to support the Department for Education's expectation that all education settings have a sustainability lead and climate action plan, while positioning schools as active contributors to East Sussex's ambition to become a climate-resilient and net-zero county.

Unlike many climate strategies that focus primarily on carbon reduction, the Charter adopts a broader public health and resilience perspective. It recognises that schools influence not only environmental outcomes but also wellbeing, behaviour, social resilience, future employment opportunities and community engagement. As such, it provides a practical framework through which education can contribute directly to addressing the health effects of a changing climate.

Climate-Resilient Schools and Educational Settings

A key focus of the East Sussex response is supporting schools to become more resilient to climate impacts. East Sussex Children's Services has developed its own climate change strategy, recognising both the environmental impact of educational estates and the need to prepare schools for future risks such as overheating, flooding, extreme weather and environmental disruption.

The local approach promotes climate action plans based around four key areas identified nationally:

- Decarbonisation
- Adaptation and resilience
- Biodiversity
- Climate education and green careers

These themes are embedded within the Charter, helping schools improve preparedness for climate risks that can affect attendance, learning, wellbeing and educational attainment.

A Whole-School Approach to Climate and Health

A distinctive feature of the East Sussex response is its whole-school approach. The Charter encourages schools to embed climate action across governance, curriculum, operations and community engagement through nine interconnected themes:

- Curriculum
- Waste

- Food
- Air Quality
- Travel
- Energy
- Outdoor Space
- Water
- Procurement

Together these themes address many of the wider determinants of health that are affected by a changing climate. For example, food-related actions promote healthy eating and sustainable consumption, while work on air quality supports respiratory health. Travel initiatives encourage active travel, increasing physical activity while reducing emissions. Outdoor space projects enhance biodiversity, nature connection and outdoor learning, supporting both physical and mental wellbeing. Water and energy initiatives help schools understand resource management and climate resilience.

Collectively, these actions create healthier school environments while helping children and young people understand and respond to climate risks.

Climate Education, Health Literacy and Agency

East Sussex places significant emphasis on climate education as a means of building long-term resilience. Schools are encouraged to embed climate change, sustainability and environmental awareness across learning, helping pupils understand the relationships between climate change, health, nature and wellbeing.

The aim is not simply to raise awareness but to build climate literacy, health literacy and an understanding of adaptation and resilience. Importantly, the approach seeks to empower young people to take positive action. Through sustainability leadership structures and pupil green teams, children and young people are given an active role in shaping environmental initiatives within their schools and communities. This helps develop a sense of agency, optimism and problem-solving rather than reinforcing feelings of helplessness about a changing climate.

Nature, Wellbeing and Climate Anxiety

One of the strongest aspects of the East Sussex response is the recognition of the links between nature, wellbeing and climate resilience. Schools are encouraged to engage in biodiversity projects, outdoor learning, environmental stewardship and nature recovery activities.

This reflects growing evidence that access to nature supports mental wellbeing, physical activity, emotional resilience and educational engagement. It is also increasingly recognised as an important response to climate anxiety and eco-anxiety among children and young people. By connecting pupils with nature and involving them in climate action, schools can help transform concern about a changing climate into positive engagement and resilience.

Green Skills and Future Health

East Sussex's approach also aligns closely with national ambitions around green skills and future employment. Through initiatives such as Greener Careers Sussex, schools are encouraged to raise awareness of sustainability, environmental management, adaptation and careers within the green economy.

From a public health perspective this is particularly important because education, skills and employment are among the strongest determinants of lifelong health and wellbeing. Preparing young people for future employment opportunities within a climate-resilient economy contributes not only to economic prosperity but also to long-term health outcomes.

Behaviour Change and Healthy Lifestyles

The county's education response extends beyond formal learning into everyday behaviours that support both health and climate goals. Through active travel programmes, sustainable travel planning, waste reduction, energy conservation and environmental stewardship, schools help encourage behaviours that contribute to healthier lifestyles and lower environmental impacts.

These initiatives support increased physical activity, improved air quality, healthier travel habits and greater environmental awareness. The influence of schools often extends beyond pupils to families and wider communities, helping to promote broader behaviour change.

Community Resilience and Social Connectedness

East Sussex also recognises schools as important community assets. Through the Sustainability Lead Forum, the Climate Change Charter and wider sustainability networks, schools are encouraged to engage governors, staff, families and local communities in climate action.

This strengthens social connectedness, community participation and local resilience. Schools can therefore play an important role in supporting wider community responses

to a changing climate by building awareness, encouraging collaboration and fostering collective action.

Overall Assessment

The East Sussex response broadly reflects national policy but goes further by providing practical frameworks, networks and support mechanisms that enable schools to translate climate ambitions into action. The Climate Change Charter for Education Settings is central to this approach and represents one of the clearest examples in East Sussex of a whole-system climate and health model.

Rather than focusing solely on emissions reduction, the Charter links climate action with children's health and wellbeing, climate resilience, nature recovery, skills development, active lifestyles and community participation. Through this integrated approach, schools are helping to reduce the health effects of a changing climate by improving mental wellbeing, addressing climate anxiety, strengthening resilience to heatwaves and flooding, promoting healthier environments, enhancing access to nature, developing green skills and building stronger, more connected communities. As a result, education is becoming an increasingly important component of East Sussex's wider climate adaptation and public health response.

Gaps

Whilst East Sussex has developed a strong response through its Climate Change Charter for Education Settings, sustainability networks and climate education programmes, there remain a number of gaps, tensions and barriers that mirror challenges being experienced nationally and internationally. At the same time, there are significant opportunities to position education as a core part of the county's response to the health effects of a changing climate.

Despite the strength of the East Sussex response, there remains a gap in the integration of climate, education and public health. While many activities contribute to wellbeing and resilience, climate action within schools is still primarily framed through sustainability and environmental improvement rather than health outcomes. There is currently no explicit framework that brings together climate adaptation, educational attainment, mental wellbeing, health inequalities, community resilience and future workforce development. As a result, opportunities to maximise the health benefits of climate action within education may not be fully realised. A more integrated climate-health-education approach could help position schools as a key part of East Sussex's health resilience infrastructure.

There is also a gap in how climate-related mental health issues are addressed. Although the county's approach promotes climate literacy, pupil participation and

environmental engagement, less attention has been given to systematically supporting children and young people experiencing climate anxiety, eco-anxiety, ecological grief and concerns about the future. Many schools are still developing confidence in how to discuss a changing climate in ways that build hope, agency and resilience rather than fear and helplessness.

A further gap relates to inequalities and vulnerability. Climate risks often overlap with educational disadvantage, poverty, poor housing conditions, limited access to green space and existing health inequalities. While the Climate Change Charter is available to all schools, there is less emphasis on targeting support towards the children and communities most vulnerable to climate-related health impacts. This highlights an opportunity to strengthen the focus on climate justice and health inequalities within educational responses.

Another challenge is that climate mitigation generally receives greater attention than adaptation. Much of the activity undertaken by schools focuses on carbon reduction, recycling, energy use and biodiversity. Important adaptation issues such as overheating, flood preparedness, emergency planning and health protection are often less visible. As climate impacts become more pronounced, there is likely to be a growing need to support schools and learners in adapting to unavoidable climate risks.

Finally, whilst schools are undertaking a wide range of climate-related activities, there is limited evaluation of their contribution to health outcomes such as mental wellbeing, physical activity, resilience, social connectedness and reductions in climate anxiety. Strengthening the evidence base could help demonstrate the wider value of climate action within education.

Barriers

The physical condition of the school estate remains a significant barrier. Many educational buildings were not designed to cope with higher temperatures, prolonged heatwaves, flooding or more frequent extreme weather events. Retrofitting schools to improve climate resilience can be both costly and complex.

Funding constraints continue to limit the pace of progress. Although support and guidance are available, many schools lack the resources needed to implement adaptation measures, enhance biodiversity, improve outdoor learning environments or invest in climate resilience infrastructure.

Workforce capacity is another challenge. Teachers and school leaders may feel insufficiently supported to address climate science, climate anxiety, adaptation planning and the links between a changing climate and health. Levels of confidence, knowledge and expertise vary considerably across the sector.

Implementation is also uneven. Schools differ significantly in terms of resources, leadership capacity, staff expertise and access to local opportunities. Consequently, the quality and scale of climate action can vary considerably across the county.

Finally, although strong connections exist between education and sustainability teams, links with public health, NHS partners, mental health services and community resilience programmes remain less developed. This can result in climate, health and education being addressed through separate systems rather than as part of a coordinated response.

Tensions

One of the key tensions facing schools is balancing climate education with wider educational priorities. Schools are under increasing pressure to deliver academic attainment, improve attendance, support inclusion and meet inspection requirements. Climate education therefore competes with many other demands on curriculum time and staff capacity.

There is also a delicate balance between raising awareness of a changing climate and protecting young people's wellbeing. Schools want pupils to understand climate risks and environmental challenges, but they must do so in ways that avoid increasing anxiety, fear or feelings of helplessness. The challenge is to educate without overwhelming and to promote agency alongside awareness.

A further tension exists between immediate educational pressures and long-term resilience building. Climate adaptation requires long-term planning and investment, yet schools often operate within short-term funding cycles and face immediate operational demands. This can make it difficult to prioritise future climate resilience.

Similarly, many schools are committed to improving energy efficiency, biodiversity, outdoor learning environments and climate resilience, but these ambitions must be balanced against financial pressures associated with staffing, maintenance and core educational provision.

Opportunities

East Sussex has a significant opportunity to position schools as part of the county's wider climate and health infrastructure. Schools are uniquely placed to influence health behaviours, mental wellbeing, climate literacy, social connectedness and community resilience, making them important assets in addressing the health effects of a changing climate.

The Climate Change Charter already provides a strong platform for addressing climate anxiety through participation and action. Expanding pupil green teams, youth

leadership opportunities, environmental volunteering and community projects could help transform concern about a changing climate into a sense of purpose, agency and resilience.

The county's exceptional natural assets, including the South Downs National Park Authority, the High Weald and the Sussex coast, provide opportunities to further expand outdoor learning and nature-based education. Greater engagement with nature can support mental wellbeing, physical activity, biodiversity awareness and climate resilience simultaneously.

There is also scope to strengthen climate and health literacy. While the Charter already promotes climate education, schools could play an even greater role in helping young people understand the links between a changing climate, health, air quality, food systems, heat risks, nature and community resilience.

East Sussex has also prioritised green skills within its economic and education strategies. There is an opportunity to create clearer pathways into careers linked to environmental management, nature recovery, sustainable construction, renewable energy and climate adaptation. These pathways support both economic prosperity and long-term health outcomes.

Schools also provide a powerful mechanism for reducing health inequalities. As one of the few universal services reaching almost all children and young people, they can use climate action programmes to improve access to nature, promote active travel, encourage healthy eating and increase participation in community activities, particularly in disadvantaged communities.

Finally, schools are trusted community institutions and could play a greater role in supporting local resilience. By acting as community hubs, information centres and focal points for climate action, schools can strengthen preparedness for climate-related disruptions while building stronger and more connected communities.

Strategic Opportunity for East Sussex

The greatest opportunity is to move beyond viewing climate action in schools primarily as an environmental or educational issue and instead recognise education as a key component of East Sussex's climate-health resilience system. The East Sussex Climate Change Charter for Education Settings already provides many of the foundations for this approach. By more explicitly connecting education, public health, mental wellbeing, climate adaptation, community resilience and green skills, East Sussex has the opportunity to become a national leader in demonstrating how schools can help address the health effects of a changing climate.

In practice, this would mean recognising schools not only as places of learning, but as places that build healthier, more resilient and climate-ready communities while helping children and young people develop the skills, confidence and wellbeing needed to thrive in a changing world.

8. Environmental Services

High Level Strategic Opportunity:

Strengthen environmental health resilience by embedding cross-sector governance, sustainable land and water management, clean air and waste systems, and vector control into coordinated local strategies—leveraging nature-based solutions, circular economy principles, data sharing, and inclusive community engagement to protect ecosystems, public health, and climate readiness.

Rationale:

Environmental health systems are essential to protecting population health, ecosystems and climate resilience, yet they are increasingly affected by climate-related pressures including flooding, drought, poor air quality, waste disruption, contaminated land, water insecurity, vector-borne disease risks and biodiversity loss. These risks cut across multiple sectors and cannot be effectively managed through isolated responses. Strengthening environmental health resilience through coordinated governance, sustainable land and water management, clean air and waste systems, vector control, nature-based solutions, circular economy approaches, data sharing and community engagement will help prevent environmental harms, protect vulnerable populations, improve ecosystem health, reduce inequalities and support a healthier, more climate-ready East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1: Champion and Establish Cross-Sector Governance, Leadership & Collaboration Locally

Action Steps:

- Identify and build on existing partnerships as well as foster **cross-sector collaboration between environment services**, public health, planning, climate,

sustainability, and national agencies (e.g. Environment Agency, Defra, Natural England, Forestry Commission and Emergency Planning). Establish an 'East Sussex Systemwide Climate and Health Partnership' to support and drive this. Collaboration could mean the alignment of funding streams and environmental services which could include private companies with an environmental duty (e.g. water companies).
- Champion and establish **joint policy and legislative lobbying/advocacy efforts** to improve environmental protections, land management, and building regulations.
- Improve coordination and data sharing (e.g. air quality, rainfall, flood risk, pollution, fire risk) through an established, centralised and accessible platform.

Opportunity 2: Promote, Enhance and Support Climate Resilience & Land Management

Action Steps:

- Promote nature-based solutions (via the Local Nature Recovery Strategy and Partnership for example) within appropriate projects—disincentivize demolition (where appropriate)
- Support retrofit and reuse in the built environment (e.g. via Local Plans).
- Champion carbon sequestration, regenerative farming, and sustainable land and water use.
- Work with landowners and farmers to support water quality, grey water use, wildfire prevention, and biodiversity protection.
- Subject to the availability of funding and where appropriate, support land management practices that reduce fire and flood risks (e.g. fire wise landscaping, sustainable drainage, green infrastructure).

Opportunity 3: Improve Air Quality, Low Emissions Considerations & Urban Planning

Action Steps:

- Improve transparency around air quality monitoring and ensure AirAlerts are widely disseminated and linked to local services.
- Develop and promote low-emission zones (where appropriate), sustainable urban design, and tree planting strategies that reduce pollen and allergen risk near residential areas and schools.
- Where possible, train staff on air pollution risks, emissions monitoring, and heat management in residential and care settings.

Opportunity 4: Improve and Monitor Water Quality, Use & Management

Action Steps:

- Coordinate with government and utilities to improve water legislation, infrastructure for grey water use, leak management, and reservoir construction.
- Where possible, strengthen oversight of river and coastal water pollution, including sewage management and fish biodiversity monitoring.
- Improve people's knowledge of whether they live in a flood risk area and how to access information on this.
- Promote flood alerts (via the Environment Agency), weather warnings (via the MET Office) and emergency water storage.;
- Monitor waterborne infection risks (not related to drinking water)
- Empower citizens in water testing and improve early warning and reporting systems.

Opportunity 5: Promote Good Waste Management and Circular Economy

Action Steps:

- **Promote circular economy principles**: reduce first, reuse, repair, and recycle. Create schemes/projects.
- Address the impact of rising temperatures on waste infrastructure such as landfills.
- Offer education and incentives for sustainable waste management at household and business levels.

Opportunity 6: Make Use of Community Engagement, Education & Inclusion

Action Steps:

- Co-create learning resources, support community events, offer volunteering opportunities, and increase visibility of environmental services.
- Use communications and campaigns (targeted at youth, older people, tourists, outdoor workers and businesses etc.) to raise awareness of risks (wildfires, floods, mold, air pollution and extreme heat for example).

- Share climate impact stories from local, regional, national and global communities to build understanding and empathy.
- Remove barriers for migrant participation in environmental volunteering and ranger programs.

Opportunity 7: Integrate and Promote Vector and Disease related Interventions

Action Steps:

- Integrate environmental services into vector-borne disease and waterborne infection response via monitoring, public education, and urban design considerations.
- Work with the UK Health Security Agency and via Public Health to develop awareness and training to promote mosquito- and tick-safe environments through habitat management and vector-aware planning.

Context and impacts:

Environmental Services are the services, policies and interventions that protect and enhance the natural and built environment, reduce environmental and climate-related risks, and support the health, wellbeing and resilience of people, communities and ecosystems. They are the functions, activities and systems that protect, manage and enhance the natural and built environment to support environmental sustainability, climate resilience and population health. They encompass a broad range of responsibilities including biodiversity, nature recovery and environmental protection.

In the context of a changing climate and public health, environmental services play a critical role in addressing the environmental determinants of health. They help reduce exposure to climate-related risks such as extreme heat, flooding, poor air quality, water insecurity and biodiversity loss, while enhancing the natural assets and ecosystem services that support physical health, mental wellbeing and community resilience.

Environmental services are increasingly recognised as more than environmental management functions. They form part of the wider infrastructure that protects and improves health by creating healthier places, supporting access to nature, reducing health inequalities, strengthening resilience to climate impacts and enabling communities to adapt to a changing climate. They play a critical role in addressing the health effects of a changing climate because they sit at the intersection of

people, places and the natural environment. Internationally, there is increasing recognition that environmental services are not only essential for protecting ecosystems but are fundamental to protecting human health.

Organisations such as the World Health Organization, United Nations Environment Programme and the Intergovernmental Panel on Climate Change increasingly frame climate change as both an environmental and public health challenge. The quality of the natural and built environment influences many of the wider determinants of health, including air and water quality, access to green space, opportunities for physical activity, food systems, mental wellbeing and community resilience.

As a changing climate increases the frequency and intensity of heatwaves, flooding, drought, storms and biodiversity loss, environmental services are becoming increasingly important in helping communities adapt, reduce vulnerability and maintain health and wellbeing.

Why Environmental Services Matter for Health

Environmental services influence health through multiple and interconnected pathways. Healthy environments reduce exposure to environmental hazards, support physical and mental wellbeing, encourage active lifestyles and strengthen resilience to climate-related shocks. They also play an important role in reducing health inequalities, as access to clean air, green space and healthy environments is not distributed equally across communities.

Conversely, environmental degradation can increase risks associated with respiratory and cardiovascular disease, heat-related illness, water contamination, poor mental health and social vulnerability. Environmental services therefore form a critical component of both climate adaptation and public health infrastructure.

A Changing Climate and Environmental Health Impacts

Heatwaves and Overheating

One of the most significant climate-related health risks is increasing exposure to extreme heat. Environmental services contribute to heat resilience through urban greening, tree planting, green infrastructure, sustainable drainage systems and the creation of shaded public spaces. These interventions help reduce urban heat island effects, provide cooling benefits and improve the liveability of towns and cities.

Without adaptation, rising temperatures are likely to increase heat exhaustion, heatstroke, respiratory and cardiovascular illness, and heat-related mortality. Older

people, young children and those with existing health conditions are particularly vulnerable.

Air Quality

A changing climate can worsen air quality through higher temperatures, increased ground-level ozone, longer pollen seasons, dust and particulate pollution, and smoke from wildfires. Environmental services play an important role in monitoring and improving air quality through planning policies, transport initiatives, pollution control and green infrastructure.

Poor air quality is associated with increased rates of asthma, respiratory disease, cardiovascular disease and premature mortality, making it one of the most significant environmental determinants of health.

Flooding and Water Management

Flood risk is expected to increase as a result of a changing climate, including river, surface water and coastal flooding. Environmental services are central to managing these risks through natural flood management, sustainable drainage systems, catchment-based approaches, wetland restoration and coastal adaptation measures.

Flooding can have profound health impacts, including physical injury, water contamination, displacement and loss of homes or livelihoods. The psychological effects, including stress, anxiety and trauma, can persist long after the immediate event has passed.

Biodiversity and Ecosystem Health

There is growing recognition that biodiversity is a determinant of human health. Healthy ecosystems help regulate temperatures, improve air and water quality, reduce flood risk and provide opportunities for recreation and connection with nature. A changing climate is accelerating biodiversity loss and ecosystem degradation, reducing the resilience of both natural systems and communities.

Loss of biodiversity can contribute to poorer mental wellbeing, reduced opportunities for physical activity, weaker environmental resilience and increased vulnerability to climate-related impacts.

Water Quality and Water Security

A changing climate is placing increasing pressure on water resources through drought, changing rainfall patterns and water quality challenges. Environmental services help

manage these risks through catchment management, water resource protection and environmental regulation.

Impacts on water availability and quality can affect public health through increased contamination risks, environmental degradation and pressure on essential services and infrastructure.

Mental Health, Wellbeing and Community Resilience

Environmental services contribute significantly to mental health and wellbeing through the protection and enhancement of natural environments. Access to green and blue spaces is associated with lower stress levels, improved mental health, increased physical activity and stronger social connections.

At the same time, a changing climate can affect wellbeing through biodiversity loss, environmental degradation and changes to landscapes that people value. These changes can contribute to climate anxiety, ecological grief and a loss of connection to place. As a result, environmental services are increasingly supporting nature-based approaches that improve wellbeing while strengthening resilience to a changing climate.

Environmental programmes also create opportunities for volunteering, citizen science, community stewardship and local participation. These activities build social capital and strengthen the community networks that help people respond and recover during periods of environmental stress.

Environmental Services as Climate Adaptation

The role of environmental services is increasingly shifting from environmental protection alone towards active climate adaptation. Nature-based solutions such as woodland creation, wetland restoration, river restoration and urban greening are increasingly recognised for their ability to deliver multiple benefits simultaneously. They reduce flood risk, improve air quality, enhance biodiversity, support mental wellbeing and contribute to climate resilience.

Similarly, environmental health services play an important role in protecting communities from climate-related risks, including overheating, pollution, flooding, food safety issues and housing-related environmental hazards.

This integrated approach reflects growing recognition that climate adaptation and health improvement are closely linked.

Wider Public Health Benefits

Environmental services contribute directly to many of the outcomes sought by public health systems. By improving environmental quality and reducing exposure to climate-related hazards, they support better mental wellbeing, increased physical activity, reduced health inequalities and stronger community resilience. These preventative benefits can help reduce future demand on health and social care services while improving quality of life.

Strategic Implication

Environmental services should no longer be viewed solely as environmental management functions. They are increasingly a core part of the public health response to a changing climate. Through protecting ecosystems, improving environmental quality, reducing climate risks and delivering nature-based solutions, environmental services help create healthier, more resilient and more sustainable communities.

Current International and National Response(s):

Internationally, environmental services are increasingly recognised as a fundamental component of climate adaptation and public health. The response has shifted from a traditional focus on environmental protection towards a broader understanding that healthy ecosystems are essential for healthy populations. A changing climate is now widely recognised as both an environmental and public health emergency, requiring integrated action across health, environment, planning and infrastructure sectors.

The World Health Organization has emphasised the importance of addressing the environmental determinants of health, recognising that air pollution, extreme heat, water insecurity, biodiversity loss and environmental degradation are major drivers of disease and health inequalities. The WHO increasingly promotes climate-resilient and environmentally sustainable communities, highlighting the role of green spaces, clean air, healthy ecosystems and nature-based solutions in protecting physical and mental health.

Similarly, the United Nations Environment Programme has promoted ecosystem-based adaptation and nature-based solutions as key responses to a changing climate. These approaches seek to use natural systems such as wetlands, forests, rivers and coastal habitats to reduce climate risks while simultaneously delivering benefits for biodiversity, health and wellbeing. There is growing international recognition that investments in nature can deliver multiple outcomes, including flood protection, improved air and water quality, urban cooling and enhanced mental health.

The Intergovernmental Panel on Climate Change has reinforced this direction of travel, highlighting the need for transformative adaptation that integrates climate resilience, ecosystem restoration and public health. Increasingly, environmental services are viewed as part of a wider resilience system that supports adaptation to heatwaves, flooding, drought and other climate-related hazards.

Another important international development is the growth of the One Health approach, which recognises the interconnectedness of human health, animal health and ecosystem health. This framework has become increasingly influential in climate adaptation policy, particularly in relation to biodiversity, environmental protection, food systems and disease prevention.

Alongside this, there has been growing emphasis on the mental health benefits of nature. International research and policy increasingly recognise access to high-quality green and blue spaces as important protective factors against stress, anxiety, social isolation and climate-related psychological distress.

National Response (England)

In England, environmental services play a central role in the response to a changing climate and its health impacts. National policy increasingly recognises that environmental quality is a critical determinant of population health and that climate adaptation must be integrated with nature recovery, public health and community resilience.

The UK's National Adaptation Programme (NAP) identifies flooding, overheating, water scarcity, biodiversity loss and environmental degradation as major climate risks. The programme promotes adaptation through natural flood management, green infrastructure, resilient landscapes, water resource management and nature recovery. Increasingly, these measures are recognised for their health benefits as well as their environmental value.

A major area of focus nationally is the expansion of nature-based solutions. Government policy, including the Environmental Improvement Plan and nature recovery initiatives, supports woodland creation, wetland restoration, peatland recovery, urban greening and habitat restoration. These interventions are increasingly promoted as delivering multiple benefits, including climate adaptation, biodiversity recovery, improved air quality, reduced flood risk and better physical and mental health.

Environmental services also play a significant role in addressing air pollution, which remains one of the largest environmental risks to health in England. National strategies focus on reducing emissions from transport, industry and domestic sources

while improving urban greening and sustainable transport infrastructure. These measures support both climate mitigation and public health objectives.

There is also growing recognition of the importance of green infrastructure within planning and development. National planning policy increasingly promotes access to green space, sustainable drainage systems, biodiversity net gain and climate-resilient design. These approaches help reduce overheating, manage flood risk, encourage active travel and improve wellbeing.

The national response has also strengthened around biodiversity recovery. Initiatives such as Local Nature Recovery Strategies and Biodiversity Net Gain are designed to reverse environmental decline while improving ecosystem resilience. Increasingly, these programmes recognise the links between biodiversity, health, wellbeing and resilience to a changing climate.

Environmental Health Services are another important component of the national response. Local authorities are expected to address climate-related risks including heatwaves, flooding, air quality, food safety and housing conditions. This reflects growing recognition that climate adaptation is not solely an environmental issue but also a public health priority.

Emerging Themes

Across both international and national policy, several common themes are emerging. The first is a shift from environmental protection alone towards **environmental resilience and adaptation**, recognising that healthy ecosystems underpin healthy communities.

The second is the growing use of **nature-based solutions**, with natural systems increasingly viewed as critical infrastructure for managing climate risks while improving health and wellbeing.

A third theme is the increasing integration of **public health and environmental policy**, particularly around air quality, flooding, heat resilience, biodiversity and access to nature.

There is also growing recognition of the importance of **mental health and wellbeing**, with access to nature increasingly viewed as a protective factor against climate anxiety, stress and social isolation.

Finally, there is a move towards **whole-system approaches**, bringing together environmental services, public health, planning, housing, transport, education and economic development to build more resilient communities.

Overall, the direction of travel internationally and nationally is clear: environmental services are no longer seen simply as custodians of the natural environment. They are

increasingly recognised as a critical component of climate adaptation, population health, health equity and community resilience. Their role is shifting from managing environmental assets to helping create healthier, safer and more climate-resilient places.

Local East Sussex Response to Build From:

Within East Sussex, environmental services contribute to a whole-system approach that connects climate adaptation, nature recovery, environmental sustainability, public health and community resilience. Through activities such as habitat restoration, green infrastructure, flood management, air quality improvement and nature-based solutions, environmental services help create places that are healthier, safer, more sustainable and better able to withstand future environmental and climate challenges.

East Sussex has a strong foundation of environmental and climate-related activity that contributes to addressing the health effects of a changing climate. However, unlike some local authorities, the response has evolved through a combination of environmental, transport, planning, climate and public health initiatives rather than through a single integrated climate-health framework. As a result, there is substantial activity that contributes to climate resilience and health, but delivery remains fragmented across organisations, services and programmes.

Environmental Services contribute to climate adaptation and health through a broad range of activities including nature recovery, biodiversity enhancement, flood risk management, water management, air quality improvement, green infrastructure, environmental health and sustainable transport initiatives. These interventions influence many of the wider determinants of health by improving environmental quality, reducing exposure to climate-related risks and increasing access to nature. Projects such as urban greening, green transport corridors, habitat creation and catchment restoration help address overheating, improve air quality, support active travel, reduce flood risk and enhance mental wellbeing.

An important area of development is the emerging East Sussex Local Nature Recovery Strategy, which provides a strategic framework for restoring and connecting habitats, enhancing biodiversity and improving the resilience of ecosystems across the county. While primarily focused on nature recovery, the strategy also has significant implications for public health through improved access to nature, climate adaptation, flood management, cleaner air and water, and the creation of healthier and more resilient places. It provides an opportunity to strengthen the links between environmental improvement, climate resilience and population health.

There is also growing recognition that environmental services can make a much greater contribution to health outcomes. Officers have acknowledged that ecological and habitat creation projects do not routinely assess public health impacts, health inequalities or longer-term human-environment interactions. Consequently, there is increasing interest in using tools such as Health Impact Assessment (HIA) to strengthen decision-making and ensure environmental interventions deliver both environmental and health benefits. There is also recognition that earlier engagement with health partners, communities and stakeholders can improve project design, reduce conflict and maximise long-term outcomes.

Alongside this, East Sussex is beginning to develop a more system-wide understanding of climate resilience and health. Work is underway to map climate-related policies across the County Council, NHS Sussex, the Integrated Care System, district and borough councils, and infrastructure providers. There is also growing interest in identifying and mapping protective assets such as green spaces, shaded areas, community facilities and environmental resources, alongside understanding where vulnerabilities exist across the county. This work provides an important baseline for understanding how environmental assets contribute to health resilience and where future investment may be needed.

Despite these strengths, governance and coordination remain significant challenges. East Sussex currently lacks a formal county-wide climate partnership or equivalent body responsible for overseeing climate adaptation and resilience. Delivery is often dispersed across different organisations and policy areas including transport, housing, air quality, fuel poverty, biodiversity and nature recovery. While much good work is taking place, accountability can be unclear, partnership working inconsistent and opportunities for coordinated action sometimes missed.

There is, however, increasing acceptance that environmental services will play a central role in future climate adaptation efforts. Priorities such as nature-based solutions, biodiversity recovery, green infrastructure, flood management, water resilience and environmental health protection are increasingly being viewed through both environmental and health lenses. There is also growing recognition that framing environmental action in terms of health outcomes can strengthen the case for investment, improve engagement across sectors and support wider policy objectives.

Gaps

The most significant gap is the absence of an integrated climate, environment and health framework. Although environmental projects frequently deliver health benefits, these are not always explicitly planned for, measured or monitored. Health is often viewed as a co-benefit rather than a primary objective.

There is also limited routine assessment of how environmental interventions affect health inequalities, vulnerable populations and long-term health outcomes. While biodiversity, nature recovery and climate adaptation are well established policy areas, the links between these agendas and public health are not yet consistently embedded within decision-making processes.

Another gap concerns adaptation. Much of the focus historically has been on environmental improvement and carbon reduction, whereas less attention has been given to understanding how environmental services can help communities adapt to unavoidable climate impacts such as overheating, flooding, drought and ecological change.

Barriers

Governance and coordination remain among the most significant barriers. The absence of a formal county-wide climate adaptation partnership means responsibility is dispersed across organisations and sectors, making coordinated action more difficult.

Funding and capacity constraints also present challenges. Environmental services are increasingly expected to deliver climate adaptation, biodiversity recovery, public health improvements and community resilience, often with limited resources and competing priorities.

There are also barriers relating to evidence and data. Whilst there is increasing recognition of the links between environmental quality and health, there is often limited local evidence demonstrating the health impacts of environmental interventions. This can make it more difficult to secure investment and prioritise preventative action.

Finally, environmental services often have limited influence over wider determinants of health such as housing, transport and economic development, despite these sectors having significant implications for environmental resilience and health outcomes.

Tensions

A key tension exists between environmental priorities and competing pressures for housing, infrastructure and economic development. Balancing biodiversity recovery, nature restoration and climate adaptation with growth ambitions can be challenging, particularly where land-use decisions are contested.

There is also a tension between delivering immediate environmental improvements and investing in longer-term resilience. Climate adaptation often requires long-term

planning and investment, while funding and political priorities frequently operate within shorter timescales.

Another emerging tension concerns the balance between environmental outcomes and social equity. Nature-based solutions and environmental improvements can generate significant health benefits, but without careful planning there is a risk that benefits are distributed unevenly, potentially widening existing inequalities.

Opportunities

The strongest opportunity lies in repositioning environmental services as a core component of East Sussex's climate-health resilience system. The growing emphasis on nature recovery, green infrastructure, biodiversity enhancement and climate adaptation provides a strong foundation for linking environmental action more explicitly to health and wellbeing outcomes.

The development of the Local Nature Recovery Strategy creates a particularly important opportunity to align biodiversity recovery, climate adaptation and public health objectives. Nature recovery projects can simultaneously support flood resilience, cooling, air quality, mental wellbeing, physical activity and community resilience.

There is also significant potential to embed Health Impact Assessment more routinely within environmental planning and decision-making. Doing so could help ensure that environmental investments maximise health benefits, reduce inequalities and strengthen climate resilience.

The ongoing mapping of policies, assets and vulnerabilities across East Sussex offers another major opportunity. By understanding where protective environmental assets are located and where vulnerabilities exist, partners can target investment more effectively and monitor progress over time.

Finally, there is growing recognition that a health framing can strengthen environmental narratives and increase engagement across sectors. Environmental services may therefore be able to use public health evidence and partnerships to increase influence, attract investment and build stronger collaboration with planning, transport, housing and community partners.

Overall Assessment

East Sussex has developed a substantial environmental response that already contributes significantly to protecting health through nature recovery, biodiversity enhancement, flood management, green infrastructure and environmental protection.

However, the response remains more environmentally led than health led, with health often viewed as a co-benefit rather than a core objective.

The greatest opportunity lies in moving towards a more integrated climate-health approach in which environmental services are recognised as a central part of the county's health resilience infrastructure. By strengthening governance, embedding health within environmental decision-making, aligning climate adaptation with nature recovery, and making better use of emerging initiatives such as the Local Nature Recovery Strategy, East Sussex could become a leading example of how environmental services can support healthier, more resilient and more equitable communities in a changing climate.

9. Emergency Services

"Yes, it's a climate emergency, but people are still getting up in the morning and they don't see the disaster unfolding immediately" (East Sussex Stakeholder - Emergency Services)

High Level Strategic Opportunity:

Build an integrated, climate-ready emergency response system that unifies public alerts, multi-hazard simulation, inclusive community engagement, resilient equipment, interagency resource sharing, and mobile access innovations—while incorporating wildfire-specific training, infectious disease protocols, global best practices, and adaptive routing to protect all populations under increasingly complex and overlapping climate threats.

Rationale:

Emergency planning and response systems are increasingly challenged by the growing frequency, intensity and complexity of climate-related hazards, including flooding, extreme heat, severe weather, wildfires, infectious disease outbreaks, infrastructure failures and cascading risks that can occur simultaneously. These events place significant pressure on emergency services, health and care systems, critical infrastructure and local communities, with disproportionate impacts on vulnerable populations, including older people, children, people with disabilities and those experiencing social disadvantage. Traditional emergency planning, often focused on single hazards, is no longer sufficient to address the interconnected nature of climate-related risks. Developing an integrated, climate-ready emergency response

system that combines multi-hazard preparedness, interoperable emergency planning, resilient infrastructure, coordinated public warning systems, inclusive community engagement, shared resources, adaptive technologies and strong interagency collaboration will strengthen preparedness, improve response and recovery, maintain continuity of essential services, reduce avoidable harm and mortality, and build community resilience in the face of escalating and overlapping climate threats.

Considerations, Opportunities and Action Steps

Opportunity 1: Develop and or make use of a Unified Climate-Responsive Public Alert System to deliver timely, accessible, and actionable information

Action Steps:

- Integrate air quality, heat, cold, flood, wildfire smoke, and UV index into a single, multilingual alert platform. Also to act as a prompt to check on the vulnerable (neighbours).
- Use geofenced push notifications, voice calls, and visual alerts adapted for people with disabilities (e.g., visual/hearing impairments).
- Where appropriate, enhance the employment of AI-driven severity forecasting and personalized alerts (e.g., tailored advice for elderly, respiratory conditions).

Opportunity 2: Develop and or make use of Multi-Hazard Scenario Simulation & Training

Action Steps:

- Where appropriate and possible develop multi-agency simulation tools combining compound risks like wildfire + heatwave + blackout or storm surge + chemical leak.
- Run and review inter-agency scenario drills annually and in accordance to the changing climate, involving healthcare, fire, police, utilities, and community leaders.
- Integrate digital twin models of places or rural zones for visualizing climate emergencies in real time.

Opportunity 3: Launch, employ and use Inclusive and Trauma-Informed Community Engagement to build public trust and effective response among all populations

Action Steps:

- Use **trauma-informed, culturally competent communication**, co-designed with community leaders and interpreters.
- Launch 'Climate and Health Risk' campaigns in schools, care homes, religious centres, and migrant hubs.
- Champion and engage with **climate-health ambassadors** from vulnerable communities (e.g., disabled and elderly) to promote readiness.

Opportunity 4: Adapt and make use of Resilient and Diversified Emergency Equipment and Adapt fleets and tools to new climate realities

Action Steps:

- Retrofit or purchase vehicles rated for high-heat, wildfire, flood, and chemical exposure operations.
- Maintain redundant cooling systems, air filters, and protective gear for responders in high-risk environments.
- Prioritize battery-electric emergency vehicles with solar-assisted backup in blackout-prone regions.

Opportunity 5: Create and Maximise Asset-Sharing and Interagency Surge Protocols to Maximize Response Capability Under Pressure

Action Steps:

- Sign regional mutual aid and asset-sharing agreements for drones, boats and hazmat gear.
- Explore the opportunity to create a shared regional command 'Climate and Health' (Public Health, Health and Social Care) dashboard to track pressures, coastal inequalities, resource availability and emergency responses/deployment in real time.
- Build portable equipment caches that can be relocated based on seasonal climate forecasts (e.g., wildfire kits in summer).

Opportunity 6: Maximise Mobile Responses and Accessibility Innovation, focusing on extending services to remote, flood-prone, or heat-isolated populations

Action Steps:

- **Develop mobile Emergency Medical Services** units with all-terrain vehicles or drone-supported access in wildfire and flood zones.
- Use floating ambulance platforms in high-flood regions and amphibious access routes where feasible.
- Equip units with telemedicine, climate-controlled patient bays, and portable communications backup (satellite/mesh).

Opportunity 7: Develop and expand Wildfire-Specific Emergency Workforce Training

Action Steps:

- Require cross-training in wildland fire behaviour, smoke triage, rapid evacuation coordination, and PPE use.
- Include psychological resilience training for long-duration fire response under heat stress.
- Integrate wildfire drills with real-time air quality simulations and long-distance evacuation routing.

Opportunity 8: Preserve & Adapt Public Health Protocols (Post-COVID) that maintain infectious disease safety amid overlapping crises

Action Steps:

- Keep pandemic contingency protocols integrated with climate emergency response (e.g., wildfire evacuation + respiratory disease management).
- Maintain a reserve PPE, masks, and HEPA filtration units for high-risk sheltering scenarios.
- Train responders on infection control during heat events and mass displacement.

Opportunity 9: Leverage global best practice and experience, global Learning and Climate Emergency Innovation Exchange

Action Steps:

- Create and join local and regional climate emergency coalitions (e.g., Resilient Cities Network, ICLEI).
- Regularly update local protocols based on lessons learned from international firestorms, floods, and heatwaves.
- Pilot innovative models on how to address climate and health impacts from abroad (e.g., Japan's earthquake evacuation kits, Chile's fire perimeter containment systems).

Opportunity 10: Explore and Develop Alternative Access and Routing Systems that prevent response delays due to impassable routes (particularly in rural areas with limited transport and road access/options)

Action Steps:

- Use AI-enabled navigation with real-time flood/fire maps for dynamic ambulance rerouting.
- Work with highways to create seasonal alternate route maps for each neighbourhood with elevation and hazard overlays.
- **Develop climate-adaptive Emergency Medical Services** staging zones outside hazard areas with rapid-deploy launch capabilities.

Monitoring, Evaluation and Coordination Example

Strategic Integration - Integrate emergency services strategy with:

- East Sussex Resilience Forum (ESRF)
- Public Health Emergency Planning
- NHS Surge Planning and ICS Preparedness Strategy
- Local Flood Risk Management and Adaptation Plans

Key Indicators:

- % of emergency sites with retrofits for heat/flood risk
- Response time variance during climate-related events
- Number of multi-agency exercises conducted per year
- % of community members signed up for early alerts

- Engagement levels of migrant and vulnerable populations in preparedness campaigns

Context and impacts:

In the context of a changing climate, emergency services are increasingly recognised as a critical part of the public health and resilience system. They help communities prepare for, respond to and recover from climate-related hazards such as flooding, heatwaves, wildfires, storms and infrastructure failures.

Their role is evolving from primarily responding to emergencies towards helping prevent harm, identify vulnerable populations, support adaptation and strengthen community resilience. As climate risks increase, emergency services are becoming key partners in protecting health, reducing vulnerability and helping communities adapt to a changing climate.

Emergency services are organisations responsible for protecting life, property, infrastructure and the environment by preventing, preparing for, responding to and supporting recovery from emergencies, accidents, disasters and major incidents. They provide immediate assistance during crises and play an increasingly important role in prevention, resilience and public safety.

In the UK, emergency services are commonly referred to as the **blue light services** and include:

- Police Services
- Fire and Rescue Services
- Ambulance Services

They work closely with a wider range of organisations, including the NHS, local authorities, environmental agencies, coastguard services, voluntary organisations and community partners.

What Emergency Services Do

Traditionally, emergency services have focused on responding to incidents such as fires, road traffic collisions, crime, medical emergencies, flooding and severe weather events. However, their role has expanded significantly and now includes prevention, preparedness, resilience building and recovery.

Emergency services:

- Respond to emergencies and major incidents.

- Rescue people from immediate danger.
- Protect communities from hazards and environmental risks.
- Support vulnerable individuals during emergencies.
- Deliver prevention and safety programmes.
- Coordinate with health, social care and local authority partners.
- Support community preparedness and resilience.
- Assist recovery following major incidents and disasters.

For example, Fire and Rescue Services not only respond to fires but also undertake home safety visits, carbon monoxide prevention, wildfire preparedness, flood response and safeguarding activities. Ambulance Services provide urgent medical care and support during extreme weather events, while Police Services help manage evacuations, public safety and emergency coordination.

A changing climate is increasingly recognised as a significant challenge for emergency planning, emergency response and public health protection. Rising temperatures, more frequent heatwaves, flooding, storms, wildfires, coastal erosion and emerging infectious diseases are creating new and complex demands on emergency services. These hazards are no longer isolated events but are becoming more frequent, interconnected and prolonged, placing increasing pressure on emergency response systems while simultaneously increasing risks to population health.

Emergency services, particularly Fire and Rescue Services, are therefore increasingly positioned at the frontline of climate change impacts. Their role is evolving beyond responding to emergencies towards supporting prevention, preparedness, resilience and recovery. This reflects a broader shift from reactive emergency management towards anticipatory approaches that seek to identify and reduce risks before incidents occur.

Climate-related risks have direct implications for emergency services. Flooding and water scarcity can increase demand for rescues, welfare checks and support for people who depend on medical equipment or regular healthcare services. Heatwaves are associated with rising risks of dehydration, heat-related illness, excess deaths, fire incidents and unsafe coping behaviours. Wildfires and vegetation fires are becoming a growing concern, particularly in areas such as Sussex where dry heathlands and grasslands are vulnerable during periods of prolonged heat and drought. Poor air quality, allergens and the emergence of new infectious and vector-borne diseases also have indirect impacts on respiratory health and healthcare demand.

These risks are compounded by wider social vulnerabilities. Older people, individuals with long-term health conditions, people experiencing poverty, homelessness or social isolation, and those living in poor quality or climate-inappropriate housing are often

disproportionately affected. A changing climate is therefore exposing and amplifying existing health inequalities whilst creating new forms of vulnerability.

Importantly, vulnerability is increasingly dynamic. Traditional emergency planning has often focused on fixed risk groups and historical patterns of demand. A changing climate is altering where, when and for whom risks emerge. Issues such as fuel poverty, overheating homes, loss of housing security due to coastal erosion, repeated flooding, or reduced access to cooling and water resources are creating new challenges that may not be captured within traditional emergency planning frameworks.

Health Impacts

The health impacts associated with climate-related emergencies are both direct and indirect. Extreme weather events can lead to injury, illness and loss of life, while also affecting mental health, social wellbeing and access to essential services.

Heatwaves are becoming one of the most significant climate-related health threats. They increase risks of dehydration, heat exhaustion, heatstroke, cardiovascular disease and respiratory illness, particularly among older adults and people with pre-existing health conditions. Heat can also affect critical infrastructure, including hospitals and healthcare facilities, as demonstrated during the 2022 heatwave when hospital services experienced operational disruption due to overheating and infrastructure failures.

Flooding presents multiple health risks, including injury, contamination, displacement, loss of homes and long-term psychological impacts. Evidence consistently shows that the mental health consequences of flooding, including anxiety, stress, depression and trauma, can persist for months or years after the initial event. Flooding can also disrupt healthcare services and affect access to medication, treatment and support.

Wildfires are an emerging concern across many parts of England, including Sussex. Beyond the immediate risks to life and property, wildfires generate significant air pollution that can exacerbate respiratory and cardiovascular conditions. Smoke exposure can affect vulnerable populations over wide geographical areas and place additional pressures on health services.

A changing climate is also expected to influence the distribution of infectious diseases and environmental health risks. Warmer temperatures and changing environmental conditions may create favourable conditions for some vector-borne diseases, while changes in air quality and allergen exposure can worsen respiratory conditions and increase emergency healthcare demand.

Emergency Services as a Public Health Asset

Emergency services already make a substantial contribution to protecting health from climate impacts. Within East Sussex, Fire and Rescue Services undertake a wide range of prevention and protection activities that extend beyond emergency response. These include home safety visits, carbon monoxide prevention, fire prevention work, safeguarding vulnerable residents and identifying individuals at risk due to poor housing conditions, frailty, social isolation or long-term illness.

Through their strong community reach, emergency services are often among the first organisations to identify emerging vulnerabilities and can play a vital role in connecting individuals to wider support services. Increasingly, their contribution is recognised as an important part of the public health system rather than simply an emergency response function.

The nature of demand is also changing. Climate-related incidents are increasing the need for welfare-focused interventions, safeguarding activities and health protection measures. Emergency services are increasingly expected to support public preparedness, community resilience, post-incident recovery and public understanding of emerging climate risks, not just acute emergency response.

Data, Planning and System Challenges

A significant challenge for emergency services is that climate risks do not always align neatly with traditional planning frameworks. Information about vulnerability often exists across multiple organisations but may be fragmented, difficult to access or quickly become outdated as environmental and social conditions change.

Similarly, climate risk mapping does not always align with operational emergency planning, home safety programmes or health risk assessments. This creates challenges for identifying who is most at-risk during events such as heatwaves, flooding or wildfires and highlights the need for more adaptive and integrated approaches to risk management.

The increasing frequency of climate-related events also raises concerns about service capacity. More frequent floods, wildfires and extreme weather events have the potential to stretch emergency response resources, reduce surge capacity and create competing demands across multiple locations simultaneously.

Wider Implications

The growing influence of a changing climate means emergency services are becoming a critical part of local climate adaptation and health resilience systems. Their role

increasingly extends beyond emergency response to include prevention, preparedness, community resilience, vulnerability identification and recovery.

This shift reflects a wider understanding that climate-related emergencies sit at the intersection of public health, social care, housing, environmental management and community resilience. Flooding, wildfires and extreme weather are no longer simply emergency events; they are public health challenges that require coordinated action across sectors.

Current International and National Response(s):

Internationally, emergency services are increasingly recognised as critical actors in addressing the health effects of a changing climate. Historically, emergency management systems focused on responding to incidents after they occurred. However, organisations such as the World Health Organization, United Nations Office for Disaster Risk Reduction and the Intergovernmental Panel on Climate Change have highlighted the need to move beyond reactive emergency response towards prevention, preparedness, risk reduction and resilience-building.

A key international shift has been the adoption of the Sendai Framework for Disaster Risk Reduction, which emphasises understanding risk, protecting vulnerable populations, strengthening preparedness and building resilience before emergencies occur. Increasingly, climate-related hazards such as flooding, heatwaves, wildfires, storms and emerging infectious diseases are viewed not simply as emergency management issues but as major public health risks requiring coordinated action across emergency services, health systems and communities.

There is also growing recognition that a changing climate creates new and evolving patterns of vulnerability. International guidance increasingly promotes the use of risk stratification, vulnerability mapping and data sharing to identify those most at risk before emergencies occur. This includes older people, people with long-term health conditions, socially isolated individuals, low-income households and communities exposed to repeated climate-related events.

Another important theme is the growing role of emergency services as **community resilience partners**. Internationally, there is increasing emphasis on strengthening local resilience networks, supporting community preparedness and working with local organisations to build adaptive capacity. Emergency services are increasingly expected to contribute to prevention, public education, preparedness and recovery, alongside their traditional response functions.

National Response (England)

Nationally, the response is evolving in a similar direction. Emergency planning arrangements increasingly recognise a changing climate as one of the most significant long-term risks facing communities and public services. National adaptation planning identifies flooding, heatwaves, wildfires, drought, coastal change and infrastructure disruption as major risks requiring coordinated action across emergency services, local authorities, health organisations and resilience partnerships.

Emergency services are increasingly adapting operational planning, training and capabilities to reflect changing climate risks. This includes enhanced flood response capacity, growing preparedness for wildfires, improved heatwave planning and stronger coordination with health and social care services during extreme weather events.

However, much of the current system remains focused on incident management and emergency response after an event has occurred. While preparedness and resilience are becoming more prominent, there is increasing recognition that future approaches need to place greater emphasis on prevention, vulnerability identification and population-level health protection.

National policy is increasingly encouraging:

- Better identification of vulnerable populations before emergencies occur.
- Greater use of data sharing and risk stratification.
- Stronger links between emergency planning, public health and social care.
- Increased community resilience and preparedness.
- Adaptation of existing services to future climate risks.

A particular area of focus is the growing intersection between emergency planning and health protection. Heatwaves, flooding and severe weather events are increasingly recognised as public health emergencies, with impacts extending far beyond the immediate incident to include mental health, social care needs, housing insecurity and health inequalities.

Changing Role of Emergency Services

Both internationally and nationally there is growing recognition that emergency services should not be viewed solely as emergency responders. Instead, they are increasingly seen as part of wider health and resilience systems.

Fire and Rescue Services are often highlighted as examples of anchor institutions because they are:

- Trusted by communities.
- Present within people's homes.
- Connected to health, social care and resilience partnerships.
- Active across prevention, response, recovery and preparedness.

This places them in a unique position to identify vulnerabilities, support preventative interventions and strengthen community resilience.

There is increasing recognition that existing programmes can be adapted to address climate-related health risks rather than creating entirely new systems. For example, home safety visits can be expanded to include consideration of overheating risks, flood preparedness, unsafe coping behaviours during heatwaves, carbon monoxide risks and vulnerability to coastal or weather-related hazards.

Similarly, information-sharing arrangements already used to identify people at risk of fire, safeguarding concerns or welfare needs could be adapted to support climate-related risk management. Data from healthcare providers, social care services and resilience partners could help identify individuals most vulnerable to heatwaves, flooding or prolonged service disruption.

Community Resilience and Prevention

One of the strongest themes emerging nationally and internationally is the importance of community resilience. There is increasing recognition that local communities possess significant untapped capacity to support vulnerable residents during climate-related emergencies.

Community resilience groups, volunteers, local disaster plans and informal support networks are increasingly viewed as important components of climate adaptation. Emergency services are well positioned to bridge formal emergency planning structures with community-based support systems, particularly when focused on protecting vulnerable populations.

This reflects a wider shift from responding to crises towards building resilience before crises occur.

Emerging Direction of Travel

The overall direction of travel is towards a more preventative, health-focused and resilience-based model of emergency management. Increasingly, emergency services are expected to:

- Anticipate risk rather than simply respond to incidents.

- Identify vulnerable populations before emergencies occur.
- Work more closely with health and social care partners.
- Strengthen community preparedness and resilience.
- Support recovery and long-term adaptation.
- Use data and intelligence to target prevention efforts.

A changing climate is therefore reshaping emergency services from organisations primarily focused on emergency response into organisations that play a broader role in protecting population health, reducing vulnerability and building resilience.

Strategic Implication

Internationally and nationally, the response is moving away from a model based largely on incident management towards one centred on prevention, adaptation and resilience. Emergency services are increasingly recognised as key public health partners that can help identify vulnerability, protect at-risk populations and strengthen community resilience to climate-related health impacts.

The challenge now is to accelerate this transition so that emergency planning systems become more proactive, predictive and population-focused, ensuring that vulnerable individuals and communities are identified and supported before climate-related emergencies occur rather than after the harm has already been done.

Local East Sussex Response to Build From:

East Sussex is increasingly recognising that a changing climate presents not only an emergency planning challenge but also a significant public health challenge. The local response is delivered through a network of partnerships involving emergency services, health organisations, local authorities and resilience bodies, with growing recognition that climate-related risks such as flooding, heatwaves, wildfires, drought and coastal change have substantial implications for population health and wellbeing.

A key component of the local system is the Local Health Resilience Partnership (LHRP), which provides oversight of health and welfare system resilience across Sussex. The LHRP plays an important role in identifying risks, assessing potential impacts and developing mitigation measures to ensure that health and care services remain resilient during emergencies. It works closely with the Sussex Resilience Forum (SRF), a multi-agency partnership bringing together the NHS, public health, local authorities, emergency services and other key organisations to coordinate planning for, and responses to, major incidents and emergencies.

Within this framework, emergency services are increasingly viewed as contributors to population health protection rather than solely responders to emergencies. East Sussex Fire and Rescue Service, ambulance services and wider resilience partners already undertake substantial prevention and safeguarding activities that help reduce vulnerability before incidents occur. These include home safety visits, carbon monoxide prevention, welfare checks, safeguarding referrals and support for vulnerable individuals during periods of disruption such as flooding, severe weather events and water shortages.

An important strength of the East Sussex approach is the use of partnership working and information sharing to identify vulnerable residents. For example, Fire and Rescue Services work with GP practices and other partners to identify individuals who may benefit from preventative home visits, while resilience and safeguarding data can be used during emergencies to support people with medical dependencies, mobility limitations or other complex needs. These approaches demonstrate how existing prevention and safeguarding models can be adapted to address climate-related risks such as heatwaves, flooding and future displacement.

The local response also recognises the growing importance of community resilience. Community resilience groups, local emergency plans, volunteers and informal support networks are increasingly seen as important assets in protecting vulnerable populations during climate-related events. Emergency services are well placed to bridge formal resilience arrangements, such as those coordinated through the Sussex Resilience Forum, with local community capacity, helping strengthen preparedness and support those most at risk.

There is also evidence of a strong learning culture within the system. Mechanisms exist to log incidents, undertake post-incident reviews and learn from previous emergencies. This supports continuous improvement in emergency planning and response. However, partners acknowledge that challenges remain, particularly around data sharing and the availability of system-wide intelligence. Information about vulnerability often exists across multiple organisations but is not always integrated, making it difficult to develop a complete picture of who is most at risk during climate-related events.

Increasingly, emergency services are examining how existing programmes can be adapted to reflect emerging climate risks. This includes opportunities to expand home safety visits to consider overheating, flood preparedness, unsafe coping behaviours during heatwaves, wildfire risks and coastal vulnerabilities. There is also growing recognition that operational planning, workforce training and emergency assets will need to evolve to reflect future climate risk profiles, particularly in relation to flood response, wildfire preparedness and prolonged extreme weather events.

Strategic Direction

The emerging direction of travel in East Sussex is a shift from incident management towards longer-term health protection, vulnerability management and resilience building. While emergency planning has traditionally focused on responding to incidents once they occur, there is increasing recognition that a changing climate requires a more preventative approach based on identifying risks earlier, understanding vulnerable populations and reducing harm before emergencies happen.

This creates an opportunity to strengthen the role of public health within emergency planning and resilience arrangements, ensuring that responses focus not only on incident containment but also on wider population health impacts, inequalities and long-term recovery. Emergency services bring practical operational insight, strong community reach and established prevention programmes that can help make climate and health strategies more realistic, preventative and deliverable.

Gaps

A major gap within the East Sussex response is that emergency planning remains predominantly focused on incident response and recovery rather than the longer-term health impacts of a changing climate. Whilst flooding, severe weather and major incidents are well established within emergency planning arrangements, there is less systematic focus on identifying and managing emerging climate-related health risks such as overheating, climate-related mental health impacts, displacement, fuel poverty, water scarcity and changing patterns of vulnerability.

There is also a gap in vulnerability identification and risk stratification. Although valuable data exists across health, social care, emergency services and local authorities, it is often held in separate systems and is not routinely integrated to provide a comprehensive picture of climate vulnerability. As a result, it can be difficult to identify who is most at risk before an emergency occurs and target preventative interventions accordingly.

A further gap is the limited integration of public health into emergency planning and climate adaptation. Emergency planning arrangements increasingly recognise health impacts, but there remains an opportunity to move beyond incident containment towards a broader focus on population health, health inequalities, prevention and resilience. Climate-related risks are often considered operationally, whereas their longer-term consequences for health and wellbeing are less consistently assessed.

There is also limited consideration of how a changing climate may alter future emergency service demand. Whilst flood and wildfire risks are increasingly recognised, there is less understanding of how rising temperatures, changing disease

patterns, worsening air quality and cumulative climate impacts may affect service demand over the coming decades.

Barriers

The most significant barrier is the absence of integrated system-wide data on vulnerability. Information about people at risk during heatwaves, flooding, power outages or water shortages exists across health, social care, housing and emergency services, but there is no single, dynamic picture of climate vulnerability across East Sussex.

Resource and capacity constraints also present a challenge. Emergency services are already responding to increasing operational demands, and there is limited capacity to develop entirely new climate adaptation programmes. As a result, adaptation needs to be delivered through modifications to existing services rather than through additional resources.

Another barrier is that many climate-related health risks remain outside traditional emergency service planning frameworks. Issues such as overheating homes, climate anxiety, fuel poverty, housing insecurity due to coastal erosion and social isolation can significantly increase vulnerability but are not always recognised within conventional emergency risk assessments.

Partnership working, whilst strong in many areas through the Local Health Resilience Partnership and Sussex Resilience Forum, can also be constrained by organisational boundaries, differing priorities and inconsistent data systems. This can make coordinated action more difficult, particularly when addressing complex, long-term climate risks.

Finally, there is an evidence gap around the future health impacts of a changing climate at a local level. Whilst there is increasing awareness of risks, uncertainty remains around how a changing climate will affect emergency demand, vulnerable populations and health outcomes in East Sussex over time.

Tensions

One of the key tensions is balancing immediate operational demands with longer-term adaptation and prevention. Emergency services are under pressure to respond to incidents today, yet a changing climate requires investment in preparedness, vulnerability management and resilience-building for future risks that may not yet be fully visible.

There is also a tension between reactive and preventative approaches. Emergency services are traditionally measured and funded around response performance,

whereas climate adaptation requires greater emphasis on prevention, community resilience and safeguarding. This can make it challenging to prioritise preventative activity when operational pressures are high.

Another tension relates to data sharing and privacy. Effective climate adaptation increasingly requires sharing information about vulnerable individuals across organisations. However, concerns around governance, confidentiality and legal responsibilities can sometimes create barriers to timely information sharing, even when the intention is to protect health and wellbeing.

A further tension exists between local and system-wide priorities. Climate-related risks such as flooding, heatwaves and wildfires often cross organisational boundaries, yet planning, funding and decision-making structures are frequently organised around individual agencies or geographical areas.

Opportunities

East Sussex has significant opportunities to build on existing strengths. One of the greatest opportunities is to reposition emergency services as part of the county's wider climate-health resilience system rather than viewing them solely as responders to emergencies. Fire and Rescue Services already have trusted relationships with communities, strong safeguarding functions and extensive prevention programmes that could be adapted to address climate-related risks.

There is considerable scope to build climate considerations into existing home safety visits, welfare checks and prevention activities. For example, services could increasingly consider overheating, flood preparedness, resilience during power outages, wildfire awareness and other climate-related risks alongside traditional fire and safety concerns.

The Local Health Resilience Partnership and Sussex Resilience Forum provide strong foundations for integrating climate, health and emergency planning. These partnerships create opportunities to strengthen joint working between emergency services, public health, health and care providers, housing, planning and community organisations.

Improving vulnerability mapping represents another major opportunity. By combining data from health, social care, emergency services, housing and community organisations, East Sussex could develop a more sophisticated understanding of who is most vulnerable to climate-related risks and where targeted interventions would have the greatest impact.

There is also significant potential to strengthen community resilience. Community resilience groups, local emergency plans, volunteers and neighbourhood networks

already exist across the county. Emergency services are well placed to support and connect these assets, helping communities prepare for and respond to climate-related events.

Finally, a changing climate provides an opportunity to shift emergency planning towards a more preventative public health model. Rather than focusing primarily on managing incidents after they occur, emergency services can play a greater role in identifying risks early, preventing harm, protecting vulnerable populations and supporting long-term adaptation.

Strategic Opportunity for East Sussex

East Sussex already has many of the foundations required to address the health effects of a changing climate through emergency services. Strong partnership arrangements through the Local Health Resilience Partnership and Sussex Resilience Forum, effective prevention and safeguarding programmes, community resilience initiatives and a commitment to learning from incidents all contribute to protecting health and wellbeing.

The major opportunity now is to formally recognise emergency services as core partners within the county's climate and health response. The greatest opportunity is to formally recognise emergency services as core partners in climate adaptation and public health rather than as peripheral responders. Much of the infrastructure needed already exists through prevention programmes, safeguarding arrangements, resilience partnerships and community networks. By adapting these existing systems to incorporate climate risks, East Sussex can move towards a more proactive model that protects health, reduces inequalities and builds resilience to both immediate climate shocks and longer-term environmental change.

In this model, emergency services become not only responders to floods, wildfires and extreme weather events, but also key contributors to vulnerability management, population health protection and the creation of climate-resilient communities.

10. Health and Social Care (Adults and Children)

High Level Strategic Opportunity:

Transform health and social care into a climate-resilient, equitable, and net-zero system by prioritising prevention for the most vulnerable, embedding climate risk into

governance and service delivery, decarbonising and adapting infrastructure, safeguarding mental and physical health, ensuring secure food, water, and energy supplies, protecting against environmental hazards, and strengthening community partnerships, multi-hazard preparedness, and integrated system-wide leadership to maintain care continuity under escalating climate threats.

Rationale:

Health and social care services are both on the frontline of responding to the health impacts of a changing climate and increasingly vulnerable to climate-related disruption. Rising temperatures, extreme weather, flooding, poor air quality, infectious diseases, water scarcity and infrastructure failures are expected to increase demand for health and care services while simultaneously affecting healthcare facilities, workforce capacity, supply chains and access to essential medicines, food, water and energy. These impacts are likely to disproportionately affect people who are already vulnerable, including older adults, people with long-term health conditions, people with disabilities, children and those experiencing deprivation, potentially widening existing health inequalities. At the same time, the health and care sector has a significant opportunity to improve population health by embedding prevention, climate adaptation and sustainability into service planning, governance and delivery while reducing its own environmental footprint. Developing a climate-resilient, equitable and net-zero health and social care system through resilient infrastructure, climate-informed clinical practice, integrated emergency preparedness, secure critical supplies, community partnerships and whole-system leadership will help maintain continuity of care, protect patients and staff, reduce avoidable illness and demand, strengthen resilience and support healthier, fairer and more sustainable communities across East Sussex.

Definition of Health and Social Care:

Health and social care refer to the integrated system of organisations, services and professionals that work to protect, improve and maintain people's physical, mental and social wellbeing throughout the life course. It encompasses health promotion, disease prevention, diagnosis, treatment, rehabilitation, long-term care and end-of-life support, alongside services that enable people to live independently, safely and with dignity.

Health services include primary, community, mental health, acute, ambulance and specialist healthcare, whilst social care provides practical, emotional and personal support to children, adults, older people, carers and individuals with disabilities or long-term conditions. Together, these services aim to improve quality of life, reduce

inequalities, protect vulnerable populations and support people to achieve the best possible health and wellbeing.

Within the context of a changing climate, health and social care systems have a dual responsibility. They must **adapt** to increasing climate-related health risks—including heatwaves, flooding, poor air quality, infectious diseases, mental health impacts and disruption to essential services—while also **mitigating** their own environmental impacts through sustainable, low-carbon and climate-resilient service delivery. Building resilient health and social care systems is therefore essential to maintaining service continuity, protecting vulnerable populations and supporting healthier, more resilient communities in a changing climate.

HIA Context

Within this Health Impact Assessment, **health and social care** includes:

- NHS organisations and integrated care services
- Adult and children's social care
- Public Health
- Primary care (general practice, community pharmacy, dentistry and optometry)
- Community health and mental health services
- Acute and specialist hospital services
- Ambulance and urgent care services
- Care homes, domiciliary care and supported living
- Voluntary, community and social enterprise (VCSE) organisations delivering health and care support; and
- Informal carers, recognising their vital contribution to health, wellbeing and community resilience.

This broader definition reflects the whole-system nature of health and social care and recognises that protecting health in a changing climate requires coordinated action across services, communities and the wider determinants of health.

Considerations, Opportunities and Action Steps

Opportunity 1: Prioritise in Prevention and the Most Vulnerable

Action Steps:

- Invest in early warning systems to alert and prepare health and social care settings to mobilise and respond, at the earliest opportunity, and days leading up to severe weather events such as heat waves etc.
- Embed **climate vulnerability screening** in primary care, hospital discharge, social work, and safeguarding protocols.
- Expand access to **heatwave and air quality alerts**, hydration kits, home cooling interventions, and respiratory health services—especially for:
- Children with asthma
- Older individuals who are 65 and over (as they are less able to detect temperature changes and at high risk of cardiovascular conditions)
- Outdoor workers
- People in poverty or poor housing
- Link climate resilience interventions to anti-poverty strategies:
- Home energy efficiency upgrades for households in fuel poverty Access to cooling centres
- Free school meal expansion during extreme weather events

Note: Prevention is cost-saving and health-enhancing in both the short and long term.

Opportunity 2: Mainstream Climate into Health & Social Care Governance and Delivery

Action Steps:

- Embed climate into Integrated Care Systems (ICS) governance, strategies, and population health management dashboards.
- Adapt care settings for climate extremes:
- Passive cooling and air purification in clinics, homes, and hospitals
- Backup power systems in residential care
- Climate-informed shift scheduling and staff training (e.g., heat stroke, vector exposure)
- Build **early warning and rapid response protocols** for flood, heat, wildfire, and power outage impacts on services.

Health and social care systems must evolve from reactive models to proactive, climate-ready systems that **reduce exposure**, **protect the most vulnerable**, and **build public trust** in uncertain futures.

Population Health Focus:

- Include **climate health risk indices** in risk stratification tools.
- Commission services based on **place-based environmental exposure data**, not just clinical data.

Opportunity 3: Decarbonise Physical Estates and Build Resilient Infrastructure

Action Steps:

- Retrofit existing buildings with:
- Low carbon heating technologies (where appropriate and possible)
- LED lighting and passive ventilation
- Green roofs and shaded courtyards
- On-site renewables and battery storage
- Set **net-zero design standards** for all new build hospitals, care homes, and family hubs.
- Create **nature-positive care environments** (e.g. dementia gardens, trauma recovery greenspaces, biodiverse playgrounds).

Opportunity 4: Co-Build Resilience by Strengthening Community Participation and Local Wellbeing Networks

Action Steps:

- Partner with **schools, family hubs, food banks, and community gardens** to provide health-supportive, climate-aware services.
- Support and provide guidance/tools for **climate-health champions** within voluntary, community, and social enterprise (VCSE) organisations.
- Promote **co-located services** (e.g. mental health + housing + green prescribing in one space) in all areas and particularly in climate-stressed areas.
- Local System Integration: Develop place-based climate-health action plans with local authorities and anchor institutions.

Opportunity 5: Address Mental Health Impacts of related to a Changing Climate

Action Steps:

System Preparedness:

- Equip frontline practitioners (youth workers, social workers, GPs) to identify and address:
- **Eco-anxiety** in our youth
- **Disaster-related trauma** in flood or fire survivors
- **Grief, anger, or paralysis** related to chronic environmental loss

Support Mechanisms:

- Establish **climate-aware therapy options** (group support, cognitive behavioural therapy
- , green therapy).
- Train clinicians in **trauma-informed care** for climate events.

Opportunity 6: Lead by Example in Operations and Procurement

Action Steps:

- Shift to **zero-emission fleets**, especially for community health and care teams.
- Reform procurement to favour:
- Low-carbon medical devices and pharmaceuticals
- Reusable PPE and climate-safe packaging
- Ethical food sourcing and waste reduction
- Build **circular systems** (recycling, composting, energy recapture) into hospital and care estate operations.

Opportunity 7: Secure Food, Water, and Energy for Care Systems and Communities as Resilience Priorities

Action Steps:

- Establish **resilient food supply partnerships** with local farms, meal providers, and wholesalers.

- Install **solar + battery microgrids** to safeguard essential services during power outages.
- Use care settings as **distribution and information hubs** during climate emergencies (e.g., cooling sites, water access points).
- Provide education and tools for **household food and water resilience**, especially among patients with chronic conditions.

Opportunity 8: Protect respiratory and immune-vulnerable patients from Aeroallergens & Poor Air Quality (including rising pollen, mould, dust, and pollution levels).

Action Steps:

- Install HEPA-grade air filtration and mechanical ventilation systems in hospitals, care homes, and family hubs.
- Design pollen- and pollution-aware ventilation systems with seasonal auto-adjustments.
- Embed **air quality alerts into clinical and social care protocols** (e.g. adjusting exercise, outdoor activities, medication timing).

Evidence-backed: Allergic rhinitis and asthma cases increase during high pollen and air pollution events exacerbated by a changing climate.

Opportunity 9: Minimize health and infrastructure risks from increasing wildfire frequency and proximity.

Action Steps:

- Redesign hospital and care site grounds to include:
- **Fire-defensible zones** (e.g. hardscaping, fuel-free buffer areas)
- Fire-resistant native plant landscaping
- Sprinkler systems and exterior sealing on vulnerable structures
- Conduct **smoke intrusion simulations** and prepare emergency air quality shelters in care facilities.
- Ensure **climate wildfire hazard mapping** is shared across ICSs and social care estate teams.

Opportunity 10: Prepare for new patterns of disease spread due to changing vector habitats.

Action Steps:

- Integrate **climate-linked disease threats** (e.g. dengue, Lyme, West Nile) into:
- Nursing and medical school curricula
- Continuing professional development (CPD)
- Include PPE stockpiles, vector-control kits, and insect-proofing in climate preparedness plans.
- Use **AI-informed early warning systems** combining temperature, moisture, and mosquito presence data to alert services in high-risk areas.

Opportunity 11: Manage and Adapt Temperature Extremes (Heat & Cold) in all Health and Social Care Settings

Action Steps for Built Environment and Operations:

- Require **cool, shaded outdoor spaces for patients and staff**, heat-reflective surfaces, and water access in all care site renovations.
- Prioritize passive cooling and emergency heat protocols in:
- Neonatal wards
- Geriatric care units
- Psychiatric inpatient settings

Action Steps for Care Planning & Health Record Integration:

- Embed **climate-sensitive triage criteria** in EMS and A&E protocols (e.g. temperature stress signs).
- Add **individual climate risk assessments** (e.g. sun sensitivity, thermoregulation issues) into EHR/care plans.
- Ensure patients in glass-heavy buildings (e.g. health and social care buildings/housing and their conservatories) are **flagged for cooling assistance programs**.

Action Steps for Outreach and Equity:

- Deliver proactive outreach to rough sleepers, older adults, people with disabilities, traveller communities, park homes, and those in unsupported housing:

- Distribute cooling packs, water, SPF, and sunhats
- Provide transport to cooling centres
- Coordinate emergency accommodation during heat or cold alerts

Opportunity 12: Integrate System-Wide Integration and Leadership across the Health and Social Care System where addressing the Health Effects of a Changing Climate is a key priority

Action Steps:

- Integrate climate risks across triage, care planning, discharge, and recovery pathways.
- Include **temperature-related health risk alerts** in ICS dashboards and GP systems.
- Create a national clinical climate adaptation toolkit that includes:
- Temperature-related medication interactions
- Climate triggers for flare-ups (Chronic Obstructive Pulmonary Disease (COPD), and cardiovascular events)
- Specific adaptations for children, pregnant people, and those with comorbidities

Opportunity 13: Future-proof health and care services for pandemics and climate-amplified outbreaks.

Action Steps:

- Maintain multi-hazard pandemic readiness plans:
- Ensure **rotating PPE stockpiles** with regional coordination.
- Provide **climate-informed workforce training** on zoonotic and vector-borne diseases.
- Design facilities for spatial health resilience:
- Integrate natural ventilation, High-Efficiency Particulate Air (HEPA) filtration, and antimicrobial surfaces.
- Adopt **flexible interior layouts** allowing physical distancing without isolation trauma.
- Improve **infection-resilient digital systems** (e.g. contactless check-ins, telehealth expansion).
- Embed **pandemic protocols** into multi-agency resilience forums (health + CVS + housing + schools).

Opportunity 14: Reduce skin cancer, heatstroke, and photosensitivity impacts from increasing UV and temperature.

Please see: Heat-related deaths in social care in England: can the Care Quality Commission ratings system be used to identify care homes that would benefit most from heat adaptation measures? | Age and Ageing | Oxford Academic

Action Steps:

- Retrofit care homes and hospitals to:
- Install shaded patios, awnings, UV-reflective windows, and sun shelters for patient/staff use.
- Apply **UV films on glass** in high-exposure rooms.
- Partner with businesses and organisations to deliver UV-safe community infrastructure:
- SPF dispensers in public health settings.
- Branded sun hats or shade sails in family hubs or playgrounds.
- Train health workers to **screen for UV-linked risks**, particularly in immunocompromised or dermatological patients.
- Drive 'prevention' and reduce the risk of skin cancer by championing education awareness in schools, colleges and health and social care settings.

Opportunity 15: Minimise exposure to endocrine disruptors, volatile organic compounds, and waterborne chemicals.

Action Steps:

- Smart Procurement & Facility Action - Mandate **ecological procurement**:
- Ban high-VOC paints, PFAS-containing textiles, and non-biodegradable cleaning products.
- Choose low-toxicity, recyclable, and reused materials.
- Equip maintenance staff with **climate- and pollution-safe protocols** for pesticide use, disinfection, and waste.

Opportunity 16: Guarantee secure, safe water access for patients and operations during water stress.

Action Steps:

- Install rainwater harvesting and on-site purification systems in larger facilities.

- Create community-level emergency water depots at health hubs and clinics.
- Train staff and carers on water conservation protocols and run public campaigns on home water storage (e.g. jerry cans, filters, reuse of greywater).
- Add **hydration stations** in clinics to prevent heat-related illness.

Opportunity 17: Protect health operations and vulnerable populations in flood-prone areas.

Action Steps:

- Ensure healthcare continuity plans cover:
- Alternate staff routes.
- Patient transport options.
- Medical record access and **mobile health delivery** during flood disruption.
- Retrofit or locate resilient infrastructure:
- Raise electrical systems in ground-floor wards.
- Use water-resistant interiors in flood-prone clinics.
- Store mobile medical units above flood level.
- Activate schools, libraries, and family hubs as:
- Temporary shelters
- Heat/cool respite centres
- Field triage or pharmacy extension sites

Opportunity 18: Enable Cross-Cutting Integration

Action Steps:

- Co-locate **emergency services, health teams, and social care** in shared flood- and heat-resilient buildings.
- Conduct **resilience drills** with the public and frontline staff using climate scenarios.
- Expand ICS and Local Resilience Forums (LRFs) to include **climate impact coordination hubs**.

Governance, Measurement & Evaluation

Strategic Integration - embed these actions in:

- ICS Green Plans
- East Sussex Joint Health and Wellbeing Strategy

- Adult Social Care Future Planning
- Children's and SEND Strategies

Evaluation Metrics:

- % of health estate with climate risk mitigation
- % reduction in carbon emissions from operations
- No. of patients accessing climate-informed social prescriptions
- Food and fuel insecurity rates in care populations

Context and impacts:

A changing climate is increasingly recognised as one of the most significant challenges facing health and social care systems. Importantly, it is no longer viewed as a future risk but as a current and growing reality that is already affecting population health, service delivery and health and care infrastructure. Across the health and care system there is growing recognition that a changing climate is influencing demand for services, exacerbating health inequalities and creating new pressures on workforce capacity, service resilience and long-term planning.

Increasingly, there is recognition that health and social care systems must move beyond emergency preparedness and infrastructure resilience towards a broader understanding of climate resilience. This includes anticipating future demand, protecting vulnerable populations, strengthening workforce resilience and addressing the wider determinants of health that influence vulnerability to a changing climate.

A changing climate is therefore reshaping the role of health and social care systems. Alongside treating illness and responding to emergencies, services are increasingly required to prevent climate-related harm, support adaptation, reduce inequalities and strengthen community resilience.

For health and social care, the implications are broad. Heatwaves increase risks of dehydration, heatstroke, cardiovascular illness, respiratory illness and excess deaths, particularly among older people, people with long-term conditions, babies and young children, and those living in poor-quality housing. Flooding can cause injury, displacement, contamination, trauma and disruption to medication, appointments, home care and hospital access. Poor air quality and longer pollen seasons worsen asthma and respiratory disease, while changing environmental conditions may increase risks from some infectious and vector-borne diseases.

Adult social care is especially exposed. Care homes, supported living, domiciliary care and unpaid carers face growing pressures from overheating buildings, transport

disruption, staff shortages, power or water outages and increased needs among frail or medically dependent residents. A changing climate therefore affects not only hospitals and NHS estates, but the whole health and care pathway, including people receiving care at home.

A key issue is that health-system climate work has often been estates-led, focusing on buildings, energy, infrastructure and decarbonisation. These are essential, and the NHS has committed to adaptation planning, but this approach does not fully address community health impacts, surges in demand, workforce wellbeing, social care pressures or unequal vulnerability. NHS England itself recognises that without adaptation, a changing climate will disrupt services, critical infrastructure, hospitals, staff and patients.

Social Care Impacts

Adult social care is increasingly exposed to climate-related pressures. Care homes supported living services and domiciliary care providers face growing challenges associated with heatwaves, flooding, transport disruption and infrastructure failures.

Older people and those receiving care are often among the most vulnerable to climate-related health risks. Heat stress can affect both residents and staff; while flooding or severe weather can disrupt care delivery, staff travel and access to essential supplies. Power outages, water shortages and transport disruptions can create additional risks for individuals who depend on medical equipment, medication or regular support.

A changing climate also affects the social care workforce. Staff may face increased travel difficulties, workplace stress and operational challenges during extreme weather events. As demand for care continues to grow, climate-related disruptions may exacerbate existing workforce shortages and recruitment challenges.

Workforce and Service Resilience

The health and care workforce is itself vulnerable to climate impacts. Staff working in hospitals, community services, care homes and home care settings may experience increased exposure to heat stress, operational pressures and emergency response demands. Climate-related events can also affect staff wellbeing, increase workload and contribute to burnout.

At the same time, healthcare facilities and social care services are vulnerable to infrastructure disruption. Recent examples nationally have demonstrated how heatwaves can affect hospital buildings, IT systems and service delivery, while flooding has disrupted healthcare facilities and essential services. These incidents

highlight the need to consider climate resilience across the entire health and care system.

Complexity and Uncertainty

One of the defining challenges for health and social care is the complexity of a changing climate and its interactions with other systems. Climate impacts do not occur in isolation but interact with housing markets, labour supply, transport networks, economic conditions and community resilience.

There is growing recognition that evidence remains uneven in some areas, particularly around issues such as climate-related migration, long-term changes in service demand and the cumulative effects of multiple climate hazards. As a result, health and care organisations are often planning within conditions of uncertainty.

There are concerns that existing demographic projections and service planning models do not yet fully incorporate climate assumptions. This creates a risk that future demand for health and social care services may be underestimated, particularly if climate impacts accelerate or interact with other social and economic pressures.

Gaps, Barriers and Tensions

The main gap is that a changing climate is not yet fully embedded into population health, social care and long-term service planning. Climate assumptions are often not built into demographic modelling, workforce planning, demand forecasting or care market assessments, which risks underestimating future pressures.

There is also a gap between NHS estates resilience and wider system resilience. Buildings may be assessed for energy, heat and flood risk, but less attention is given to how climate hazards affect home care, unpaid carers, people with complex needs, community services, mental health, safeguarding, transport and access to care.

A major tension is between immediate operational pressures and long-term adaptation. Health and social care services are already under strain, making it difficult to prioritise preventative climate resilience work whose benefits may be seen over years rather than weeks.

There are also barriers around complexity and uncertainty. Climate impacts interact with housing, poverty, labour markets, care workforce supply, migration, transport and community resilience in non-linear ways. Evidence is still emerging in some areas, but waiting for perfect evidence risks delayed action.

Opportunities and what needs to change

The opportunity is to shift from an estates-focused approach to a **whole-system climate-health-care resilience model**. This would mean treating a changing climate as a driver of future demand, inequality and service disruption, not just as an infrastructure or carbon issue.

Health and social care partners should embed climate risk into population health management, adult social care planning, care home standards, domiciliary care resilience, workforce wellbeing, safeguarding, emergency planning and prevention. This includes identifying vulnerable people before climate events occur, strengthening community and home-based resilience, and ensuring care providers can operate during heatwaves, floods, outages and transport disruption.

Current International and National Response(s):

International Response

Internationally, there has been a significant shift in how a changing climate is viewed within health and care systems. Historically, a changing climate was treated primarily as an environmental issue. Increasingly, however, organisations such as the World Health Organization recognise a changing climate as one of the greatest threats to population health and health-system sustainability in the 21st century. The focus has moved beyond emergency response and infrastructure protection towards building **climate-resilient health systems** that can anticipate, absorb and adapt to climate-related shocks and long-term stresses.

The WHO's framework for climate-resilient health systems highlights ten key areas for action, including leadership and governance, climate-informed workforce planning, vulnerability and adaptation assessments, climate-resilient infrastructure, integrated surveillance and early warning systems, climate-informed health programmes, emergency preparedness and sustainable financing. The emphasis is on ensuring that health systems continue to protect population health despite increasing climate-related pressures.

A major theme internationally is the recognition that a changing climate affects not only health outcomes but also the ability of health and care systems to function. Increasing attention is being given to workforce resilience, supply chains, continuity of care, community-based services and social care systems, alongside hospitals and healthcare infrastructure. There is growing recognition that health systems must prepare for rising demand associated with heat-related illness, flooding, respiratory disease, mental health impacts and changing patterns of infectious disease.

The international response is also increasingly focused on vulnerability and adaptation assessments. Countries are being encouraged to identify climate-sensitive health risks, understand which populations are most vulnerable and embed health considerations within wider climate adaptation planning. This reflects recognition that a changing climate is likely to exacerbate existing health inequalities and place disproportionate burdens on older people, low-income populations and those with long-term conditions.

Increasingly, international policy recognises that climate resilience extends beyond healthcare facilities to encompass social care, community services, public health systems and the wider determinants of health. The direction of travel is towards whole-system resilience rather than a narrow focus on healthcare infrastructure alone.

National Response (England)

In England, the response has largely been led through the NHS, UK Health Security Agency (UKHSA) and national adaptation planning processes. There is increasing recognition that a changing climate is already affecting health outcomes and service delivery through heatwaves, flooding, poor air quality and infrastructure disruption. National policy increasingly frames climate change as both a health protection issue and a health-system resilience challenge.

The NHS response has been strongly shaped by the ambition to create a more sustainable and climate-resilient health service. Much of the early focus has been on decarbonisation, estates, energy systems and infrastructure resilience through programmes such as the NHS Net Zero agenda. More recently, there has been growing recognition that adaptation is equally important, particularly as heatwaves, flooding and extreme weather events increasingly disrupt services and affect patients and staff.

Nationally, there is increasing emphasis on:

- Climate risk assessments and adaptation planning.
- Heatwave preparedness and response.
- Flood resilience and business continuity.
- Climate-resilient healthcare infrastructure.
- Workforce resilience and staff wellbeing.
- Integrated emergency preparedness and health protection.
- Vulnerability identification and support for at-risk populations.

However, stakeholders increasingly acknowledge that climate resilience within the NHS remains heavily focused on estates and infrastructure. There is growing recognition that future responses need to place greater emphasis on population health impacts, health inequalities, workforce pressures, service demand and the wider health and care system.

Adult Social Care

Compared with healthcare, the climate response within adult social care is less developed. Internationally and nationally, there is growing awareness that care homes, supported living services, domiciliary care providers and unpaid carers are highly exposed to climate risks, yet adaptation planning has often focused on hospitals and healthcare facilities.

Nationally, there is increasing recognition that care services face growing risks from:

- Heat stress affecting residents and staff.
- Flooding and severe weather disrupting care delivery.
- Transport disruption affecting workforce mobility.
- Power and water outages affecting vulnerable individuals.
- Increased demand among older people and those with complex health needs.

Despite this, adult social care is often viewed as a secondary consideration within climate adaptation planning. Many commentators and regulators have highlighted the fragility of the care sector and the need for stronger resilience planning, workforce support and integration with health-system adaptation efforts.

A growing area of concern nationally is overheating in care settings. Recent discussions within the UK adaptation community increasingly recognise that hospitals and care homes may require significant adaptation to remain safe during future heatwaves, particularly given the vulnerability of older adults and those with long-term conditions.

Emerging Themes

Across both international and national policy, several common themes are emerging.

The first is a shift from viewing a changing climate as an environmental issue towards recognising it as a health-system issue. A changing climate is increasingly understood as affecting not only health outcomes but also the resilience, capacity and sustainability of health and care services.

The second is a move from infrastructure resilience towards whole-system resilience. There is growing recognition that protecting hospitals alone is insufficient; adaptation must also include adult social care, community services, workforce planning, public health, emergency preparedness and support for vulnerable populations.

The third is an increasing focus on vulnerability. Health systems are being encouraged to identify populations at greatest risk and target preventative interventions before climate-related harms occur. This includes older people, people with chronic illness, socially isolated individuals and those living in poor-quality housing.

Finally, there is growing recognition that climate adaptation and health inequalities are closely linked. A changing climate is expected to exacerbate existing inequalities unless adaptation measures are designed to protect those most vulnerable to both health and environmental risks.

Overall Assessment

The international and national response is moving steadily towards the concept of **climate-resilient health and care systems**. The strongest progress has been made in understanding climate risks, strengthening healthcare infrastructure and embedding climate considerations within health policy. However, there is increasing recognition that adaptation must go beyond buildings and emergency planning to address population health, adult social care, workforce resilience, health inequalities and future service demand.

The major challenge for the next decade is translating climate adaptation from an estates and infrastructure agenda into a whole-system health and care agenda that protects vulnerable populations, supports the care workforce and ensures that health and social care systems remain resilient in a changing climate.

Local East Sussex Response to Build From:

East Sussex is increasingly recognising that a changing climate is not simply an environmental issue but a fundamental determinant of future health, wellbeing and demand for health and care services. This is particularly important given the county's ageing population, significant health inequalities, large rural and coastal communities, and growing demand for adult social care. Climate-related risks such as heatwaves, flooding, coastal erosion, poor air quality and infrastructure disruption therefore have the potential to disproportionately affect some of the county's most vulnerable residents whilst placing additional pressure on already stretched health and care systems.

The local response is increasingly focused on building **system-wide resilience**, recognising that a changing climate affects not only hospitals and care settings, but the wider determinants of health and the ability of communities to remain healthy and independent. There is growing emphasis on preparing health and social care systems for the next 5–10 years, taking account of extreme weather, demographic change, workforce pressures and future governance reforms. A changing climate is increasingly being discussed alongside prevention, health inequalities and long-term service sustainability rather than as a standalone environmental issue.

Partnership working is a central feature of the East Sussex response. NHS Sussex, East Sussex County Council, Adult Social Care, Public Health, district and borough councils, voluntary and community organisations, emergency planning partners and the wider Sussex Health and Care Partnership are increasingly exploring how climate adaptation can be embedded within existing health and care transformation programmes. There is recognition that addressing climate risks will require coordinated action across housing, transport, community resilience, emergency planning and care services, rather than action from the NHS alone.

A particular area of focus is the development of more resilient health and care systems. Locally there is growing recognition that climate resilience cannot be limited to estates and infrastructure. Whilst resilient buildings, energy systems and business continuity arrangements remain important, there is increasing awareness that a changing climate will affect demand for services, workforce wellbeing, adult social care provision, care home resilience and the ability of vulnerable residents to remain healthy and independent.

This is particularly relevant for adult social care. Overheating in care homes and residential settings has emerged as a priority concern because it sits at the intersection of health, wellbeing, estates management, energy use and prevention. There is increasing recognition that future care environments will need to be designed and managed differently to cope with hotter summers whilst maintaining safe and comfortable environments for residents and staff.

Housing is also seen as a critical part of the response. Keeping people healthy at home for longer is a major objective for both health and social care services, and climate resilience is increasingly being linked to housing quality, affordability, energy efficiency, overheating risk and access to community support. This reflects recognition that many climate-related health impacts occur in people's homes rather than healthcare settings.

Another important feature of the local response is the growing role of procurement and commissioning as levers for change. There is increasing interest in embedding climate-health considerations into service specifications, contracts and commissioning processes. This includes considering how providers protect staff and service users

during heatwaves, flooding and other disruptions, and using procurement processes to support resilience as well as carbon reduction.

The voluntary and community sector is also recognised as a critical partner. Community organisations are often closest to vulnerable populations and can provide valuable intelligence on how a changing climate is affecting local communities. There is growing interest in developing stronger feedback mechanisms so that local experience can inform planning, prevention and service design.

Locally, there is strong support for developing practical tools, guidance and training to help staff routinely consider climate and health impacts within decision-making. This includes the development of climate-health assessment tools, simple evidence summaries and approaches that can be integrated into existing processes such as Equality Impact Assessments.

Gaps

The most significant gap is that climate adaptation is not yet fully embedded within health and social care transformation. Whilst there is increasing awareness of climate risks, much of the work remains focused on estates, infrastructure and emergency planning rather than understanding how a changing climate will affect future population health, service demand and care provision.

There is also a gap in the integration of climate considerations into strategic planning. Long-term health and care planning models do not yet consistently incorporate climate assumptions relating to heatwaves, flooding, housing pressures, migration, workforce availability or changing patterns of illness. This creates a risk that future demand may be underestimated.

Adult social care represents another important gap. Compared with healthcare services, climate adaptation within care homes, domiciliary care and community-based support remains relatively underdeveloped despite the vulnerability of many people receiving care.

There is also limited system-wide intelligence on climate vulnerability. Although valuable data exists across health, social care, housing, emergency planning and community organisations, it is often fragmented and not routinely brought together to identify populations most at risk.

Barriers

The complexity of a changing climate is itself a significant barrier. Climate impacts interact with housing, transport, labour markets, energy systems, social care

provision and community resilience in complex and often unpredictable ways. This can make it difficult for organisations to know where to start.

Evidence gaps remain another challenge. Whilst the impacts of heatwaves and flooding are increasingly well understood, there is less certainty around issues such as climate-related migration, long-term social care demand and the cumulative effects of multiple climate hazards.

Workforce capacity and capability also present barriers. Many staff recognise a changing climate as important but may lack the confidence, training or practical tools needed to incorporate climate considerations into everyday decision-making.

Governance can also be a challenge. Responsibility for climate adaptation is spread across multiple organisations and sectors, making coordination and accountability more difficult.

Tensions

One of the major tensions is between immediate service pressures and longer-term resilience planning. Health and social care organisations are dealing with workforce shortages, rising demand and financial pressures, making it difficult to prioritise climate adaptation when many of the benefits may only become visible over time.

There is also a tension between short-term operational priorities and prevention. Much of the health and care system is structured around responding to need once it emerges, whereas climate adaptation requires earlier intervention, risk identification and investment in resilience.

Another tension relates to competing priorities for investment. Decisions about estates, workforce, digital infrastructure and service transformation increasingly need to consider climate resilience, but resources remain limited.

There is also a growing tension between local vulnerabilities and national policy frameworks. Coastal erosion, flooding, rural isolation and an ageing population create specific risks for East Sussex that may not always be reflected within national adaptation approaches.

Opportunities

East Sussex has significant opportunities to position climate adaptation as a core part of health and care transformation. Rather than treating a changing climate as a separate environmental agenda, there is an opportunity to embed it within prevention, population health management, health inequalities, community resilience and service redesign.

The county's strong partnership structures provide an important foundation. Existing forums such as the Sussex Health and Care Partnership, Integrated Care Board, Health and Wellbeing Boards, Adult Social Care partnerships and cross-county resilience arrangements provide mechanisms through which climate-health action can be coordinated.

Procurement and commissioning offer particularly powerful opportunities. By incorporating climate resilience and health considerations into contracts and service specifications, East Sussex can influence how services are delivered, how organisations prepare for disruption and how vulnerable populations are protected.

There is also substantial opportunity to focus on practical, visible priorities such as overheating in care homes, healthy and climate-resilient housing, community resilience, loneliness and social isolation, and support for people to remain healthy at home for longer. These areas provide clear connections between climate adaptation, prevention and health outcomes.

The voluntary and community sector represents another major opportunity. Community organisations often have strong relationships with vulnerable groups and can provide valuable insight into emerging climate-related challenges. Strengthening these connections could improve both planning and service delivery.

Finally, there is an opportunity to develop a more place-based approach that reflects East Sussex's unique characteristics, including its ageing population, coastal exposure, rural communities and existing health inequalities. Visualisation tools, vulnerability mapping and climate-health intelligence could help make risks more tangible and support better decision-making.

What Needs to Change?

The key challenge for East Sussex is to move beyond viewing a changing climate primarily as an estates, sustainability or emergency planning issue and instead recognise it as a major driver of future health and care demand.

Climate adaptation needs to become a core component of health and care transformation, linking NHS Sussex, East Sussex County Council, Adult Social Care, Public Health, care providers, housing, transport, emergency planning and voluntary sector partners around shared climate-health risks. Greater emphasis is needed on prevention, vulnerability identification, workforce resilience, care home adaptation, healthy housing and community resilience.

Ultimately, the opportunity is to develop a climate-resilient health and care system that not only responds to emergencies but actively protects vulnerable residents,

reduces inequalities and supports people to live healthy, independent lives in a hotter, more disrupted and less predictable future.

11. Housing

High Level Strategic Opportunity:

Champion, create and foster a climate-resilient, health-promoting, and low-carbon housing systems by prioritising equitable retrofits, embedding climate-smart design in all new builds, integrating active and healthy neighbourhood planning, safeguarding air and water quality, mitigating health and chemical risks, enhancing flood and drought resilience, and preparing adaptable housing solutions to support migration and climate displacement.

Rationale:

Housing is one of the most important determinants of health and plays a critical role in shaping resilience to a changing climate. The quality, location and design of homes influence exposure to extreme heat, cold, flooding, poor air quality, water scarcity, damp, mould, chemical pollutants and other environmental hazards, while also affecting physical and mental health, energy affordability, social connectedness and health inequalities. As a changing climate increases the frequency and intensity of extreme weather events, resilient, healthy and low-carbon housing will be essential to protecting vulnerable populations, reducing fuel poverty, maintaining safe living conditions and supporting independent living. At the same time, the transition to climate-adapted housing presents opportunities to improve indoor environmental quality, promote active and healthy neighbourhoods, enhance biodiversity, strengthen flood and drought resilience, reduce greenhouse gas emissions and prepare for changing housing needs associated with population change, migration and climate displacement. Embedding climate adaptation, health, sustainability and equity across housing policy, design, retrofit and development will help create healthier homes, more resilient communities and a fairer, climate-ready East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1: Make Retrofitting and Resilient Design for Existing Homes a top priority

Action Steps:

- Continue to work with the East Sussex Housing Partnerships to drive activity and apply for joint bids (through grant funding) to support retrofit.
- As being set out by national government, champion for the 'minimum energy performance requirements' (2028-2030) for privately rented homes.
- Further drive and support **locally coordinated retrofit programs** with equity prioritization (low-income, renters, social housing) and in line with support for delivery of the East Sussex Retrofit Strategy.
- Where possible and subject to funding make use of **whole-building performance assessments** (heat retention, moisture control, ventilation, allergen reduction).
- Lobby for government grants that enable and prioritize the need for **passive cooling upgrades** before installing mechanical systems:
- External shutters
- Tree canopy buffers
- Reflective coatings and ventilation stack retrofits
- Work with the public to make homes more energy efficient by using traditional retrofit upgrades to help maintain a constant temperature all year round.
- Fund "climate health retrofit navigators"/energy advisory service (like the Warm Homes Check Service) to help vulnerable households access funding and services.
- Lobby for the legislation of **higher EPC minimums for private landlords**, with enforcement mechanisms and support.

Opportunity 2: Make use of strict Planning and Design Standards to develop Climate-Smart New Builds and Urban Form

Action Steps:

- Foster stronger working relationships and collaboration between developers, local planning authorities and housing systems to help develop climate-smart neighbourhoods and new builds.
- Mandate **net-zero-ready building codes** aligned with climate adaptation needs (heat, drought, flood, wildfire).
- Embed **climate-health co-benefits** into housing masterplans:

- Cool roofs, drought-tolerant landscaping
- Smart water reuse systems
- District heating systems and cooling systems for the future
- Natural ventilation aligned with prevailing wind and pollution patterns
- Edible landscaping
- Require all developments to meet **heat-resilient urban density standards** (e.g. avoid heat traps, enforce green % per plot).
- Ban **non-permeable artificial grass** and replace with biodiversity-enhancing, climate-buffering green space.
- Expand **Nature-Based Housing Infrastructure Funds** to support rain gardens, tree corridors, and pollinator habitats.

Opportunity 3: Maximise and Incorporate Active, Healthy, and Low-Carbon Living Environments via Local Policy areas (Planning, Housing and Neighbourhood Design), the 'East Sussex Public Health and Planning Memorandum of Understanding (MOU)' and the 'East Sussex Planning for Health, Wellbeing and Sustainability Framework'.

Action Steps:

- Apply **Healthy Streets and Active Design standards** to all new residential developments and major retrofits.
- Ensure **connected and compact neighbourhoods** with walkable access to schools, groceries, clinics, and transit.
- Mandate **secure bike storage, shaded pathways**, and safe pedestrian-priority streets in planning codes.
- Incentives for **green roofs and home gardens**, emphasizing mental health and food resilience.
- Integrate **active design audits** into planning approvals for high-density housing.

Opportunity 4: Enhance Indoor and Outdoor Air Quality Integration

Action Steps:

- Champion for decent standards for private and socially rented homes. This includes the need for social landlords to navigate their responsibilities in relation to Awaab's Law.
- Require all new homes to include **high-efficiency filtration, cross-ventilation**, and smart indoor air quality sensors.

- Promote **green buffer zones** (e.g., trees, hedges) near major roads or industry to reduce outdoor air infiltration.
- Co-locate **housing and transit planning** to reduce private car dependency.
- Include **pollen- and heat-aware planting guidance** in all municipal landscaping codes.
- Link housing policy to **dynamic air quality alerts**, restricting construction or triggering public health advisories.

Opportunity 5: Design and Incorporate Health Risk Mitigation in Housing

Action Steps:

- Design for safe **multi-generational homes** with adequate space, ventilation, and private hygiene facilities to reduce infection risk. Improve space standards, repurposing for existing housing and new builds
- Apply ventilation, humidity, and thermal comfort standards (and EPC requirements) that prevent mould and damp—especially in social and rental housing.
- In accordance to the 'Renters Rights Bill' and new supported housing regulations, expand local authority capacity to introduce and carry out **proactive inspection and repair mandates** for damp-prone buildings, linked to local climate risk maps.
- Where possible work with local planning authorities and housing providers to incorporate vector-borne disease prevention features as part of new developments and housing retrofit programmes (lobby for measure to be part of future retrofit grant schemes):
- Mosquito-proof screens
- Roof drainage systems to avoid pooling
- Landscaping that reduces standing water

Cross-sectoral note: Link to public health surveillance and forecasted disease range shifts (e.g. West Nile, Dengue).

Opportunity 6. Enable Water, Flood, and Drought Resilience in Homes and Neighbourhoods

Action Steps:

- Mandate **SuDS (Sustainable Drainage Systems)** in all new builds and retrofits, including:

- Rain gardens
- Swales
- Green roofs
- Require **dual-purpose systems**: absorb heavy rain, store water for droughts (e.g. underground tanks).
- Normalize **greywater systems** for toilet flushing and irrigation across housing types.
- Require **above-minimum flood design** in zoning and insurance thresholds for high-risk zones.
- Use permeable paving, bioswales, and sponge city features to reduce runoff and urban flash floods.
- Protect **groundwater recharge zones** through green infrastructure and zoning enforcement.

Opportunity 7: Ensure Chemical and Soil Safety in Residential Development

Action Steps:

- Require **enhanced site assessments** before residential development on brownfields or former industrial/agricultural land.
- Establish **health-buffer zoning** to separate homes from pesticide-intensive agricultural zones, roads, and toxic exposure sites.
- Apply precautionary regulation on new construction materials, especially those containing:
- VOCs (Volatile Organic Compounds)
- Flame retardants
- PFAS ("forever chemicals")
- Make use of/publish **"Healthy Build Material Standards"** with transparency labels (similar to food labelling).
- Train inspectors and developers on **climate-health-material interactions** (e.g. chemical leaching during wildfires or floods).

Opportunity 8: Plan and Prepare Future Housing Options to support Migration, Climate Displacement, and Community Support

Action Steps:

- Build of existing partnership structures including a strategic migration partnership and partnership projects such as the ‘Homes for Ukraine Programme’.
- Develop local climate displacement readiness plans, including:
- Emergency housing from vacant/second homes
- Community hosting schemes
- Modular/portable housing for evacuees
- Integrate displacement support into housing and health systems, including:
- Trauma-informed intake protocols
- Medical continuity (prescriptions, records)
- Cultural dietary and privacy considerations
- Employ and provide training for **culturally competent housing officers** who reflect and understand local migrant and refugee populations.
- Fund **community navigation programs** with housing and health advocates in high-displacement risk regions.
- Temporary accommodation stock to be made more resilient to a changing climate particularly where they are on the coast.

Collaborative Imperative

Opportunity:

Establish permanent cross-agency climate-health-housing taskforce involving:

- Public health
- Local planning authorities
- Environmental health officers
- Emergency services
- Migrant and social service organizations

They should co-create integrated housing strategies that:

- Address both acute (floods, heatwaves and storms) and chronic (air quality, displacement, allergens) stressors
- Centre vulnerable populations in planning
- Measure success in both climate and health outcomes

Context and impacts:

Housing is one of the most important determinants of health and is increasingly recognised as a critical component of climate adaptation and resilience. The quality, location, affordability and resilience of housing influence physical health, mental wellbeing, social connectedness and vulnerability to environmental risks. As a changing climate intensifies, housing is becoming one of the primary ways through which climate-related health impacts are experienced by individuals and communities.

Historically, housing policy has focused on issues such as affordability, supply, quality, fuel poverty and homelessness. Increasingly, however, a changing climate is adding a new dimension. Homes are no longer simply places of shelter; they are becoming frontline environments where people experience the effects of rising temperatures, flooding, severe weather, poor air quality and energy insecurity. Consequently, housing is now recognised internationally and nationally as a key component of both climate adaptation and public health policy.

The relationship between housing and health is particularly important because people spend a significant proportion of their lives indoors. The condition of homes influences exposure to heat, cold, damp, mould, air pollution and environmental hazards, while also affecting mental wellbeing, safety and quality of life. A changing climate has the potential to worsen existing housing-related health inequalities, particularly for populations already experiencing disadvantage.

Housing as a Climate and Health Issue

A changing climate affects housing through multiple pathways. Rising temperatures increase the risk of overheating in homes, particularly in older properties, poorly insulated buildings, upper-floor flats and housing designed primarily to retain heat during winter. Heat exposure is associated with dehydration, heat exhaustion, heatstroke, cardiovascular disease, respiratory illness and increased mortality, particularly among older people, young children and individuals with long-term health conditions.

Flooding presents another significant challenge. River flooding, surface water flooding, groundwater flooding and coastal flooding can damage homes, disrupt services and displace residents. Beyond physical damage, flooding can have profound and long-lasting impacts on mental health, contributing to anxiety, depression, trauma and stress. Evidence suggests that the mental health impacts of flooding often persist long after physical recovery has taken place.

A changing climate is also increasing concerns around housing affordability and energy resilience. As temperatures become more extreme, households may face growing costs associated with heating, cooling and maintaining healthy living conditions. Low-income households are often least able to adapt, increasing risks of fuel poverty, energy insecurity and associated health inequalities.

Poor housing conditions can amplify climate-related risks. Homes affected by damp, mould, inadequate ventilation, overcrowding or poor insulation may be less able to cope with changing climatic conditions. A changing climate may therefore exacerbate existing health issues associated with poor-quality housing.

Physical Health Impacts

The health impacts associated with climate-vulnerable housing are extensive. Overheating is increasingly recognised as a major public health concern, particularly as heatwaves become more frequent and intense. Excess heat can increase mortality and hospital admissions, particularly among older adults, people with cardiovascular disease, respiratory conditions and other chronic illnesses.

Flooding and severe weather can result in injuries, disruption to healthcare access, contamination of living environments and increased exposure to environmental hazards. Poor indoor air quality, which may be worsened by higher temperatures and inadequate ventilation, can contribute to respiratory conditions such as asthma and chronic obstructive pulmonary disease.

Housing also influences opportunities for physical activity and healthy living. Well-designed neighbourhoods with access to green space, active travel infrastructure and community facilities can help improve health while supporting climate adaptation goals.

Mental Health and Wellbeing

Housing plays a critical role in supporting mental wellbeing. A safe, secure and comfortable home provides stability, protection and a sense of control. Climate-related threats to housing can undermine these protective factors.

Concerns about flooding, coastal erosion, rising energy costs and housing insecurity can contribute to stress, anxiety and uncertainty. Individuals affected by flooding often experience prolonged psychological impacts, while repeated exposure to climate-related risks can affect community confidence and wellbeing.

Housing quality is also closely linked to loneliness and social isolation. Climate-related disruptions can reduce mobility, limit social contact and increase vulnerability among

people who are already isolated. Secure and resilient housing therefore contributes not only to physical health but also to social and emotional wellbeing.

Health Inequalities and Vulnerability

A changing climate is likely to magnify existing housing inequalities. Vulnerability is not distributed evenly across the population.

Groups particularly at risk include:

- Older people.
- People with disabilities and long-term health conditions.
- Low-income households.
- Renters and people in insecure housing.
- People experiencing fuel poverty.
- Residents of poorly insulated or climate-vulnerable homes.
- Coastal and flood-prone communities.

These populations often have fewer resources available to adapt their homes or relocate away from environmental risks. As a result, housing is increasingly recognised as a key pathway through which a changing climate may widen health inequalities.

Housing and Health System Impacts

The relationship between housing and health has significant implications for health and social care services. Poor-quality or climate-vulnerable housing can increase demand for healthcare, social care and emergency services. Heat-related illness, respiratory disease, falls, mental health problems and hospital admissions are all influenced by housing conditions.

There is growing recognition that supporting people to remain healthy at home is central to prevention and sustainability within health and care systems. Climate-resilient housing can reduce future pressures on health and social care services by preventing illness before it occurs.

This is particularly important given ageing populations and increasing demand for adult social care. Housing that supports independent living, resilience to climate impacts and healthy ageing is becoming a critical component of future health and care planning.

Current International and National Response(s):

Emerging National and International Themes

Across both international and national policy, several common themes are emerging.

Theme	Direction of Travel
Healthy Homes	Housing recognised as a core determinant of health
Climate Adaptation	Greater focus on overheating, flooding and resilience
Health Inequalities	Recognition that climate-vulnerable housing increases inequalities
Retrofit and Decarbonisation	Improving existing housing stock rather than focusing solely on new homes
Fuel Poverty and Energy Security	Linking affordability, energy efficiency and health
Healthy Ageing	Supporting people to remain safe and independent at home
Nature and Place	Integrating green infrastructure and climate-resilient neighbourhoods
System Resilience	Recognising housing as part of health-system resilience

Internationally, housing is increasingly recognised as one of the most important determinants of health and a critical component of climate adaptation. The focus has shifted from housing being viewed primarily as a shelter issue towards understanding housing as a key mechanism through which a changing climate affects health, wellbeing, resilience and health inequalities.

The World Health Organization has placed housing at the centre of its healthy environments agenda, recognising that housing quality influences exposure to extreme heat, cold, flooding, air pollution, infectious diseases, injury risks and mental health outcomes. The WHO argues that improving housing conditions can save

lives, prevent disease, reduce inequalities, improve quality of life and contribute to climate mitigation and adaptation.

The WHO's Housing and Health Guidelines provide an important international framework, highlighting the need to address indoor temperatures, overcrowding, accessibility, ventilation, damp and mould, water quality and environmental hazards. Increasingly, these issues are being viewed through a climate adaptation lens, particularly as heatwaves, flooding and extreme weather become more common.

A major international theme is the development of **healthy, climate-resilient housing**. The WHO promotes housing strategies that improve insulation, ventilation, passive cooling, thermal comfort, water efficiency, sustainable building materials and access to green infrastructure. The aim is to create homes that can protect occupants from both current and future climate conditions while reducing health inequalities.

International policy increasingly emphasises:

- Climate-resilient housing design.
- Retrofitting existing housing stock.
- Healthy indoor environments.
- Protection from overheating.
- Flood-resilient homes and communities.
- Energy efficiency and fuel poverty reduction.
- Housing as a mechanism for reducing health inequalities.
- Integration of housing within climate adaptation and public health strategies.

There is also growing recognition that housing plays a key role in building climate-resilient health systems. The WHO's work on climate-resilient health systems acknowledges that health protection depends not only on healthcare services but also on the resilience of homes and communities where people live.

National Response (England)

In England, the response increasingly recognises housing as central to both climate adaptation and public health. Historically, housing policy focused on affordability, supply, fuel poverty and energy efficiency. More recently, climate resilience, overheating, flood risk and healthy homes have become increasingly important policy concerns.

One of the most significant drivers is the UK's **National Adaptation Programme (NAP)**, which identifies housing as a critical sector for adaptation. National adaptation policy increasingly highlights risks associated with overheating, flooding, water scarcity and

infrastructure disruption, and the need to ensure homes remain safe and habitable under future climate conditions.

The UK has also seen growing attention to the risks posed by overheating. Historically, housing policy concentrated on keeping homes warm during winter. However, evidence now shows that overheating is becoming a major public health concern, particularly in southern England. Research suggests that overheating in UK homes has increased substantially over the last decade, creating growing risks for older people, people with long-term conditions and other vulnerable groups.

National responses include:

- New overheating regulations through Building Regulations Part O, introduced in 2022 for new homes.
- Greater emphasis on passive cooling measures such as shading, ventilation and urban greening.
- Recognition of overheating within planning and building standards.
- Growing discussion about adaptation of existing housing stock.

Alongside adaptation, national policy continues to focus heavily on energy efficiency and fuel poverty. Programmes such as the government's Warm Homes Plan, social housing decarbonisation initiatives and home retrofit programmes aim to improve housing quality, reduce energy costs and increase resilience to both winter cold and summer heat. These interventions are increasingly recognised as delivering both climate and health benefits.

There is also increasing recognition within health policy that housing is fundamental to prevention. The NHS, public health system and local authorities increasingly promote the concept of healthy homes, recognising links between housing conditions and:

- Respiratory disease.
- Cardiovascular disease.
- Mental health.
- Falls and injuries.
- Social isolation.
- Excess winter and summer mortality.

This aligns with wider national ambitions to support people to remain healthy and independent at home for longer.

The international and national response is increasingly moving towards a model of **healthy, climate-resilient housing**. Housing is no longer viewed simply as a planning,

construction or energy issue; it is increasingly recognised as a public health intervention and a key component of climate adaptation.

The strongest areas of progress have been in energy efficiency, fuel poverty reduction and recognition of overheating risks. However, significant challenges remain, particularly in adapting existing housing stock, addressing flood vulnerability, reducing inequalities and ensuring that housing policy is fully integrated with health, social care and climate adaptation planning.

The overall direction of travel is clear: housing is increasingly being recognised as one of the most important opportunities to protect health, reduce inequalities and strengthen resilience in a changing climate.

Local East Sussex Response to Build From:

East Sussex has a strong local foundation for addressing climate-related housing and health risks. The Director of Public Health's Annual Report / JSNA on Health and Housing 2019/20 explicitly frames housing as a key determinant of health, alongside employment and social connections, and states that improving health and reducing inequalities requires action on wider determinants, not only healthcare access. It also aims to strengthen integrated working across housing, health, public health and social care, and to support partnership working on homelessness, rough sleeping and safe, healthy homes.

This has informed the refreshed East Sussex Housing Partnership Strategy 2025–2032, whose vision is for **"healthy, safe and affordable homes for all"**. The partnership brings together the five local housing authorities, housing providers, health and social care partners, voluntary and community sector organisations, probation, government and Homes England. It includes specialist groups on homelessness, housing standards, development, private rented housing, and a dedicated **Climate Change and Net Zero Group**.

A major strength is that East Sussex is treating housing improvement as a public health intervention. Public Health is investing additional funding until June 2026 to support development of the East Sussex Retrofit Strategy, with the Climate Change and Net Zero Group co-producing priorities with housing providers. This is significant because retrofit is being linked not only to carbon reduction, but also to fuel poverty, damp and mould, building compliance, financial inclusion and future health resilience.

The scale of the challenge is substantial. A baseline assessment found that only **31% of homes in East Sussex have a SAP rating of A–C**, compared with **47% nationally**, reflecting the county's rural housing profile and lower energy performance. The

partnership is therefore prioritising better housing stock data, workforce capacity, access to retrofit providers, grant funding pipelines and collaborative bids between housing providers.

The local response is also beginning to broaden retrofit beyond energy efficiency. The Housing Partnership Strategy recognises the need to work with environmental leads on wider climate effects, including **flooding, biodiversity change and overheating**. This is important because a narrow energy-efficiency model will not be enough to protect residents from hotter summers, flood risk, poor ventilation, damp, mould and changing climate-related health risks.

Explicit examples of local action

Examples of current and emerging East Sussex action include: a county-wide Housing Partnership Strategy; a Climate Change and Net Zero housing subgroup; a public health-led retrofit strategy; work on damp and mould through housing standards; retrofit skills development with the Employment and Skills Team; engagement with Developers East Sussex on energy performance in new developments; and tenure-specific communications for owner occupiers and private rented households. The strategy also identifies the need to engage the private rented sector, which makes up **19.7%** of East Sussex housing stock and is concentrated in coastal urban areas such as Eastbourne and Hastings.

There is also a strong homelessness and prevention strand. The strategy reports that some parts of East Sussex have homelessness rates twice the England average, with more than **1,200 households in temporary accommodation** and over **£14 million** spent by local authorities on temporary accommodation in 2023/24. This matters for climate and health because insecure housing, temporary accommodation and poor-quality homes increase vulnerability to heat, cold, flooding, damp, mould, stress and poor mental health.

Gaps

The main gap is that housing, climate and health are not yet fully integrated into a single “healthy, climate-resilient homes” model. Current work is strong on energy efficiency, retrofit, fuel poverty and damp and mould, but less developed on overheating, passive cooling, ventilation, flood resilience, shading, vector risks and long-term climate adaptation.

There is also a data gap around “hidden” housing risk. Park homes, mobile homes, static caravans, coastal properties, flood-risk homes, poorly ventilated homes and electrically constrained sites may face significant climate-related health risks but can sit outside mainstream housing datasets and policy attention.

Another gap is lived experience and community consent. The Housing Partnership Strategy recognises a gap in lived experience involvement across the housing sector, and this is particularly important for retrofit, where trust, disruption, fear of displacement and previous poor experiences can affect uptake.

Barriers

The biggest barriers are financial fragility, workforce capacity and restrictive funding criteria. Housing providers are operating in a very challenging financial environment, and national retrofit funding is often too narrowly focused on energy efficiency to support wider climate adaptation measures.

The private rented and owner-occupied sectors are harder to influence than social housing, yet they make up a large share of local housing. Around **69% of homes in East Sussex are owner occupied**, meaning progress depends heavily on communication, trust, incentives and household willingness to act.

There are also behavioural barriers. Even fully funded retrofit may be resisted if residents fear disruption, loss of control, poor workmanship or displacement. Consistent messaging from housing, health, planning and community partners will be essential.

Tensions

A major tension is between investing in retrofit and delivering new affordable housing. Both are health priorities. Delayed retrofit locks residents into cold, damp, overheated or inefficient homes, while insufficient new supply worsens overcrowding, homelessness and housing insecurity.

There is also a tension between mitigation and adaptation. Funding and policy often define retrofit narrowly around energy efficiency and carbon reduction, while East Sussex increasingly needs measures that also address overheating, ventilation, flood resilience, shading and future climate conditions.

A further tension relates to older people and housing transitions. Many older residents may live alone in larger homes that are expensive to heat, cool or maintain, but may be reluctant to downsize if alternatives feel less secure, less connected or less suitable. Poorly designed downsizing options could inadvertently move people into less climate-resilient housing.

Opportunities

The strongest opportunity is to position housing as **preventative public health infrastructure**. A resilient home can prevent illness, reduce care demand, support independence, lower energy costs, improve mental wellbeing and protect residents during heatwaves, flooding and other climate events.

East Sussex is well placed to develop a “one stop shop” model that brings together energy efficiency, damp and mould, ageing and disability adaptations, overheating, ventilation, flood resilience, financial inclusion and community support. This would help residents navigate a complex system and make housing improvement feel practical and trusted.

There is also a major opportunity to target investment where health benefits are greatest: older residents, low-income households, people with long-term conditions, coastal and flood-risk communities, poor-quality private rented homes, and residents in non-standard housing. This would make retrofit and housing adaptation an equity-led intervention rather than a blanket technical programme.

Overall, East Sussex has moved beyond seeing housing solely as a supply issue. The next step is to make healthy, affordable, low-carbon and climate-resilient homes a shared objective across housing, public health, adult social care, planning, environmental services, energy, community organisations and the NHS.

12. Media

High Level Strategic Opportunity:

Build an inclusive, solutions-focused climate–health communication ecosystem that promotes trust, hope, and action by pairing urgent risks with tangible solutions, amplifying diverse and local voices, using accessible and creative formats, championing equitable climate–health literacy, countering misinformation, and linking storytelling directly to protective behaviours and community engagement.

Rationale:

Effective communication is fundamental to strengthening climate resilience, protecting public health and enabling informed decision-making. However, a changing climate can often be perceived as distant, overwhelming or beyond individual influence, while misinformation and inconsistent messaging can undermine trust and discourage action. Evidence shows that communication is most effective when it is

clear, accessible, locally relevant and solution-focused, combining an honest portrayal of risks with practical actions that individuals, communities and organisations can take. Building an inclusive climate–health communication ecosystem that amplifies diverse voices, reflects lived experience, promotes equitable climate–health literacy and uses trusted, culturally appropriate and creative communication approaches can increase understanding, empower protective behaviours, strengthen community engagement and social cohesion, counter misinformation, and inspire collective action. By linking compelling storytelling with evidence-based solutions and opportunities for participation, communication can help create a shared sense of purpose, hope and agency, supporting healthier, more resilient and climate-ready communities across East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1: Promote Truth and Hope Without Denial

Action Steps:

- Use **constructive framing**: Highlight how communities are succeeding, rather than only what's failing.
- Avoid **doom loops**; instead, pair threats with specific solutions and actions people can take today.

Opportunity 2: Bridge Divides and Build Trust

Action Steps:

- Focus on **shared values** like safety, children's wellbeing, local pride, and fairness.
- Co-create content with people from diverse political, cultural, and socioeconomic backgrounds.
- Influence local media to identify and counter **polarizing narratives** (e.g., framing climate action as elitist).

Opportunity 3: Empower Citizen and Community Journalism

Action Steps:

- Support **community-led media** and storytelling from underrepresented groups (e.g., people from ethnic minority backgrounds, youth, disabled).

- Build partnerships with hyperlocal influencers, teachers, and health workers.
- Include climate-health coverage in youth journalism programs and schools.

Opportunity 4: Use Diverse Formats and Access Channels

Action Steps:

- Produce multilingual content in formats like:
- TikToks, podcasts, interactive infographics, AR/VR tools, and digital zines.
- Design content for **offline distribution** in areas with poor digital access (e.g., community radio, posters at clinics).

Opportunity 5: Focus on Everyday Benefits

Action Steps:

- Emphasize **near-term wins** of climate action like:
- Cleaner air → fewer asthma attacks
- Greener cities → mental health + property value
- Active travel → mobility, fitness, and cost savings

Opportunity 6: Highlight Relatable Role Models

Action Steps:

- Showcase stories of **local builders, nurses, parents, and farmers** adapting to climate challenges.
- Profile **unsung climate-health champions**, not just celebrities or high-profile activists.
- Celebrate progress—**not just urgency**—to maintain long-term public engagement.

Expanded Cross-Cutting Media Considerations, Opportunities and Action Steps

The following Considerations, opportunities and action steps apply to both the national, local media and public official use of social media.

Opportunity 7: Champion Equitable Climate-Health Literacy

Action Steps:

- Work with public health and academic experts to create **media toolkits** that explain:
- Heatwaves, wildfires, and flooding in health terms
- Protective actions (hydration, cooling, mental health care)
- The climate-health co-benefits of local policy change
- Establish editorial standards and climate–health style guides across newsrooms.

Opportunity 8: Improve Fact-Checking and Crisis Communication

Action Steps:

- Embed dedicated climate-health misinformation units in major platforms and media outlets.
- Develop **rapid-response debunking tools** for viral disinformation during emergencies (e.g., wildfires, heatwaves).
- Train media workers in **emergency health literacy** to avoid panic and amplify protective behaviours.

Opportunity 9: Localize Climate Narratives with Data and Voices

Action Steps:

- Use **hyperlocal climate impact maps**, lived experiences, and neighbourhood stories to make risks feel real.
- Collaborate with local scientists, local leaders, academic institutions, teachers, and public health teams.
- Translate IPCC-level science into **community-accessible storytelling**.

Opportunity 10: Use Media as a Driver of Public Engagement

Action Steps:

- Create or amplify **"Climate-Health Media Pledges"**—public commitments to ethical coverage.

- Fund public interest journalism through grants, cooperatives, or crowd-sourced models.
- Use media as a bridge to action: include links to **cooling centres, mental health lines, mutual aid, or emergency alerts** in climate coverage.

Context and impacts:

Media and communication play a critical role in shaping public understanding of a changing climate and its impacts on health. As climate-related hazards become more frequent and severe, access to timely, accurate, trusted, and accessible information is increasingly recognised as an important determinant of health protection and community resilience.

A changing climate presents a range of health risks, including heat-related illness, poor air quality, flooding, severe weather events, infectious diseases, food insecurity, and impacts on mental health and wellbeing. Effective communication can help individuals and communities understand these risks, prepare for extreme weather, access support services, and adopt behaviours that reduce harm.

The media also influences how a changing climate is perceived. Coverage that focuses solely on environmental impacts may fail to highlight the immediate health consequences for local communities. In contrast, climate-health communication that links a changing climate to issues people experience in their daily lives—such as physical health, mental wellbeing, housing, transport, employment, and cost of living—can increase engagement and support informed decision-making.

Media as a Public Health Tool

Media serves an important public health function by disseminating information before, during, and after climate-related events. During periods of extreme weather, communication channels can provide life-saving information about:

- Heat-health protection and hydration.
- Cold weather preparedness.
- Air quality alerts.
- Flood warnings and evacuation information.
- Access to healthcare and community support services.
- Mental health and wellbeing resources.
- Emergency accommodation and welfare support.

Timely communication enables individuals, families, and organisations to take preventative action and reduce exposure to climate-related risks.

Supporting Behaviour Change

Media can help promote behaviours that protect both health and the environment. Examples include:

- Encouraging active travel such as walking and cycling.
- Promoting physical activity in safe and climate-appropriate ways.
- Supporting energy-saving behaviours that improve thermal comfort.
- Raising awareness of climate-responsive sleep practices during hot weather.
- Promoting the use of green spaces for recreation and wellbeing.
- Encouraging community preparedness and resilience planning.

By normalising healthy and sustainable behaviours, media can contribute to long-term improvements in population health while supporting climate adaptation and mitigation goals.

Addressing Climate Anxiety and Mental Wellbeing

Media coverage can influence mental wellbeing both positively and negatively. Repeated exposure to alarming climate-related news may contribute to anxiety, distress, helplessness, or eco-anxiety, particularly among young people and communities already experiencing disadvantage.

Balanced communication is therefore important. Effective climate-health messaging should:

- Communicate risks honestly.
- Provide practical actions individuals can take.
- Highlight examples of successful adaptation and resilience.
- Promote community solutions and positive action.
- Support hope, empowerment, and collective responsibility.

Media can play an important role in strengthening psychological resilience by helping people feel informed, connected, and capable of responding to climate challenges.

Reducing Health Inequalities Through Inclusive Communication

Not all communities access information in the same way. Digital exclusion, language barriers, literacy challenges, disability, social isolation, and mistrust of institutions can create barriers to receiving climate-health information.

An equitable approach to climate-health communication requires:

- Information in multiple languages.
- Accessible formats including audio, video, Easy Read, and large print.
- Use of trusted community networks and leaders.
- Culturally appropriate messaging.
- Both digital and non-digital communication channels.

This is particularly important for populations at greater risk of climate-related harm, including older adults, people with disabilities, low-income households, ethnic minority communities, Gypsy and Traveller communities, people experiencing homelessness, and those with long-term health conditions.

Strengthening Social Connectedness and Community Resilience

Media can strengthen social connectedness by promoting community networks, volunteering opportunities, neighbourhood initiatives, and local support services.

During climate emergencies, local communication channels can help communities:

- Identify vulnerable residents.
- Coordinate welfare checks.
- Share practical support.
- Connect people to local resources.
- Reduce social isolation.

Local media, community organisations, faith groups, and social media networks can all contribute to building community resilience and strengthening social capital.

Supporting the Green Economy, Employment and Skills

Media can also support climate adaptation by increasing awareness of opportunities associated with the transition to a low-carbon economy.

Communication campaigns can help residents access:

- Green skills training.
- Apprenticeships and employment opportunities.
- Retrofit and energy-efficiency programmes.
- Sustainable transport initiatives.
- Community climate projects.

By promoting awareness and participation, media can help ensure that the economic benefits of climate action are shared across communities and contribute to reducing inequalities.

The Importance of Trusted Local Communication

Evidence consistently shows that people are more likely to act on information when it comes from trusted and familiar sources. Local authorities, healthcare professionals, community organisations, faith groups, schools, employers, and local media outlets all have important roles in communicating climate-health information.

In East Sussex, trusted local communication networks will be essential for ensuring that residents receive timely information during extreme weather events and understand how a changing climate may affect their health and wellbeing.

Implications for East Sussex

As climate-related risks increase, effective communication and media engagement should be recognised as a key component of climate adaptation and public health planning. A coordinated climate-health communication approach can support:

- Improved awareness of climate-health risks.
- Earlier protective action during extreme weather.
- Better mental wellbeing and reduced climate anxiety.
- Increased physical activity and active travel.
- Improved climate-responsive sleep behaviours.
- Greater social connectedness and community resilience.
- Increased participation in green skills, employment, and economic opportunities.
- Reduced inequalities in access to information and support.

By embedding climate-health messaging across local media, public services, healthcare settings, community organisations, and digital platforms, East Sussex can strengthen resilience and support healthier communities in a changing climate.

Current International and National Response(s):

The role of the media has evolved significantly. Historically, climate change reporting focused largely on environmental issues such as emissions, energy, and biodiversity. Increasingly, however, media organisations are framing a changing climate as a public health issue by:

1. Raising Awareness of Climate-Related Health Risks

International and national media increasingly report on:

- Heat-related illness and mortality.
- Air pollution and respiratory disease.
- Mental health impacts of a changing climate.
- Extreme weather events and health consequences.
- Health inequalities associated with climate vulnerability.

This shift helps make a changing climate more relevant to people's everyday lives and health. Coverage of reports from WHO and the Lancet Countdown has contributed to growing public understanding that a changing climate is already affecting health rather than being solely a future environmental concern.

2. Supporting Early Warning and Risk Communication

During heatwaves, storms, flooding events, and air pollution episodes, media outlets play a critical role in disseminating:

- Public health warnings.
- Heat-health advice.
- Air quality alerts.
- Information about emergency support services.
- Guidance for vulnerable populations.

Local radio, television, online news platforms, and social media channels often become essential communication routes during climate-related emergencies.

3. Promoting Behaviour Change

Many media campaigns increasingly support:

- Active travel.
- Physical activity.
- Sustainable transport choices.
- Energy efficiency.
- Community resilience.
- Climate preparedness.

By highlighting practical actions individuals and communities can take, media can support both health improvement and climate adaptation.

4. Influencing Public and Political Engagement

The Lancet Countdown now specifically tracks public and political engagement with climate and health, including media coverage, recognising that public understanding and political action are strongly influenced by how climate-health issues are communicated.

Media coverage can:

- Increase awareness among policymakers.
- Support public demand for action.
- Promote accountability.
- Highlight inequalities and vulnerable populations.
- Share examples of successful adaptation and resilience initiatives.

5. Addressing Climate Anxiety

There is growing recognition that media reporting can affect mental wellbeing. While reporting on climate risks can increase awareness, repeated exposure to catastrophic messaging may contribute to climate anxiety, particularly among younger people.

Many public health organisations now advocate for "solutions-focused" climate communication that:

- Presents evidence-based risks.
- Highlights practical actions.
- Promotes community resilience.
- Emphasises health benefits of climate action.
- Encourages hope and empowerment rather than fear alone.

Emerging Trend: A Changing Climate as a Health Story

One of the most significant international shifts has been the movement away from framing a changing climate solely as an environmental issue toward presenting it as a health issue. Major organisations such as WHO, the Lancet Countdown, public health agencies, and increasingly mainstream media now emphasise that climate action can deliver immediate health benefits through cleaner air, increased physical activity, better mental wellbeing, healthier communities, and more resilient economies.

For East Sussex, this approach is particularly relevant because climate-health communication can support adaptation by improving awareness, encouraging protective behaviours, strengthening community resilience, and helping residents access support during climate-related events.

Local East Sussex Response to Build From:

East Sussex has begun to develop a climate-health communications approach, but it is still largely emerging and sits across climate adaptation, public health engagement, emergency communications, and community outreach rather than within a single dedicated climate-health communications strategy.

East Sussex has increasingly recognised a changing climate as a public health issue, with local authorities, public health teams, healthcare organisations, community groups, and local media playing an important role in raising awareness of climate-related health risks and promoting adaptation measures.

The local response has focused on improving understanding of climate risks, supporting community resilience, engaging residents in climate adaptation planning, and communicating health protection messages during extreme weather events. While much of the communication activity has been delivered through public sector and community channels, local media organisations also contribute to public awareness by reporting on heatwaves, flooding, coastal erosion, air quality, severe weather alerts, and wider climate-related issues affecting East Sussex residents.

Public Health and Local Authority Communications

East Sussex County Council has positioned climate adaptation as a priority area and has undertaken climate risk and vulnerability assessments to better understand local impacts. Public-facing communications have highlighted the health risks associated with increasing temperatures, flooding, drought, and severe weather, particularly for vulnerable groups such as older people and those with existing health conditions.

A notable development was the county-wide public engagement exercise on climate change and health, which sought residents' views on how extreme weather, air quality, flooding, drought, and environmental changes affect health and wellbeing. This reflects an emerging recognition that climate adaptation requires community engagement and local understanding of climate-health impacts.

Climate communication is also embedded within wider county initiatives, including the Climate Emergency Plan and adaptation planning work. These initiatives recognise the importance of direct engagement with residents and businesses in building climate resilience.

Weather and Health Communications

The most visible climate-health communication activity locally has occurred during periods of extreme weather. During heatwaves, local communications have largely

focused on disseminating Weather-Health Alerts, promoting hydration, encouraging welfare checks on vulnerable individuals, and providing advice to reduce heat-related illness. Similar approaches are used during periods of severe cold, flooding, and storms.

Local communications increasingly mirror national approaches by emphasising:

- Protection of vulnerable groups.
- Community preparedness.
- Personal health protection measures.
- Access to support services.
- Early warning and prevention.

This reflects a broader shift from reactive emergency messaging toward resilience and preparedness.

Role of Healthwatch and Community Engagement

Healthwatch East Sussex plays an important role in local communication and engagement by gathering community views, promoting access to health information, and ensuring that the experiences of residents influence local decision-making. Through community engagement activities, listening exercises, outreach work, and partnerships with voluntary organisations, Healthwatch contributes to understanding local concerns that may be relevant to climate-health planning and resilience.

Community engagement approaches used by Healthwatch and voluntary sector partners are particularly important for reaching groups that may experience barriers to accessing mainstream information, including older adults, ethnic minority communities, Gypsy and Traveller communities, people experiencing homelessness, and those experiencing digital exclusion.

Local Media Response

Local media outlets across East Sussex and Sussex more broadly have increasingly reported on:

- Heatwaves and health alerts.
- Coastal flooding and erosion.
- Severe storms.
- Air quality concerns.
- Climate adaptation initiatives.
- Community resilience projects.

Coverage of UKHSA heat-health alerts and local weather warnings has become more common during periods of extreme weather, helping to raise awareness of health risks and promote protective behaviours. Recent reporting during periods of extreme heat has focused on the risks to older people, people with long-term health conditions, and pressures on health and social care services.

Local media also play an important role in communicating emergency information quickly and reinforcing messages issued by public health agencies, local authorities, and emergency services.

Emerging Areas of Good Practice

Several themes are emerging within East Sussex communications activity that align with national and international best practice:

- Increasing use of community engagement to understand local climate-health concerns.
- Greater recognition of a changing climate as a health issue rather than solely an environmental issue.
- Improved integration of climate adaptation within public health planning.
- Use of community networks and trusted organisations to reach vulnerable populations.
- Growing focus on resilience, preparedness, and prevention.
- Recognition of the importance of addressing health inequalities within climate adaptation efforts.

Opportunities for Further Development

Despite progress, there is currently limited evidence of a dedicated, county-wide climate-health communications strategy in East Sussex. Future opportunities include:

- Developing a coordinated Climate and Health Communications Framework for East Sussex.
- Embedding climate-health messaging within all public health campaigns.
- Expanding communications on the health co-benefits of climate action, including physical activity, active travel, mental wellbeing, social connectedness, and green skills.
- Strengthening targeted communications for vulnerable populations.
- Increasing use of community champions and trusted local networks.
- Developing climate-health communication resources in multiple languages and accessible formats.

- Establishing a local climate-health media partnership involving public health, local authorities, healthcare organisations, community organisations, and local media outlets.

The local communications response to a changing climate and health in East Sussex is developing and increasingly reflects national priorities around climate adaptation, health protection, and resilience. Current activity has focused primarily on public engagement, weather-health alerts, emergency preparedness, and community outreach. There is growing recognition that communication and media engagement are essential components of climate adaptation and health protection. Strengthening coordinated climate-health communications presents an opportunity to improve public awareness, support behaviour change, reduce inequalities, and build community resilience across East Sussex.

Gaps

Despite growing recognition that a changing climate is a public health issue, significant gaps remain in how climate-health communication is coordinated and delivered. In East Sussex, communication activity is currently distributed across public health, emergency planning, climate adaptation, local government, healthcare organisations, community groups and media outlets. While many valuable initiatives are already taking place, there is no single, integrated climate-health communications framework that brings these activities together around shared objectives, target audiences and consistent messaging. This can result in fragmented communications and missed opportunities to reinforce key health protection messages.

There is also a gap in public understanding of the direct health consequences of a changing climate. A changing climate is still frequently perceived as an environmental issue rather than something that affects daily life, physical health, mental wellbeing, housing, employment, food security and the cost of living. Although awareness of extreme weather events is increasing, understanding of the wider and longer-term health implications remains variable. This can limit public engagement with adaptation measures and reduce the perceived urgency of taking preventative action.

Another important gap concerns the communication of positive health co-benefits associated with climate action. Much communication understandably focuses on risks and threats, but there is less emphasis on how climate action can improve everyday health through cleaner air, increased physical activity, active travel, improved mental wellbeing, warmer homes and stronger community connections. Opportunities to frame climate action as a means of improving quality of life, rather than solely avoiding future harms, are not always fully utilised.

There are also gaps relating to accessibility and inclusion. Although there is increasing recognition of the need to engage diverse communities, not all residents receive or access information in the same way. People experiencing digital exclusion, language barriers, sensory impairments, literacy challenges, social isolation or mistrust of institutions may be less likely to receive timely climate-health information. While community engagement approaches are developing, there remains a need for more systematic use of accessible formats, culturally appropriate communications and trusted local networks.

Finally, there is limited local evidence about the effectiveness of climate-health communication approaches. While engagement activities and public awareness campaigns are becoming more common, there is relatively little information on which messages are most effective at encouraging protective behaviours, increasing resilience or reducing inequalities within different East Sussex communities.

Barriers

A number of barriers may limit the effectiveness of climate-health communication and media engagement. Digital exclusion remains one of the most significant challenges. While many communication strategies increasingly rely on online platforms, social media and digital alerts, some residents have limited internet access, low digital confidence or lack access to appropriate devices. These barriers are particularly relevant for older adults, lower-income households and some rural communities.

Trust and engagement also present challenges. People are more likely to act on information when it comes from trusted sources, yet levels of trust vary across populations and institutions. Some individuals may be sceptical of climate-related messaging, while others may disengage from information that feels overly technical, political or disconnected from their everyday experiences. Building and maintaining trust requires sustained engagement and collaboration with respected local organisations and community leaders.

Resource constraints can represent another barrier. Effective climate-health communication requires investment in campaign development, partnership working, audience research, translation services, accessible formats and community outreach. Organisations responsible for delivering communications may face competing priorities and limited capacity, making it difficult to maintain consistent and proactive engagement over time.

Information overload can also reduce the effectiveness of communication efforts. Residents are exposed to large volumes of information from multiple sources every day. Climate-health messages must compete with numerous other demands for

attention, making it difficult to ensure that important advice is noticed, understood and acted upon. This challenge may become particularly acute during emergencies when multiple warnings and information sources are active simultaneously.

Institutional fragmentation can further limit impact. Climate adaptation, emergency planning, public health, environmental management and community engagement are often managed by different organisations and departments. Without strong coordination, there is a risk of inconsistent messaging, duplication of effort and missed opportunities to reinforce key messages across multiple communication channels.

Tensions

Climate-health communication sits within a number of competing priorities that can create tensions for organisations and communicators. One of the most significant tensions is the need to communicate climate risks honestly without contributing to fear, anxiety or feelings of helplessness. Public understanding depends upon clear communication of the seriousness of a changing climate, yet excessive emphasis on catastrophic outcomes can contribute to climate anxiety, particularly among young people and vulnerable groups. Finding the balance between raising awareness and promoting hope, empowerment and constructive action is an ongoing challenge.

There is also a tension between simplicity and complexity. A changing climate and health are highly interconnected issues involving environmental, social, economic and behavioural factors. Communicating this complexity in a way that is accurate, accessible and engaging can be difficult. Messages that are too simplified may not fully reflect the scale of the challenge, while more detailed information may be less accessible to wider audiences.

Another tension exists between national messaging and local relevance. National campaigns and alerts provide important consistency, but risks and vulnerabilities vary across places. Residents are often more likely to engage with information that feels locally relevant and reflects their lived experience. Balancing consistent national messages with locally tailored communication that addresses the specific circumstances of East Sussex communities remains an important consideration.

There can also be tensions between reaching the widest possible audience and targeting those at greatest risk. Broad public awareness campaigns may increase overall understanding, but vulnerable populations often require more specialised, tailored and resource-intensive communication approaches. Ensuring resources are allocated in a way that achieves both universal awareness and targeted support can be challenging.

A further tension exists between the rapid pace of modern media and the need for accuracy and trust. During extreme weather events, there is pressure to communicate quickly, particularly through digital and social media channels. However, misinformation, conflicting information and rapidly changing circumstances can undermine public confidence if communications are not coordinated and evidence based.

Opportunities

There is a significant opportunity to establish a more coordinated and strategic approach to climate-health communication across East Sussex. Developing a county-wide climate and health communications framework could help connect public health, local government, healthcare organisations, community groups, emergency planners and media partners around a shared vision for climate resilience and health protection. Such an approach could improve consistency, increase reach and strengthen public understanding of climate-related health risks.

There is also an opportunity to make a changing climate more personally relevant by consistently framing it as a health issue. Communicating the links between a changing climate and issues such as heat-related illness, air quality, mental wellbeing, housing, transport, food security and community resilience can help people understand how climate impacts affect their daily lives. This approach has the potential to increase engagement and encourage earlier action to protect health.

Expanding the communication of health co-benefits offers another important opportunity. Messaging that highlights the immediate benefits of active travel, access to green spaces, improved home energy efficiency, social connectedness and healthier lifestyles can help shift climate action from being viewed as a future environmental necessity to a present-day health and wellbeing opportunity. This positive framing can support both adaptation and prevention agendas.

East Sussex also has an opportunity to strengthen communication through trusted local networks. Community organisations, Healthwatch, schools, employers, faith groups, local media outlets and voluntary organisations can all play an important role in reaching diverse audiences. Greater use of community champions and locally trusted voices may improve engagement with groups that are less likely to access mainstream communication channels.

Further opportunities exist to improve accessibility and reduce inequalities. Developing materials in multiple languages, expanding the use of Easy Read and accessible formats, and increasing the use of non-digital communication methods could help ensure that climate-health information reaches those most vulnerable to climate-related harm. Embedding equity within communication strategies would

support wider public health objectives and reduce disparities in access to information.

Finally, climate-health communication can play a vital role in strengthening community resilience. By promoting local support networks, encouraging preparedness, sharing practical actions and highlighting examples of successful adaptation, communication can help people feel more informed, connected and empowered. In doing so, media and communication can become not only a means of sharing information but a key component of East Sussex's wider response to a changing climate, health protection and community wellbeing.

13. Members of the Public

"You can't necessarily rely on people making the right decisions immediately because they probably won't for a whole load of different reasons, not least of all denial. So, we should come up with some kind of an incentive" (East Sussex Stake Holder-Emergency Services).

High Level Strategic Opportunity:

Empower individuals and communities to protect health and advance climate resilience by building climate–health literacy, adopting regenerative daily habits, safeguarding personal and neighbour wellbeing during extreme events, fostering inclusive and connected neighbourhoods, and advocating for systemic policies that deliver climate–health equity.

Rationale:

Individuals and communities play a vital role in strengthening climate resilience and protecting health, yet their ability to prepare for, respond to and recover from climate-related events is strongly influenced by access to information, resources, social networks and supportive environments. Improving climate–health literacy enables people to understand climate-related health risks, make informed decisions and adopt behaviours that benefit both personal wellbeing and environmental sustainability. At the same time, strong, connected and inclusive communities are better able to support vulnerable residents during extreme weather events, reduce social isolation, build local resilience and recover more quickly from disruption. While individual action is important, lasting improvements in health and climate resilience also depend on systemic change through effective policies, equitable investment and

collaborative action. Empowering individuals and communities to adopt regenerative lifestyles, strengthen neighbourhood resilience and advocate for healthier, fairer and more sustainable places will help reduce climate-related health risks, address inequalities, foster social cohesion and support the transition to resilient, healthy and thriving communities across East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1: Learn and engage continuously by building climate-health literacy as a foundation for action

Action Steps:

- Take part in community-based climate-health workshops, museum exhibits, and webinars.
- Subscribe to climate-health alert systems (e.g., for air quality, UV, extreme heat).
- Join or start climate reading groups in libraries, schools, or workplaces.
- Use citizen science apps to monitor biodiversity, pollution, and extreme weather in your area.

"Be curious, be responsible" — knowledge fuels collective change.

Opportunity 2: Shift everyday habits for climate resilience and co-benefits to health by adopting Regenerative and Climate-Smart Lifestyles

Action Steps:

- Transition to plant-based or flexitarian diets (where possible) and support climate-resilient local agriculture.
- Use permeable landscaping, rain gardens, and shade trees at home to mitigate flooding and overheating.
- Install home passive cooling and solar systems if feasible or join energy co-ops.
- Integrate low-carbon transport habits (e-bikes, car sharing, walking) into routine planning.

Tool: Use carbon/climate footprint calculators with health co-benefit feedback.

Opportunity 3: Be climate-aware in how you care for yourself and others - Protect Your Health and Help Others Do the Same

Action Steps:

- Prepare for extreme weather: keep a heatwave plan, wildfire smoke masks, and cooling strategies.
- Create or join a resilience buddy system—check in on elders or chronically ill neighbours during climate events.
- Track air quality and pollen alerts using apps and follow advice and guidance to adjust activities accordingly.
- Learn first aid for heat exhaustion, respiratory distress, and disaster scenarios.

Opportunity 4: Build socially connected, culturally safe, and climate-prepared neighbourhoods that strengthen Community Resilience through Inclusion and Kindness

Action Steps:

- Co-lead or join climate action groups, neighbourhood emergency response teams, or “Green Block” networks.
- Organize grab-bag workshops (emergency kit prep), especially in schools, shelters, and multi-family housing.
- Practice and promote anti-racism and migrant solidarity in climate response efforts.
- Turn shared spaces into resilience hubs (libraries as cooling centres, community gardens for food security).

Climate justice is social justice. Inclusive communities are more adaptive and prepared.

Opportunity 5: Push for policies and structures that enable climate-health equity and advocate for Systemic Change

Action Steps:

- Join or support campaigns for net-zero policies, clean air policies, affordable public transport, and safe housing.
- Use your consumer power: support climate-forward companies, divest from polluting sectors, and write to boards and brands.

Change happens when informed individuals act together.

Context and impacts:

Members of the Public are a ‘sector’ of society. It is important to recognise that members of the public are not only recipients of climate-health information and services but also active participants in building climate resilience, protecting health, and supporting community adaptation.

Individuals, families, and communities are often the first to experience the health effects of a changing climate and are frequently the first responders during local emergencies. Public awareness, preparedness, and participation are therefore essential components of climate resilience.

Increasingly, climate adaptation is recognised as a shared responsibility. Building resilience requires not only institutional action but also informed and empowered communities that can take practical steps to protect their own health, support vulnerable neighbours, contribute to local decision-making, and participate in wider climate action.

Protecting Individual and Household Health

Members of the public play a key role in reducing their exposure to climate-related health risks. This includes understanding local climate hazards and taking preventative measures during periods of extreme weather.

Examples include:

- Following heat-health advice during heatwaves.
- Maintaining hydration and thermal comfort.
- Adapting daily activities during periods of extreme heat or poor air quality.
- Preparing homes and households for severe weather events.
- Developing family emergency plans.
- Understanding local warning systems and health alerts.

As climate risks increase, climate literacy and awareness of health impacts will become increasingly important public health assets.

Actively Participate and Create Psychological Resilience

Individuals and communities can help build psychological resilience by:

- Accessing reliable climate-health information.
- Participating in community activities and local initiatives.
- Maintaining social connections during periods of stress or disruption.
- Engaging in positive actions that increase a sense of control and empowerment.
- Supporting others who may be experiencing climate-related anxiety or distress.

Research increasingly suggests that participation in community climate action can support wellbeing by fostering hope, agency, and collective purpose.

Strengthening Social Connectedness and Community Resilience

Communities play a vital role in protecting health during climate-related events. Strong social networks can help identify vulnerable residents, coordinate support, and reduce isolation during emergencies.

Members of the public contribute to resilience by:

- Checking on neighbours during heatwaves, cold weather, or storms.
- Volunteering in community organisations.
- Participating in local resilience groups.
- Sharing information and resources.
- Supporting vulnerable individuals and households.

Community-led responses are often among the most effective forms of climate adaptation because they build trust, local knowledge, and social cohesion.

Current International and National Response(s):

Nationally and internationally, there has been increasing recognition that individuals and communities are critical actors in protecting health from a changing climate, not simply recipients of government action.

Across the UK and internationally, there is growing recognition that climate adaptation cannot be achieved solely through government policy, healthcare systems, or emergency planning. Communities and individual citizens play a crucial role in protecting health, strengthening resilience, and supporting climate action.

International organisations, including the World Health Organization (WHO), the United Nations (UN), and the Lancet Countdown, increasingly emphasise the importance of community engagement, climate literacy, public participation, and local resilience in reducing climate-related health risks. Similarly, UK policy has

moved towards encouraging public preparedness, community resilience, and behaviour change alongside institutional adaptation measures.

The public response to a changing climate is increasingly viewed through a health lens, with actions that reduce emissions often providing immediate benefits for physical health, mental wellbeing, social connectedness, and quality of life.

Increasing Climate Awareness and Climate Literacy

One of the most significant developments internationally has been the growth of public awareness about the health impacts of a changing climate.

Surveys consistently show increasing public recognition that a changing climate affects:

- Physical health.
- Mental wellbeing.
- Air quality.
- Food security.
- Access to green spaces.
- Community resilience.

Governments, public health agencies, schools, universities, charities, and community organisations are investing in climate literacy programmes that help people understand climate risks and take practical actions to protect themselves and their communities.

There is also increasing public demand for information on how a changing climate affects daily life and health rather than solely environmental outcomes.

Behaviour Change and Health Co-Benefits

National and international climate strategies increasingly promote actions that benefit both health and the environment.

Members of the public are increasingly:

- Walking, wheeling, and cycling more frequently.
- Using public transport.
- Reducing household energy consumption.
- Improving home energy efficiency.
- Spending more time in green spaces.
- Adopting sustainable food practices.

- Participating in community environmental projects.

Many of these actions contribute to:

- Increased physical activity.
- Better cardiovascular health.
- Improved mental wellbeing.
- Reduced air pollution.
- Greater social interaction.
- Lower household costs.

This focus on health co-benefits has become a central feature of climate communication and public engagement strategies.

Community Resilience and Mutual Support

Following major heatwaves, floods, storms, wildfires, and other climate-related events around the world, there has been increasing emphasis on community resilience.

Communities are increasingly involved in:

- Local resilience groups.
- Volunteer emergency response networks.
- Neighbourhood support schemes.
- Community preparedness planning.
- Climate adaptation projects.

During extreme weather events, residents often undertake:

- Welfare checks on vulnerable neighbours.
- Community information sharing.
- Distribution of food, water, and supplies.
- Support for evacuation and recovery efforts.

National governments increasingly recognise community resilience as a critical component of climate adaptation because local networks are often the first source of support during emergencies.

Public Participation in Climate Decision-Making

Internationally, there has been growing use of public engagement and participatory approaches to climate policy.

Examples include:

- Citizens' assemblies.
- Community consultations.
- Participatory budgeting.
- Local climate action groups.
- Community advisory panels.

These approaches recognise that effective climate adaptation requires local knowledge and community ownership.

In the UK, local authorities increasingly involve residents in:

- Climate action planning.
- Transport strategies.
- Environmental improvement projects.
- Flood resilience planning.
- Green infrastructure development.

Public participation is increasingly viewed as essential for ensuring that adaptation measures are equitable, effective, and responsive to local needs.

What Does Good Practice Look Like?

Internationally, successful climate-health adaptation increasingly involves communities that are:

- Well informed about climate risks.
- Connected through strong social networks.
- Engaged in local decision-making.
- Supported to develop climate literacy and practical skills.
- Able to access trusted information and support.
- Involved in shaping local climate solutions.

These approaches recognise that resilience is not simply about infrastructure or services but also about empowered and connected communities.

Implications for East Sussex

The national and international evidence demonstrates that members of the public are central to addressing the health effects of a changing climate. Effective adaptation requires residents to be informed, prepared, connected, and engaged.

For East Sussex, opportunities include:

- Increasing climate-health literacy among residents.
- Supporting community resilience networks.
- Expanding volunteering and neighbourhood support schemes.
- Encouraging active travel and healthy lifestyles.
- Promoting climate-responsive behaviours that protect health.
- Supporting participation in local climate planning.
- Increasing access to green skills and employment opportunities.
- Ensuring vulnerable populations are actively involved in adaptation efforts.

Strengthening public participation in climate adaptation can improve physical health, mental wellbeing, social connectedness, and community resilience while helping East Sussex prepare for the increasing health impacts of a changing climate.

Local East Sussex Response to Build From:

For East Sussex specifically, the public response has largely taken the form of community engagement, participation in climate consultations, local climate action groups, volunteering, energy-saving initiatives, active travel promotion, community food projects, and local resilience activities, rather than large-scale climate-health campaigns.

Residents of East Sussex are increasingly participating in climate-related activities that have direct and indirect benefits for health and wellbeing. While public engagement has often focused on environmental sustainability and carbon reduction, many community responses also contribute to climate adaptation, health protection, social connectedness, and resilience.

The local public response reflects a growing awareness that a changing climate is affecting communities through extreme weather, flooding, coastal change, rising energy costs, transport challenges, and impacts on health and wellbeing. Community participation has become an important component of local climate action, supporting both environmental objectives and wider public health goals.

Participation in Climate and Health Consultations

One of the clearest examples of public engagement has been participation in local climate and health consultations. East Sussex County Council undertook a public engagement exercise to understand residents' experiences of climate-related issues including heatwaves, flooding, drought, air quality, and severe weather, and how these affect health and wellbeing. The consultation was designed to inform this county's HIA and future planning.

This demonstrates growing public willingness to contribute lived experience and local knowledge to climate-health planning and highlights the importance of community voices in understanding local vulnerabilities and priorities.

Community Climate Action Groups

Across East Sussex, residents have established and participated in a range of local climate action initiatives. Community-led organisations have focused on:

- Climate awareness and education.
- Energy efficiency and retrofit advice.
- Sustainable transport.
- Community food growing.
- Biodiversity and environmental improvement.
- Local resilience and adaptation projects.

An example is the Lewes Climate Hub, which provides a community space where residents can access information, participate in events, learn about climate issues, receive advice on home energy use and retrofitting, and engage in collective climate action. Such initiatives provide opportunities for community participation while also supporting mental wellbeing, social connectedness, and climate literacy.

Public Interest in Climate Education and Skills

There is evidence of increasing public demand for information, education, and practical skills relating to a changing climate. Community events, workshops, climate hubs, and local sustainability initiatives provide opportunities for residents to learn about:

- Energy efficiency.
- Home adaptation.
- Sustainable transport.

- Community resilience.
- Environmental stewardship.

These activities help build climate literacy and increase community capacity to respond to future climate-related challenges.

Emerging Public Priorities

Recent engagement exercises suggest that East Sussex residents are particularly concerned about:

- Extreme heat and heatwaves.
- Flooding and coastal erosion.
- Air quality.
- Energy costs and fuel poverty.
- Access to green spaces.
- Impacts on future generations.
- Community resilience and preparedness.

There is increasing recognition among residents that a changing climate is not only an environmental issue but also one that affects health, wellbeing, quality of life, and local communities.

Opportunities for Further Development

Although public engagement is increasing, opportunities remain to strengthen the role of residents in climate-health adaptation. These include:

- Increasing climate-health literacy across communities.
- Expanding community resilience and neighbourhood support networks.
- Supporting climate-health champions and community ambassadors.
- Increasing participation from vulnerable and underrepresented groups.
- Strengthening links between climate action and health improvement initiatives.
- Expanding opportunities for community involvement in climate and health decision-making.
- Supporting local volunteering, green skills, and community-led adaptation projects.

The public response to a changing climate and health in East Sussex is characterised by growing community engagement, participation in climate consultations, local climate action initiatives, energy-saving programmes, and resilience-building

activities. Residents are increasingly contributing to climate adaptation through actions that improve physical health, mental wellbeing, social connectedness, active travel, and community resilience. While this response remains at an early stage, it provides a strong foundation for further community-led climate-health action across the county.

Gaps

Although members of the public are increasingly recognised as central to climate adaptation and health protection, there remains a gap between awareness of a changing climate and understanding of its direct implications for health and wellbeing. Many residents recognise climate change as an environmental issue but may be less aware of how it affects physical health, mental wellbeing, housing conditions, food security, access to services, social connectedness and day-to-day quality of life. This can reduce the likelihood that individuals will take preventative action to protect themselves and their families from climate-related risks.

There is also a gap in climate-health literacy across communities. While interest in climate issues is growing, opportunities to develop practical knowledge and skills relating to climate adaptation are not always widely available or consistently accessible. Many people may be unsure how to prepare for extreme weather, adapt homes to changing climate conditions, support vulnerable neighbours during emergencies or access relevant local services and information.

Participation in climate adaptation activities is also uneven across the population. Local consultations, community projects and climate action initiatives often attract residents who are already engaged and interested in environmental issues. Vulnerable and underrepresented groups, including people experiencing deprivation, social isolation, poor health, language barriers or digital exclusion, may be less likely to participate in planning and decision-making processes despite often being among those most affected by climate-related risks.

A further gap exists in connecting climate action with health improvement. Many community initiatives focus on environmental sustainability, carbon reduction or conservation outcomes, but the health benefits associated with these activities are not always clearly articulated. As a result, opportunities to engage wider audiences through messages about physical health, mental wellbeing, active lifestyles, warmer homes and stronger communities may not be fully realised.

There is also limited understanding of how climate impacts and adaptation needs vary between different communities, neighbourhoods and population groups across East Sussex. While public engagement exercises have provided valuable insights, there remains a need for more detailed understanding of local experiences, vulnerabilities

and priorities to ensure that future adaptation measures are inclusive and responsive to community needs.

Barriers

A range of barriers may restrict public participation in climate adaptation and resilience-building activities. Economic barriers are particularly significant. Rising living costs, fuel poverty, housing pressures and financial insecurity can limit people's ability to invest in home adaptations, improve energy efficiency, access transport alternatives or participate in community initiatives. Households facing economic hardship may have fewer resources available to prepare for climate-related risks or recover from climate-related events.

Information and awareness barriers also remain important. Although information about climate change is increasingly available, it can be difficult for residents to identify reliable, relevant and practical advice. Complex scientific language, inconsistent messaging and information overload can reduce understanding and engagement. Some individuals may also find it difficult to relate national climate messages to their local circumstances and personal experiences.

Digital exclusion represents another important barrier. Many communications, services and engagement opportunities are delivered online, yet not all residents have access to digital technology, reliable internet connections or the confidence to use digital platforms effectively. This can limit access to information, emergency alerts, support services and opportunities for participation.

Social isolation and unequal access to community networks may further reduce resilience. Individuals who live alone, have limited mobility, experience health problems or have weaker social connections may be less able to access support during periods of extreme weather or other climate-related disruptions. These barriers can increase vulnerability and reduce opportunities for participation in local resilience activities.

Trust can also present a challenge. Some residents may feel disconnected from decision-making processes or uncertain whether their voices will influence local action. Others may lack trust in institutions or struggle to engage with information that feels technical, inaccessible or disconnected from their everyday concerns. Building meaningful participation requires sustained engagement and genuine opportunities for communities to shape local responses.

Tensions

Members of the public face a number of competing pressures that can create tensions in relation to climate action and adaptation. One of the most significant is the tension between awareness and capacity to act. Many residents are increasingly concerned about climate change and recognise the need for action, yet financial pressures, competing priorities and everyday demands can make it difficult to adopt climate-responsive behaviours or participate in community initiatives.

There is also a tension between individual responsibility and systemic responsibility. Climate adaptation increasingly relies on public participation and behaviour change, but many people may feel that significant action must come from governments, businesses and public services. While community involvement is essential, there is a risk that residents may feel overwhelmed or perceive that responsibility is being shifted onto individuals without adequate support or resources.

Another tension exists between immediate concerns and longer-term climate risks. Issues such as housing costs, employment, caring responsibilities, health conditions and the cost of living often take precedence over future climate impacts. This can make it challenging to sustain engagement with adaptation activities, even when climate risks are increasing.

Climate communication can also create tensions for individuals and communities. People need clear information about climate-related risks in order to prepare effectively, but repeated exposure to negative or alarming messages may contribute to anxiety, distress or feelings of helplessness. Balancing awareness of risks with positive messaging about solutions, resilience and practical action remains important for maintaining public engagement and wellbeing.

There may also be tensions between different community priorities and perspectives. Communities are not homogeneous, and residents may have differing views on climate policies, environmental interventions and adaptation measures. Ensuring that adaptation planning reflects a range of experiences and interests while maintaining public support can be complex.

Opportunities

There are substantial opportunities to strengthen climate resilience, improve health and enhance wellbeing by supporting public participation in climate adaptation. One of the most significant opportunities is to increase climate-health literacy across East Sussex. Providing residents with practical, accessible information about local climate risks and protective actions can empower individuals and households to make informed decisions, improve preparedness and reduce vulnerability.

There is also an opportunity to build on the growing public recognition that a changing climate affects everyday life and health. Framing climate action around tangible benefits such as healthier lifestyles, warmer homes, improved mental wellbeing, cleaner air, reduced energy costs and stronger communities may encourage broader engagement and help people see climate adaptation as directly relevant to their lives.

Community resilience offers another major opportunity. Strong neighbourhood networks, volunteering schemes, local organisations and community-led initiatives can play a vital role in supporting vulnerable residents, sharing information and coordinating responses during extreme weather events. Expanding these networks can strengthen both social connectedness and preparedness while helping to reduce health inequalities.

The growing number of climate action groups, community hubs and local sustainability projects across East Sussex provides a strong foundation for further development. These initiatives create opportunities for residents to gain skills, build confidence, increase social connections and participate in meaningful local action. They can also support psychological resilience by fostering a sense of agency, collective purpose and hope.

There is also an opportunity to increase public involvement in climate and health decision-making. Greater use of consultations, citizens' panels, community forums and participatory approaches can help ensure that adaptation strategies reflect local needs and experiences. Involving residents more directly in shaping solutions can increase trust, improve the quality of decision-making and strengthen public ownership of adaptation measures.

Finally, climate adaptation presents opportunities to deliver multiple health and wellbeing benefits simultaneously. Encouraging active travel, improving access to green spaces, promoting energy-efficient homes, supporting local food initiatives and expanding volunteering opportunities can all contribute to better physical health, improved mental wellbeing, greater social connectedness and stronger community resilience. By placing communities at the centre of adaptation efforts, East Sussex can create a more resilient, healthy and empowered population that is better equipped to respond to the challenges of a changing climate.

14. Planning

High Level Strategic Opportunity:

Further develop and strengthen the embedding of climate–health priorities into all planning policy, design standards, and development processes by mandating resilient, low-carbon, and inclusive urban form; enforcing compliance with climate–health outcomes; integrating nature-based and hazard-specific design solutions; protecting food systems and vulnerable populations; and aligning local planning with national standards to deliver healthier, safer, and more climate-adapted places.

Rationale:

The planning system has one of the greatest opportunities to influence the long-term health, resilience and sustainability of communities by shaping the places where people live, work, learn and travel. Decisions made through planning determine exposure to climate-related hazards such as extreme heat, flooding, poor air quality, water scarcity and biodiversity loss, while also influencing housing quality, access to green and blue spaces, active travel, food systems, social connectedness and health inequalities. As climate risks intensify, embedding climate and health considerations across planning policy, design standards and development processes is essential to ensure that new development is resilient, low-carbon, inclusive and capable of adapting to future environmental conditions. Integrating nature-based solutions, hazard-specific design and climate-health objectives into planning will help reduce environmental risks, protect vulnerable populations, strengthen food security and ecosystem resilience, support healthier lifestyles, reduce carbon emissions and avoid creating future climate vulnerabilities. Aligning local planning with national policy and evidence-based design standards will ensure that growth contributes to healthier, safer, more equitable and climate-resilient places for current and future generations.

Considerations, Opportunities and Action Steps

Opportunity 1: Transform Local Plans to Embed Climate-Health Priorities

Action Steps:

- Continue to strengthen the working relationship between public health and planning via the 'East Sussex Planning for Health Working Group' to help develop and provide the climate change and health evidence in local planning policies and plans. Establish and communicate the climate-health priorities for planning.
- Create a consistent '**Climate and Health Vision for East Sussex**' to help with planning policy development and local place making.
- Working with the East Sussex Planning for Health Working Group, continue to develop and work to fully integrate **'Climate-Health Impact Considerations'** into Local Plans and Strategic Environmental Assessments.
- Evidence, define and implement **"Golden Interactions"** Zones (e.g. where air quality, heat risk, and deprivation intersect), using GIS mapping for example, to prioritise investment and planning controls.
- Where possible champion the development (where appropriate), integration and use of a **Climate-Health Compatibility Checklist** for all types of major developments, regeneration schemes, and infrastructure projects.

Opportunity 2: Champion & Mainstream Climate-Health Interventions in Development

Action Steps:

- Where appropriate and deliverable require sustainable urban drainage systems (**SuDS), biophilic design, food-growing space, retrofit-enabling architecture**, and protective **climate-resilient landscaping** as core design principles—not optional extras.
- Use design codes and or guidance to:
- Within Local Plans and regeneration projects/schemes, set minimum requirements and use metrics for appropriate **green infrastructure (% canopy cover, cooling metrics)**.
- Specify retrofittable features such as dual-aspect layouts, ventilation-readiness, and modular adaptability.

- Require **inclusive public realm design**—wayfinding, shade, water, and rest areas—for all residents.

Opportunity 3: Strengthen Planning Monitoring and Enforcement

Action Steps:

- Establish **climate-health planning monitoring indicators** as part of the prioritise for the East Sussex Planning for Health Working Group.
- Encourage and then link developer contributions (through planning obligations) to **delivery milestones** on climate-health outcomes (e.g. air quality, green space access, water security).
- Where appropriate, work with the East Sussex Planning for Health Group to develop and publish **open-access dashboards** tracking compliance with climate-health provisions across developments.

Opportunity 4: Integrate Inclusive, Participatory Planning and Governance

Action Steps:

- Develop and institutionalise ‘climate and health proofing’ workshops to help further the knowledge, understanding and application of ‘climate and health proofing’ in the ‘planning for health and climate’ context.
- Partner with health and care sectors to co-develop and deliver **place-based Resilience & Prevention Planning Guidance**.

Opportunity 5: Influence National Policy Priorities and Design Codes

Action Steps:

- Further prioritise, champion and advocate for:
- A national **Climate-Health Design Standard** for planning and architecture.
- **Net Zero-aligned Building Regulations** (Part L/F) that include ventilation, heat mitigation, and water reuse.
- **Amendments to NPPF** that further expand and explicitly prioritise the evidence for public health under climate stress.

Opportunity 6: Establish Developer-Friendly Tools and Training

Action Steps:

- Provide and/or integrate Climate-Health Design considerations/checklist and templates (where appropriate and possible) as part of the HIA Checklist to support SMEs and volume builders in implementing new requirements.
- Where possible and subject to funding, launch an **innovation fund or competition** to reward exemplar developments that exceed climate-health expectations.
- Champion further training for developers and planners in **nature-based, low-carbon, and inclusive design approaches**.

Context and impacts:

Planning is one of the most powerful determinants of climate-related health outcomes because it shapes exposure to risk over decades. Local Plans, site allocations, development management decisions, infrastructure planning and design codes influence where homes are built, how people travel, whether communities have access to shade and green space, how flood risk is managed, and whether places support healthy, low-carbon living.

The National Planning Policy Framework states that the purpose of planning is to contribute to sustainable development, including homes, commercial development and infrastructure in a sustainable manner. In climate-health terms, this means planning should reduce exposure to hazards such as flooding, overheating and poor air quality, while also improving wider determinants of health such as housing quality, active travel, access to nature, community facilities and economic opportunity.

The health evidence is clear that the built environment affects health inequalities. The Marmot Review's spatial planning work highlights that disadvantaged communities are more likely to experience environmental burdens such as poor housing, worse air quality, lack of green space, traffic risk and climate vulnerability. This means planning decisions can either reduce or reinforce health inequalities.

Climate change strengthens the public health role of planning. UKHSA's climate-health evidence identifies heat, flooding, air quality, infectious disease risks and mental health impacts as growing threats, with unequal impacts across populations. Planning can reduce these risks through climate-resilient design, green and blue infrastructure, sustainable drainage, flood avoidance, active travel and healthier neighbourhood layouts.

Key Impact Pathways

Planning affects climate-related health through several linked pathways. Poorly located development can increase exposure to river, surface water or coastal flooding, with consequences for injury, displacement, housing insecurity, trauma and long-term mental health. In contrast, avoiding high-risk locations, using sustainable drainage systems, restoring natural floodplains and designing with future climate allowances can reduce harm.

Planning also determines heat exposure. Dense urban areas with limited tree cover, hard surfaces, poor ventilation and limited shade can intensify overheating. This increases risks of heat exhaustion, cardiovascular illness, respiratory illness and excess mortality, particularly for older people, young children and people with long-term conditions. Climate-sensitive planning can reduce this through tree canopy, shade, passive cooling, orientation, ventilation, reflective materials and access to cool public spaces.

Air quality is another major pathway. Car-dependent development increases traffic emissions, reduces physical activity and worsens respiratory and cardiovascular risks. Compact, mixed-use neighbourhoods with safe walking, cycling and public transport can reduce emissions, increase physical activity and support healthier daily routines.

Planning also affects mental health and social connectedness. Access to green space, safe streets, community facilities and walkable neighbourhoods supports wellbeing, reduces isolation and strengthens community resilience. These social networks matter during heatwaves, floods and other climate shocks.

Technical Planning Implications

A climate-health approach to planning means embedding health, equity and adaptation into every stage of the planning process. This includes strategic site selection, Local Plan policies, infrastructure delivery, masterplanning, design review, development management, Section 106 and Community Infrastructure Levy priorities, and post-occupancy monitoring.

In practical terms, this means requiring developments to demonstrate how they will manage overheating, flood risk, water stress, air quality, active travel, access to nature, biodiversity net gain, inclusive design and emergency resilience. It also means assessing cumulative impacts, not just individual site impacts. A development may appear acceptable in isolation but still contribute to wider car dependency, pressure on water systems, loss of green infrastructure or unequal access to healthy environments.

The RTPI/TCPA guidance on planning for the climate crisis emphasises that local planning is central to delivering climate mitigation and adaptation, including sustainable drainage, resilient development and long-term planning for sea-level rise.

East Sussex Relevance

For East Sussex, planning is particularly important because the county combines coastal exposure, flood risk, rural accessibility challenges, ageing communities, housing pressures, biodiversity assets and areas of significant deprivation. Planning decisions across Eastbourne, Hastings, Lewes, Rother and Wealden, alongside the South Downs National Park Authority, will shape long-term climate resilience and health outcomes.

Key local issues include coastal change, surface water flooding, overheating in homes and public spaces, water stress, transport dependency, air quality in urban areas, access to services in rural communities, and unequal access to green and blue space. Planning also has a major role in supporting healthy ageing, enabling people to remain independent, connected and safe in climate-resilient homes and neighbourhoods.

Strategic implication

Planning should be treated as a core public health and climate adaptation function, not only a land-use regulatory process. The central question for East Sussex is whether new development and regeneration will lock in future vulnerability or create healthier, lower-carbon, climate-resilient places.

A strong climate-health planning approach would help East Sussex reduce future demand on health and care services, protect vulnerable communities, support active lifestyles, improve air quality, strengthen social connectedness and ensure that growth contributes to long-term resilience rather than future risk.

Current International and National Response(s):

Across both international and national policy, several common themes are emerging:

Theme	Direction of Travel
Healthy Places	Planning as a public health intervention
Climate Adaptation	Embedding resilience into development decisions
Nature-Based Solutions	Using ecosystems to support adaptation and health
Health Equity	Reducing unequal exposure to climate risks

Active Travel	Creating healthier and lower-carbon communities
Climate-Resilient Development	Integrating adaptation, mitigation and wellbeing
Green Infrastructure	Delivering cooling, flood protection and wellbeing
Health Impact Assessment	Embedding health into planning decisions
Planetary Health	Linking human health with environmental sustainability

Internationally, planning is increasingly recognised as one of the most important policy tools for addressing both climate change and population health. There has been a significant shift away from viewing planning solely as a land-use and development management function towards recognising its role in shaping health outcomes, reducing inequalities, building resilience and supporting climate adaptation.

This reflects growing evidence that many of the health impacts of a changing climate are mediated through the built and natural environment. Heatwaves, flooding, poor air quality, biodiversity loss, social isolation, housing quality and access to services are all strongly influenced by planning decisions. Consequently, planning is now viewed as a critical mechanism for creating healthier, more climate-resilient communities.

The World Health Organization (WHO) increasingly promotes planning as a public health intervention through initiatives such as Healthy Cities, Health in All Policies and Climate-Resilient Health Systems. These approaches recognise that health outcomes are shaped by the environments in which people live, work and travel, and that climate adaptation requires action beyond healthcare systems into planning, housing, transport and environmental policy.

A central international message is that healthy urban planning and climate adaptation are mutually reinforcing. The WHO advocates climate-resilient and healthy cities, compact and walkable neighbourhoods, green and blue infrastructure, active travel, sustainable housing, access to nature and reduced exposure to environmental hazards. These interventions improve health, reduce emissions and increase resilience simultaneously.

Similarly, the Intergovernmental Panel on Climate Change (IPCC) identifies land-use planning, urban greening, nature-based solutions, flood risk management and climate-resilient infrastructure as some of the most effective adaptation measures available.

Recent IPCC reports increasingly promote the concept of **climate-resilient development**, which integrates climate adaptation, mitigation, health, equity and sustainable development. The emphasis is on ensuring that future development reduces vulnerability rather than locking communities into future climate risks.

Internationally there has also been growing adoption of the Planetary Health framework, which recognises that human health depends on healthy ecosystems. Under this approach, planning becomes a mechanism for protecting biodiversity, reducing environmental degradation, strengthening resilience and improving population health simultaneously.

The **United Nations Sustainable Development Goals (SDGs)** further reinforce this agenda, particularly SDG 3 (Good Health and Wellbeing), SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action) and SDG 15 (Life on Land). Collectively, these frameworks promote integrated approaches that link planning, environment, climate and health rather than treating them as separate policy areas.

National Response (England)

In England, planning policy increasingly recognises the links between climate change, health and place. The most important framework is the National Planning Policy Framework (NPPF), which requires planning policies and decisions to support sustainable development, address climate change, reduce flood risk, protect and enhance the natural environment, and promote healthy and safe communities.

Health is now increasingly embedded within planning policy through expectations around healthy places, active travel, access to services, green infrastructure, air quality, climate resilience, flood risk management and biodiversity enhancement. The NPPF also requires planning authorities to support adaptation to climate change by taking account of long-term risks such as flooding, overheating and water scarcity.

Alongside this, the UK's **Third National Adaptation Programme (NAP3)** identifies planning as a critical delivery mechanism for climate adaptation. The programme recognises that decisions made through the planning system today will shape exposure and vulnerability for decades and highlights the importance of ensuring that future development is resilient to heatwaves, flooding, coastal change, water shortages and biodiversity loss.

Healthy Places and Public Health

National public health policy increasingly recognises planning as a major determinant of health. The work of the UK Health Security Agency, Office for Health Improvement

and Disparities and the NHS promotes healthy place-making approaches that integrate health considerations into planning decisions.

These approaches focus on creating environments that support active travel, healthy housing, access to green space, community infrastructure, improved air quality and climate resilience. The underlying principle is that prevention begins with the places in which people live rather than solely within health services.

The Marmot Review and subsequent work on spatial planning have been particularly influential in highlighting how planning affects health inequalities. National policy increasingly acknowledges that disadvantaged communities are often exposed to multiple environmental risks simultaneously, including poor housing, air pollution, flooding, overheating and limited access to nature. Planning is therefore increasingly viewed as a mechanism for reducing health inequalities as well as improving environmental sustainability.

Climate Adaptation and Resilience

One of the most significant areas of policy development concerns adaptation to future climate conditions. There is growing concern about overheating in homes and public buildings, urban heat islands, surface water flooding, coastal erosion, water stress and infrastructure resilience.

This has resulted in a range of policy and regulatory responses, including new overheating requirements within Building Regulations Part O, greater emphasis on Sustainable Drainage Systems (SuDS), increasing use of climate risk assessments and growing support for nature-based solutions. National agencies are increasingly promoting planning approaches that deliver environmental, climate and health benefits together rather than addressing these issues separately.

Nature Recovery and Green Infrastructure

The Environment Act 2021 has significantly strengthened the role of planning in supporting nature recovery and climate adaptation. Major developments include Biodiversity Net Gain, Local Nature Recovery Strategies, the Green Infrastructure Framework and the Environmental Improvement Plan.

These initiatives recognise that biodiversity and green infrastructure are not simply environmental assets but also public health assets. They help regulate temperatures, reduce flood risk, improve air quality, support physical activity, enhance mental wellbeing and strengthen community resilience. Nature-based solutions are therefore increasingly viewed as an important component of both climate adaptation and preventative health policy.

Active Travel and Sustainable Transport

Planning also plays a central role in national efforts to reduce transport-related emissions and improve health outcomes. Policies led by the Department for Transport, Active Travel England and Office for Health Improvement and Disparities (OHID) increasingly promote walkable neighbourhoods, cycling infrastructure, public transport accessibility and reduced car dependency.

These approaches are intended to deliver multiple benefits by reducing emissions, improving air quality, increasing physical activity, reducing obesity and supporting healthier communities. As a result, transport planning is increasingly viewed as both a climate policy and a public health intervention.

Health Impact Assessment

Another important national development is the increasing use of Health Impact Assessment (HIA) within planning. HIAs are increasingly used to assess how development proposals may affect physical health, mental wellbeing, health inequalities, environmental quality, climate resilience and access to services.

The growing use of HIA reflects recognition that planning decisions have long-term consequences for health and that these impacts should be considered alongside economic, environmental and transport considerations. Increasingly, HIA is being viewed as a practical tool for integrating climate adaptation, health improvement and equity into planning decisions.

Overall Direction of Travel

Across both international and national policy, the direction of travel is clear. Planning is increasingly being viewed not simply as a regulatory land-use function, but as a critical mechanism for delivering climate adaptation, reducing health inequalities, supporting biodiversity recovery and improving population health.

The strongest themes emerging across policy include climate-resilient development, healthy place-making, nature-based solutions, active travel, health equity and the integration of climate adaptation into mainstream planning. Together, these approaches recognise that the places created today will determine health, wellbeing and resilience for future generations, making planning one of the most important tools available for addressing the health effects of climate change.

Local East Sussex Response to Build From:

East Sussex Relevance

East Sussex has developed one of the more advanced local approaches to integrating planning, health and sustainability in England. East Sussex has established a coordinated countywide approach that explicitly links planning decisions to health outcomes, health inequalities, sustainability and climate resilience.

A significant strength of the East Sussex response is the development of the East Sussex Planning for Health, Wellbeing and Sustainability Framework, led by the **Public Health - Healthy and Sustainable Places Team** in partnership with all local planning authorities, the County Planning Authority and Highway Authority. The framework was developed to ensure that planning actively contributes to improving health, reducing inequalities and creating healthier and more sustainable places. It provides a consistent evidence base and approach across Eastbourne, Hastings, Lewes, Rother, Wealden and the South Downs National Park Authority.

The framework is particularly notable because it explicitly identifies climate adaptation as a health issue. Rather than focusing solely on development control or environmental sustainability, it recognises that planning decisions influence exposure to flooding, extreme temperatures, environmental hazards, access to nature, active travel opportunities, housing quality and social connectedness. These are all increasingly recognised as key pathways through which a changing climate affects health and wellbeing.

A further strength is the formal partnership structure that has been established. Public Health, planning authorities and highways teams have agreed a countywide Memorandum of Understanding and established an East Sussex Planning for Health Working Group. This provides governance, shared learning and a mechanism for embedding health considerations within planning policy and development management decisions. The county has also developed its own Health Impact Assessment (HIA) Toolkit to support the assessment of health, wellbeing and sustainability impacts arising from development proposals.

The East Sussex approach is strongly aligned with wider county priorities, including the Integrated Care Strategy, Health and Wellbeing Strategy, Adult Social Care Prevention Strategy, Housing Partnership Strategy and Local Transport Plans. This reflects growing recognition that climate resilience, healthy places and population health are interconnected and require cross-sector action.

A Changing Climate and Healthy Place-Making

The Planning for Health Framework is organised around five interconnected aspects of the built and natural environment: neighbourhood design, housing, food, natural environments and transport. Within these themes the framework addresses issues directly relevant to climate adaptation and health, including environmental hazards, flood risk, overheating, active travel, access to green and blue space, healthy food environments and social cohesion.

Importantly, the framework recognises that climate-related risks do not affect all communities equally. It explicitly identifies vulnerable population groups and highlights the relationship between place, deprivation and healthy life expectancy. Evidence used within the framework shows that healthy life expectancy varies significantly across East Sussex, with almost a 20-year gap between the most and least advantaged neighbourhoods. This means climate adaptation is increasingly viewed through both a resilience and health inequalities lens.

The framework also reflects growing local recognition of the role that planning can play in addressing overheating, flood risk and access to nature. Natural environments, green infrastructure, outdoor recreation, biodiversity and climate adaptation are all identified as important contributors to health and wellbeing. This aligns closely with emerging national and international evidence on nature-based solutions and healthy place-making.

Gaps

Despite significant progress, a changing climate is not yet fully embedded across all aspects of planning policy and decision-making. Whilst the Planning for Health Framework provides a strong foundation, climate adaptation often remains less developed than climate mitigation. Issues such as overheating, long-term water stress, climate migration, infrastructure resilience and future climate scenarios are still emerging within planning practice.

There is also a gap between strategic aspirations and implementation. Many of the principles within the framework rely on being translated into Local Plans, planning policies, design codes, supplementary planning documents and development decisions. The extent to which this occurs can vary across planning authorities.

A further gap concerns monitoring and evaluation. Whilst the framework provides extensive evidence on health and place, there is less systematic measurement of whether planning interventions are improving climate resilience, reducing inequalities or improving health outcomes over time.

Barriers

A major barrier is capacity and resources. Planning departments across England face significant workforce pressures, and integrating climate adaptation, health impact assessment and healthy place-making requires specialist expertise and time.

Data and evidence also remain challenges. Although East Sussex has developed a strong evidence base, there are still limitations in understanding cumulative impacts, future climate-health risks and how planning interventions influence long-term health outcomes.

Policy fragmentation can also create barriers. Planning operates within a complex landscape involving housing, transport, environment, public health, economic development and climate policy. Aligning these agendas consistently across organisations remains difficult.

There are also challenges associated with development viability. Measures that improve climate resilience, biodiversity, active travel or healthy place-making can sometimes be perceived as increasing development costs, creating tensions during negotiations and decision-making processes.

Tensions

One of the most significant tensions is between growth and resilience. East Sussex faces continuing pressures for housing delivery, economic growth and infrastructure development, whilst simultaneously needing to address flood risk, biodiversity loss, overheating and environmental sustainability. Balancing development needs with long-term climate resilience remains a challenge.

There is also a tension between short-term planning pressures and long-term climate adaptation. Planning decisions are often influenced by immediate housing and economic needs, whereas climate adaptation requires thinking over several decades. Decisions made today may create vulnerabilities that only become apparent in future climate conditions.

A further tension exists between local distinctiveness and countywide consistency. East Sussex contains very different places, including coastal towns, rural villages, market towns and protected landscapes. Developing consistent health and climate approaches while responding to local circumstances can be challenging.

Opportunities

East Sussex is well positioned to integrate climate adaptation, health and planning. The Planning for Health Framework already provides a strong foundation that many areas do not possess.

One major opportunity is to further strengthen the use of Health Impact Assessment and climate-health assessment within planning decisions. This would help ensure that overheating, flood risk, air quality, biodiversity, social connectedness and health inequalities are considered routinely alongside more traditional planning considerations.

There is also an opportunity to use planning more explicitly as a climate adaptation tool. This could include greater emphasis on climate-resilient neighbourhood design, urban greening, cooling infrastructure, water-sensitive design, biodiversity recovery and healthy homes.

The county's strong partnership structures create opportunities to align planning more closely with public health, adult social care, housing, transport, environmental services and NHS priorities. This would support a more preventative approach that addresses the root causes of vulnerability rather than responding to health impacts after they occur.

Another significant opportunity lies in using planning to reduce health inequalities. The framework's focus on healthy life expectancy, vulnerable populations and place-based inequalities provides a strong platform for ensuring that climate adaptation benefits those communities most at risk.

Overall Assessment

For East Sussex, planning is particularly important because the county combines coastal exposure, flood risk, rural accessibility challenges, ageing communities, housing pressures, biodiversity assets and areas of significant deprivation. Planning decisions across Eastbourne, Hastings, Lewes, Rother and Wealden, alongside the South Downs National Park Authority, will shape long-term climate resilience and health outcomes.

East Sussex has developed a most comprehensive local approach to linking planning, health and sustainability. Through the Planning for Health, Wellbeing and Sustainability Framework, Health Impact Assessment processes, partnership governance arrangements and strong public health leadership, the county has established many of the foundations required for a climate-health approach to planning.

The next stage is to move from recognising the relationship between planning, health and climate change to systematically embed climate adaptation and resilience across all planning functions. By strengthening implementation, monitoring, partnership working and climate-health assessment, East Sussex has the opportunity to demonstrate how planning can become a central component of a whole-system response to the health effects of a changing climate.

Key local issues include coastal change, surface water flooding, overheating in homes and public spaces, water stress, transport dependency, air quality in urban areas, access to services in rural communities, and unequal access to green and blue space. Planning also has a major role in supporting healthy ageing, enabling people to remain independent, connected and safe in climate-resilient homes and neighbourhoods.

The central question for East Sussex is whether new development and regeneration will lock in future vulnerability or create healthier, lower-carbon, climate-resilient places.

A strong climate-health planning approach would help East Sussex reduce future demand on health and care services, protect vulnerable communities, support active lifestyles, improve air quality, strengthen social connectedness and ensure that growth contributes to long-term resilience rather than future risk.

15. Private Industry and Procurement

High Level Strategic Opportunity:

Develop a climate-resilient, healthy and sustainable private sector across East Sussex by embedding climate adaptation, environmental sustainability, population health and health equity into business leadership, governance and decision-making. Through collaborative action, responsible investment, resilient workplaces, sustainable operations and innovation, businesses should reduce environmental impacts, protect workforce and community health, strengthen economic resilience, and support the transition to a fair, low-carbon economy that benefits both people and the planet.

Rationale:

The private sector plays a critical role in shaping the environmental, economic and social determinants of health through employment, investment, procurement, infrastructure, innovation and the goods and services it provides. At the same time, businesses are increasingly exposed to climate-related risks, including extreme weather, supply chain disruption, resource scarcity, rising energy costs, workforce

health impacts and changing regulatory and market expectations. These risks can affect productivity, business continuity and economic resilience, while also creating opportunities to drive innovation, sustainable growth and improved population health. Embedding climate adaptation, environmental sustainability, population health and health equity into business leadership and decision-making will enable organisations to better anticipate and manage climate risks, protect workforce and community wellbeing, reduce environmental impacts, strengthen resilience and competitiveness, and contribute to a fair and prosperous transition to a low-carbon economy. By working collaboratively across sectors, the private sector can help create healthier places, support resilient local economies and deliver long-term benefits for both people and the planet.

Considerations, Opportunities and Action Steps

Opportunity 1: Develop Comprehensive Sustainability & Resilience Action Plans

Action Steps:

- Create and or integrate climate and health impacts/considerations into **Climate-Health Business Action Plans (CHBAPs) as appropriate** that:
- Align with local and national Net Zero, health, and resilience goals.
- Include **quantified emissions targets**, circular economy strategies, and social equity objectives.
- Embed **dual materiality assessments** (climate risk to business + business risk to health and climate).
- Integrate climate-health metrics into Environmental Social Governance (ESG) reporting, annual statements, and risk registers.

Opportunity 2: Embed Health-Conscious Design Across Operations and Supply Chains

Action Steps:

- Use health-centric procurement frameworks that:
- Prioritise low-volatile organic compound (VOC) materials, non-toxic packaging, ergonomic tools, and safe chemical substitutes.
- Redesign logistics and transport to minimise:
- Air and noise pollution.

- Heat-vulnerable delivery practices and excessive refrigeration emissions.
- Implement **circular product life cycles**—from clean sourcing to end-of-life recovery.

Opportunity 3: Accelerate Cross-Sector Innovation for Climate-Health Solutions

Action Steps:

- Invest in and pilot:
- **Cooling technologies** for workforce and consumers (e.g. passive cooling in retail).
- **Green manufacturing** and zero-waste processes.
- **Urban greening tech**—green roofs, shade solutions, vertical farming, biosolar panels.
- Participate in innovation coalitions with universities, NHS, councils, sector peers and SMEs to co-develop:
- Low-carbon packaging, modular construction, and drought-resilient food systems.

Opportunity 4: Build Climate-Health Literacy and Resilience in the Workforce

Action Steps:

- Provide training on:
- **Climate risk and occupational health**, including indoor air quality, vector exposure, sun safety, and mental health under climate stress.
- **Wellbeing in extreme conditions**: heat stress protocols, UV-safe workwear, hydration support.
- Offer **upskilling opportunities** in retrofit, sustainable procurement, and green tech deployment.
- Provide **heat-safe and climate-conscious workplace policies**, including flexible hours and dress codes.

Opportunity 5: Collaborate on Infrastructure and Strategic Planning

Action Steps:

- Co-invest in:
- Shared district cooling systems, greywater reuse, green transport hubs.

- Energy-positive buildings and microgrids with business parks.
- Join **local Resilience Infrastructure Forums** with councils and emergency services to address site-level risks: flooding, heatwaves, supply chain disruption.

Opportunity 6: Advance Equitable and Transparent Governance

Action Steps:

- Champion:
- **Fair labour standards in the green transition**, including protections for outdoor and migrant workers.
- Open disclosure on **environmental justice risks** (e.g. facilities near vulnerable communities).
- Develop and adhere to **voluntary sustainability standards**, including:
- Develop and deliver transparent carbon offsetting.
- Verified climate-health labelling of products or services.

Opportunity 7: Work with Private Design Companies and Organisations to Design for Health, Nature, and Climate in Commercial Property

Action Steps:

- Integrate:
- **Biophilic design**, daylight access, air filtration, and UV-safe outdoor areas in office/retail layouts.
- Permeable paving, biodiversity corridors, and on-site food gardens in industrial parks and campuses.
- Encourage **employee travel by active means**: cycle parking, showers, walking routes, e-bike incentives to encourage and support climate and health wellbeing in and outside of private industry.

Opportunity 8: Use Procurement to Drive Market-Wide Change

Action Steps:

- Set requirements for:
- Low-carbon materials and responsible sourcing policies.
- Health-positive product lifecycle analysis (PLA).
- Collaborate with suppliers to:

- Reduce transport emissions and increase packaging circularity.
- Offset and disclose health-related climate externalities (e.g. heat emissions, chemical runoff).

Opportunity 9: Leverage Communications for Culture Shift

Action Steps:

- Embed **climate-health storytelling** in branding and community engagement.
- Promote **staff-led green teams** and workplace climate-health champions.
- Report and celebrate contributions to public wellbeing (e.g. shaded spaces, clean energy provision, local jobs).

Context and impacts:

Private industry and procurement are increasingly recognised as critical components of the response to a changing climate and its effects on health. While sectors such as healthcare, transport and housing are often viewed as the primary actors in climate-health policy, many of the underlying determinants of health are shaped by private sector activity, investment decisions, employment practices, infrastructure provision, supply chains and procurement systems. Consequently, the private sector has a significant influence on both the drivers of a changing climate and society's ability to adapt to its impacts.

For the purposes of this assessment, **private industry** encompasses businesses operating across sectors such as construction, manufacturing, utilities, energy, food production, logistics, retail, technology, finance, professional services and infrastructure delivery. **Procurement** refers to the processes through which public, private and voluntary sector organisations commission and purchase goods, services, works and infrastructure. Together, these activities shape economic development, environmental sustainability, workforce wellbeing, community resilience and population health.

Historically, the primary role of business was viewed through the lens of economic growth, employment and service provision. However, a changing climate is transforming expectations of the sector. Businesses are increasingly expected to contribute not only to economic prosperity but also to climate mitigation, adaptation, environmental stewardship, social value, workforce wellbeing and community resilience. Procurement systems are similarly evolving from being primarily cost-driven mechanisms to strategic tools capable of influencing climate, health and social outcomes.

Why Private Industry Matters for Climate and Health

Private industry influences many of the wider determinants of health. Businesses provide employment, generate income, develop homes and infrastructure, produce food and goods, deliver essential services and influence the quality of local environments. The conditions in which people live, and work are therefore heavily shaped by decisions made within the private sector.

A changing climate affects these systems in multiple ways. Rising temperatures, extreme weather events, flooding, water scarcity, supply chain disruption, resource constraints and energy insecurity all have implications for business continuity, workforce productivity and economic resilience. These impacts can then translate into consequences for health through employment insecurity, financial stress, reduced access to essential goods and services, disruption to communities and widening inequalities.

There is growing recognition that economic resilience and public health resilience are closely connected. Businesses that can adapt to a changing climate help protect jobs, support local economies and maintain access to services, while businesses that are vulnerable to climate impacts may contribute to wider social and health challenges.

Roles and Responsibilities

The role of private industry in addressing climate-related health impacts extends far beyond reducing carbon emissions. Businesses are increasingly expected to assess climate risks, protect their workforce, strengthen supply chain resilience and contribute to the resilience of the communities in which they operate.

Employers have responsibilities for workforce health, safety and wellbeing. As a changing climate increases exposure to heat, poor air quality, extreme weather and environmental hazards, organisations are increasingly required to consider how these risks affect employees, contractors and service users. This includes managing occupational heat stress, ensuring safe working environments, maintaining business continuity during climate-related disruption and supporting employee wellbeing.

Businesses also have responsibilities through their supply chains. Climate-related disruption to food production, manufacturing, transport and global trade can affect the availability and affordability of essential goods. Organisations are therefore increasingly expected to understand supply chain vulnerabilities and develop contingency plans that reduce risks to service delivery and communities.

The construction, infrastructure and development sectors have particular responsibilities because decisions made today will influence health and climate resilience for decades. Choices about building design, materials, energy efficiency,

overheating prevention, flood resilience and access to green infrastructure all have long-term implications for health and wellbeing.

Financial institutions, insurers and investors also play an increasingly important role. Through investment decisions, lending practices and risk assessments they influence which developments, technologies and infrastructure projects are prioritised and funded. Climate-related financial disclosure requirements are increasingly encouraging organisations to consider long-term climate risks alongside economic performance.

Workforce Health and Climate Resilience

One of the most important connections between private industry and climate-related health concerns workforce wellbeing. A changing climate is already affecting workers through rising temperatures, extreme weather events, air pollution, changing disease patterns and disruption to transport systems.

Certain sectors are particularly vulnerable. Construction workers, agricultural workers, utility engineers, transport operators, logistics staff, outdoor workers and emergency responders may experience increased exposure to heat stress, dehydration and other environmental risks. Indoor workplaces are also becoming vulnerable to overheating, particularly where buildings were not designed for future climate conditions.

The International Labour Organization has highlighted that climate change is likely to have significant implications for productivity, workplace safety and occupational health. Heat stress alone is projected to result in substantial economic losses globally, while also increasing risks of injury, illness and mental health challenges.

This has led to growing interest in climate-resilient workplaces that support thermal comfort, workforce wellbeing, flexible working arrangements and business continuity planning.

Procurement as a Strategic Lever

Procurement is increasingly recognised as one of the most powerful tools available for influencing climate and health outcomes. Public sector procurement alone accounts for hundreds of billions of pounds of expenditure across the UK, while large private sector organisations exert considerable influence through their purchasing decisions.

Procurement shapes what is built, how services are delivered, what products are used, where investment flows and which businesses succeed. Increasingly, organisations are using procurement to promote environmental sustainability, social value, workforce wellbeing and resilience.

This reflects a shift away from procurement focused solely on cost and efficiency towards a broader understanding of value. Decisions about procurement can influence carbon emissions, air quality, local employment, community wealth, healthy food provision, energy efficiency, housing quality and access to services.

The NHS, local government and other public bodies increasingly recognise procurement as a mechanism for achieving both climate and health objectives simultaneously.

Climate Adaptation and Supply Chain Resilience

A changing climate is creating growing challenges for supply chains. Extreme weather, drought, flooding, energy shortages and global climate disruptions can affect the availability and cost of food, materials, medicines, equipment and essential services.

The COVID-19 pandemic demonstrated the vulnerability of complex supply chains and highlighted the importance of resilience planning. A changing climate presents similar challenges but on a potentially larger and more sustained scale.

Increasingly, organisations are expected to consider climate risks within procurement processes and supplier relationships. This includes understanding where goods originate, assessing exposure to climate risks and ensuring suppliers have appropriate resilience measures in place.

The resilience of supply chains is therefore becoming a significant determinant of both organisational resilience and community wellbeing.

Social Value, Health Equity and a Just Transition

A changing climate has the potential to exacerbate existing inequalities. The transition to a low-carbon economy may create new employment opportunities and economic benefits, but it may also create risks for communities dependent on carbon-intensive industries or those already experiencing deprivation.

As a result, there is increasing emphasis on ensuring that climate action contributes to a **just transition**. This means ensuring that the benefits of climate adaptation and decarbonisation are distributed fairly and that vulnerable communities are not disproportionately burdened by the costs of change.

Procurement is increasingly being used to support this agenda through local employment opportunities, apprenticeships, skills development, fair work practices, community wealth building and support for local suppliers. These approaches are particularly relevant because employment, income and economic security are among the strongest determinants of health.

Climate, Health and Corporate Responsibility

A changing climate is also reshaping concepts of corporate responsibility. Businesses are increasingly expected to demonstrate how they manage environmental, social and governance (ESG) issues, including climate risks and health impacts.

Many organisations now undertake climate risk assessments, develop adaptation plans and report on sustainability performance. There is also growing recognition that organisational resilience depends upon healthy employees, resilient communities and functioning public services.

Increasingly, businesses are being encouraged to consider not only their own emissions but also their wider contribution to population health, environmental sustainability and community resilience.

Strategic Implications

Private industry and procurement should not be viewed solely as economic functions within a climate-health response. They are major influences on the social, economic and environmental conditions that determine health and wellbeing. Through employment, investment, supply chains, infrastructure delivery, service provision and purchasing decisions, businesses help shape how communities experience a changing climate and how successfully they adapt to its impacts.

The strategic challenge is therefore not simply to reduce the environmental footprint of economic activity, but to align business practices, investment decisions and procurement systems with broader goals relating to climate resilience, health improvement and social equity.

In this context, private industry and procurement represent some of the most significant levers available for creating healthier, more resilient and more sustainable communities. Their contribution extends well beyond emissions reduction to encompass workforce wellbeing, economic resilience, infrastructure adaptation, social value, community resilience and the reduction of climate-related health inequalities.

Current International and National Response(s):

Across both international and national policy, several themes are becoming increasingly prominent:

Theme	Direction of Travel

Climate Adaptation	Strengthening business resilience to climate risks
Sustainable Procurement	Using purchasing power to influence climate and health outcomes
Social Value	Delivering wider community benefits through procurement and investment
Workforce Resilience	Protecting employee health, wellbeing and productivity
Supply Chain Resilience	Managing climate risks across complex supply networks
ESG and Corporate Responsibility	Linking environmental performance with social and health outcomes
Just Transition	Ensuring climate action reduces rather than widens inequalities
Health Co-benefits	Recognising that climate action can improve health, wellbeing and resilience

Internationally and nationally, there is growing recognition that private industry and procurement have a significant role in addressing both a changing climate and its impacts on health. The response has evolved beyond a narrow focus on environmental sustainability towards a broader understanding that businesses, supply chains, investment decisions and procurement systems influence many of the social, economic and environmental determinants of health. Increasingly, governments, international organisations and regulators are encouraging the private sector to contribute to climate adaptation, resilience, workforce wellbeing, sustainable development and health equity alongside traditional economic objectives.

International Response

At an international level, the **World Health Organization (WHO)** increasingly promotes a *Health in All Policies* approach, recognising that many of the factors influencing health lie outside healthcare systems. Businesses, employers and supply chains influence employment, working conditions, housing, food systems, environmental quality and economic security, all of which affect population health and resilience to climate change. The WHO's work on climate-resilient health systems increasingly highlights the importance of engaging private sector partners in adaptation and resilience planning.

The **United Nations Sustainable Development Goals (SDGs)** provide the most comprehensive international framework linking business, climate and health. In particular, SDG 3 (Good Health and Wellbeing), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action) recognise that businesses play a critical role in delivering sustainable and healthy societies. Increasingly, companies are expected to demonstrate how their operations contribute to environmental sustainability, social wellbeing and long-term resilience.

The **Paris Agreement** has also significantly influenced private sector action. While primarily focused on reducing greenhouse gas emissions, it has accelerated expectations that businesses assess climate risks, adapt their operations and support wider societal resilience. Many international corporations now undertake climate risk assessments and adaptation planning alongside emissions reduction strategies, reflecting growing recognition that climate change presents material risks to business continuity, workforce productivity and supply chains.

The **Intergovernmental Panel on Climate Change (IPCC)** has increasingly highlighted the role of private sector investment, infrastructure development and supply chain management in both mitigation and adaptation. Recent reports emphasise that climate-resilient development requires collaboration between governments, businesses, communities and civil society. The IPCC also stresses that climate change can disrupt global supply chains, labour markets and economic systems, with significant implications for health, food security and social stability.

Alongside these developments, there has been rapid growth in **Environmental, Social and Governance (ESG)** frameworks, corporate sustainability reporting and climate-related financial disclosure requirements. These initiatives encourage businesses to consider not only environmental performance but also workforce wellbeing, social value, community impacts and long-term resilience. Health is increasingly recognised as a key component of sustainable business practice.

A further international trend is the growing emphasis on a Just Transition. This recognises that climate action must be delivered in ways that reduce rather than exacerbate inequalities. International organisations such as the International Labour Organization (ILO) increasingly promote approaches that support decent work, workforce retraining, skills development and protection for vulnerable populations during the transition to a low-carbon economy.

National Response (England)

In England, private industry and procurement are increasingly viewed as important levers for delivering climate adaptation, reducing emissions and improving health outcomes.

The overarching framework is provided by the **Climate Change Act 2008**, which established legally binding emissions reduction targets and a statutory framework for climate adaptation. Subsequent policies, including the **Net Zero Strategy**, **Climate Change Risk Assessment (CCRA)** and **National Adaptation Programme (NAP3)**, recognise the importance of business resilience, supply chain adaptation and private sector engagement in responding to climate change.

A major area of policy development concerns **corporate climate risk management**. Large organisations are increasingly expected to assess and disclose climate-related risks through frameworks aligned with the **Task Force on Climate-related Financial Disclosures (TCFD)** and emerging international sustainability reporting standards. These requirements encourage businesses to consider how climate change may affect operations, assets, workforce resilience and supply chains.

There is also increasing recognition that climate change presents risks to economic productivity, workforce health and business continuity. National adaptation policy highlights concerns including overheating of workplaces, disruption from flooding, infrastructure failures, water scarcity and supply chain interruptions. Businesses are therefore encouraged to strengthen resilience and develop adaptation plans alongside decarbonisation efforts.

Procurement as a Strategic Lever

One of the most significant developments nationally has been the growing use of procurement as a mechanism for delivering environmental and social outcomes.

The **Public Services (Social Value) Act 2012** established the principle that public procurement should consider wider social, economic and environmental benefits alongside cost. This has increasingly been interpreted through the lens of climate change, health and community resilience.

More recently, the **Procurement Act 2023** has strengthened opportunities for public bodies to consider social value, sustainability and resilience within procurement processes. Increasingly, organisations are expected to consider not only the cost of goods and services but also their environmental impacts, contribution to local communities, workforce wellbeing and long-term resilience.

Within the NHS, procurement has become a central component of the health sector's climate response. The NHS Net Zero Strategy identifies supply chains as one of the

largest sources of healthcare emissions and requires suppliers to demonstrate progress towards carbon reduction. However, there is also increasing recognition that procurement can support wider adaptation and resilience objectives, including workforce wellbeing, service continuity and support for vulnerable populations.

Healthy Workplaces and Workforce Resilience

National policy increasingly recognises that workplaces are important settings for protecting health from climate-related risks.

Organisations such as the **Health and Safety Executive (HSE)**, **UK Health Security Agency (UKHSA)** and **Office for Health Improvement and Disparities (OHID)** highlight growing concerns around heat stress, air quality, occupational health and workforce resilience. Particular attention is being given to workers in outdoor sectors such as construction, agriculture, transport and utilities, who may be disproportionately exposed to climate-related risks.

There is growing emphasis on creating healthy, climate-resilient workplaces through improved building design, thermal comfort, flexible working practices, workforce wellbeing programmes and business continuity planning.

Supply Chains, Food Systems and Critical Infrastructure

Nationally, there is increasing concern about the vulnerability of supply chains to climate-related disruption.

Recent adaptation planning has highlighted risks associated with food security, construction materials, medicines, utilities, transport systems and critical infrastructure. The COVID-19 pandemic reinforced awareness of supply chain vulnerabilities, and climate change is increasingly viewed as a similar systemic risk.

As a result, businesses are being encouraged to improve supply chain resilience, diversify suppliers, assess climate risks and consider the implications of disruption for customers, employees and communities.

Local East Sussex Response to Build From:

East Sussex does not currently have a single, coordinated private sector climate-health strategy. Instead, the response has emerged through a range of economic development, procurement, housing, energy, skills, public health and climate initiatives that increasingly recognise the importance of business, supply chains and investment in building climate resilience.

A key feature of the local response is growing recognition that a changing climate is not solely an environmental issue but one that affects economic resilience, workforce

health, business continuity and community wellbeing. This is reflected across the county's climate, economic and public health agendas, where there is increasing emphasis on supporting organisations to prepare for climate risks while contributing to wider sustainability objectives.

Procurement is increasingly recognised as a significant lever for change. East Sussex County Council, NHS Sussex and other public sector partners collectively spend substantial sums on goods, services and infrastructure. There is growing interest in ensuring procurement delivers wider social value outcomes, including environmental sustainability, local economic benefit, workforce wellbeing and community resilience. Procurement is increasingly being viewed not simply as a purchasing function but as a mechanism for influencing organisational behaviour, supply chains and long-term resilience.

Within health and care, procurement has emerged as a particularly important area of activity. Local discussions have identified commissioning and procurement as practical mechanisms for embedding climate and health considerations into contracts and service specifications. This includes exploring how commissioned services respond to extreme weather, support vulnerable populations during disruption, protect workforce wellbeing and contribute to climate adaptation as well as carbon reduction.

East Sussex is also beginning to explore how climate and health considerations can be integrated into decision-making tools used across organisations. There is support for developing practical approaches that help commissioners, procurement teams and service managers routinely consider climate-related health risks when designing services, making investments and procuring goods.

Economic development and skills programmes provide another important part of the local response. Through initiatives linked to green skills, retrofit, renewable energy, environmental management and low-carbon technologies, East Sussex is seeking to support workforce development and prepare local businesses for the transition to a more climate-resilient economy. This is important from a health perspective because employment, skills and income remain among the strongest determinants of health and wellbeing.

There is also increasing recognition of the role of local businesses and voluntary sector organisations in supporting community resilience. During periods of disruption, businesses often provide local employment, essential services, community support and supply chain continuity. Strengthening relationships between public services, businesses and the voluntary sector is increasingly viewed as part of building wider climate resilience.

However, much of this work remains at an early stage. Climate adaptation within the private sector is generally less developed than mitigation and carbon reduction

activity. While many organisations are considering emissions reduction, fewer are systematically assessing how a changing climate may affect workforce health, service delivery, supply chains, customers or vulnerable populations.

From a climate-health perspective, East Sussex is beginning to move towards a broader understanding of procurement and private industry as contributors to resilience, prevention and adaptation, but this is not yet embedded consistently across the system.

Gaps

The most significant gap is the absence of a clear framework linking private industry, procurement, climate adaptation and health outcomes. While climate, economic development, procurement and public health agendas exist, they are often pursued separately. Consequently, there is limited visibility of how business activity and procurement decisions contribute to climate resilience, health protection or reducing inequalities.

There is also limited understanding of how a changing climate may affect local businesses, supply chains and employment over the longer term. Much of the current focus remains on emissions reduction rather than understanding how climate-related disruption could affect workforce health, economic resilience, food systems, essential goods or local service provision.

Procurement frameworks increasingly reference sustainability and social value, but climate adaptation and health resilience are not yet systematically embedded in commissioning decisions. There is an opportunity to move beyond carbon reduction and consider how suppliers contribute to resilience during heatwaves, flooding, infrastructure disruption and other climate-related events.

A further gap concerns evidence and data. There is limited local intelligence on how climate risks affect businesses, workforce productivity, supply chains, vulnerable workers or local economic resilience. This makes it difficult to target interventions and measure progress.

Barriers

A major barrier is organisational capacity. Many businesses, particularly small and medium-sized enterprises (SMEs), lack the time, expertise and resources needed to assess climate risks, develop adaptation plans or respond to increasingly complex reporting requirements.

Limited awareness remains another challenge. Although understanding of adapting infrastructure is increasing, climate adaptation and climate-health impacts are

generally less well understood. Many organisations are uncertain about what climate adaptation means in practice or how it relates to their core business functions.

Fragmented governance also presents a barrier. Responsibility for climate adaptation, procurement, economic development, public health and business engagement sits across multiple organisations. This can make coordination difficult and reduce opportunities for shared learning and joint action.

Funding constraints remain significant. Businesses and public sector organisations are often required to prioritise immediate operational pressures over longer-term resilience investments, even where future benefits are recognised.

Tensions

One of the strongest tensions concerns the balance between short-term financial pressures and long-term resilience. Businesses and public sector organisations are operating within challenging economic conditions, which can make investment in climate adaptation difficult despite recognition of future risks.

There is also a tension between economic growth and environmental sustainability. While East Sussex seeks to support business development, housing delivery and economic prosperity, these objectives must increasingly be balanced against climate resilience, environmental protection and health outcomes.

A further tension exists between procurement cost and social value. Procurement processes often remain heavily influenced by price and affordability, while climate resilience, workforce wellbeing and community benefits can be more difficult to quantify. This can make it challenging to prioritise long-term resilience within commissioning decisions.

There is also an emerging tension around workforce transitions. Moving towards a low-carbon economy creates opportunities for new industries and employment, but may also create challenges for sectors, businesses or workers that are less able to adapt.

Opportunities

The greatest opportunity lies in using procurement as a strategic lever for climate resilience and health improvement. Public sector organisations across East Sussex collectively influence significant supply chains and investment decisions. Embedding climate-health considerations within procurement could influence business practices, strengthen resilience and support wider social value outcomes.

There is also a major opportunity to position local businesses as partners in climate adaptation rather than simply stakeholders. Businesses hold assets, expertise, supply

chains and community relationships that can contribute significantly to resilience planning and emergency preparedness.

Workforce health and wellbeing provides another important opportunity. Employers increasingly recognise that heat stress, extreme weather, mental wellbeing and workforce resilience are business issues. Supporting organisations to respond to these challenges could improve both health outcomes and productivity.

The transition to a green economy also creates opportunities for economic development, skills growth and health improvement. East Sussex is already investing in areas such as retrofit, renewable energy, environmental management and sustainable construction. These sectors can support employment, reduce inequalities and strengthen long-term resilience.

Finally, there is an opportunity to better connect procurement, public health and climate adaptation agendas. By incorporating climate-health considerations into commissioning, social value frameworks and contract management, East Sussex could influence a much wider range of organisations and suppliers than would be possible through climate policy alone.

Overall Assessment

East Sussex has begun to recognise the importance of private industry and procurement within its response to a changing climate, particularly through social value, commissioning, economic development and green skills initiatives. However, the response remains relatively fragmented and is still more strongly focused on sustainability and carbon reduction than on climate adaptation and health resilience.

The key opportunity is to position businesses, employers, suppliers and procurement systems as active contributors to climate-health resilience. By embedding climate-health considerations into commissioning, workforce planning, supply chain management and economic development, East Sussex could use its purchasing power and business networks to strengthen resilience, reduce inequalities and support healthier, more sustainable communities. In this context, private industry and procurement should be viewed not simply as economic functions but as important partners in protecting population health in a changing climate.

16. Transport

High Level Strategic Opportunity:

Expand the delivery of a climate-resilient, net-zero, and health-promoting transport system by decarbonising fleets, expanding active and inclusive travel infrastructure, integrating local food and logistics systems, safeguarding access to health and emergency services, and embedding hazard-specific, climate-adapted design to protect communities, reduce inequities, and maintain mobility under changing climate conditions.

Rationale:

Transport is a fundamental determinant of health, wellbeing, social inclusion and economic prosperity, enabling access to employment, education, healthcare, food, social networks and essential services. However, the transport sector is also a major contributor to greenhouse gas emissions, air pollution and noise, while being increasingly vulnerable to climate-related hazards such as flooding, extreme heat, severe weather, coastal erosion and infrastructure failure. These impacts can disrupt mobility, emergency response, healthcare access, supply chains and economic activity, disproportionately affecting vulnerable populations, rural communities, older people, people with disabilities and those without access to private vehicles. Transitioning to a climate-resilient, net-zero and health-promoting transport system offers substantial co-benefits, including improved air quality, increased physical activity, reduced carbon emissions, enhanced road safety, stronger community connectivity and greater resilience to climate-related disruption. Embedding climate adaptation, inclusive design, sustainable freight and logistics, active travel, resilient infrastructure and equitable access into transport planning will help protect public health, reduce inequalities, maintain essential connectivity and support a healthier, more sustainable and climate-resilient East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1: Deliver Transition & Climate Adaptation in Transport

Action Steps:

- **Decarbonise fleets**: Prioritise full electrification of public and commercial transport; introduce electric bike courier services and low-carbon last-mile logistics.
- **Install renewable-powered EV charging** stations in underserved and rural areas.
- **Create low-carbon transport innovation zones** to trial clean fuels, digital mobility services, and infrastructure retrofits.
- **Support modal shift** through integrated transport plans connecting rail, bus, active travel, and micromobility options.

Opportunity 2: Prioritise Localism and Increase Active Travel Infrastructure

Action Steps:

- Reduce the need for long distance travel, unnecessary and regular journeys by prioritising the local and ability to live, work and play locally. Digital availability and ability to shop and work digitally should reduce the need for long distance travel.
- Expand **county-wide cycling networks** with safe, segregated lanes, wayfinding, and secure bike parking.
- Design **climate-smart walking corridors** with shaded paths, benches, and drinking water points.
- Where possible, fund **bike libraries**, repair cafes, and **cycling lessons**, prioritising low-income, migrant, and older populations.
- Install **solar-lit pedestrian crossings** and smart traffic calming to improve walkability and safety.

Opportunity 3: Provide and Prioritise Inclusive and Healthy Transport Access

Action Steps:

- Provide **affordable, demand-responsive transport** (e.g. community minibuses, shared taxis) for rural, elderly, and disabled residents.
- Prioritise **step-free access**, tactile paving, and audible announcements across all transit nodes.
- Use **real-time information systems** that are multilingual, accessible, and digitally inclusive.
- Expand **public transport concessions** for youth, carers, and low-income users.

Opportunity 4: Plan for Migration & Demographic Resilience

Action Steps:

- Plan new developments with **co-located housing, jobs, and transit**, particularly for climate-related migration zones.
- Integrate **EAL-friendly signage** and culturally responsive support in transport hubs.
- Offer cycle training and public transport orientation for newly arrived communities.

Opportunity 5: Local Food & Transport Integration

Action Steps:

- Subject to feasibility for small businesses support **electric cold chains** for local food and medical supplies.
- Designate **green delivery zones** with access for low-emission vehicles only.
- Incentivise **urban logistics hubs** near fresh food markets to reduce traffic and emissions.

Opportunity 6: for Aeroallergens and Transport

Action Steps:

- Require **filtered ventilation systems** in new buses/trains and at stations, especially during high pollen seasons.

- Plant low-allergen trees and vegetation along corridors.

Opportunity 7: Wildfires

Action Steps:

- Use **shared transport schemes** to limit car use in sensitive areas.
- Establish evacuation-ready public transit plans for wildfire-prone zones.

Opportunity 8: Action Steps for Air Quality

Action Steps:

- Create **clean air corridors** with restricted diesel access and green buffer zones.
- Retrofit buses and vans with zero-emission drivetrains and regenerative braking.
- Install **air quality monitors** at key junctions and schools.

Opportunity 9: Vector-Borne Diseases

Action Steps:

- Implement coordinated inspections at borders and ports to detect disease vectors.
- Link transport authority protocols with **public health surveillance**.

Opportunity 10: Temperature Extremes:

Action Steps:

- Introduce **heat-proof bus shelters** with solar roofs and ventilation.
- Ensure **transport hubs have cooling zones** and climate-safe waiting areas.
- Use **climate-resilient materials** (e.g. high-albedo surfaces, asphalt alternatives) on roads and footpaths.

Opportunity 11: Infectious Diseases

Action Steps:

- Maintain **permanent infection controls**: air filters, hand sanitiser, signage.

- Include public transport nodes in pandemic preparedness and mass vaccination logistics.
- Improve ventilation on all **high-occupancy vehicles**.

Opportunity 12: Sun & UV Exposure

Action Steps:

- Promote **sun-safe urban design**: shaded crossings, UV-reflective pavements, and shelter at all stops.
- Install **UV-filtering windows and awnings** on buses, trains, and stops.

Opportunity 13: Chemicals

Action Steps:

- Innovate in brake and tyre dust reduction tech.
- Develop sustainable battery disposal and recycling ecosystems for electric fleets.

Opportunity 14: Drought

Action Steps:

- Design **drought-resilient corridors** with permeable surfaces and drought-tolerant vegetation.
- Integrate **rainwater harvesting and reuse** into major transport infrastructure.

Opportunity 15: Flooding & Coastal Risks

Action Steps:

- Invest in elevated and flood-resilient transit corridors near rivers and coasts.
- Use **real-time flood alerts** and AI-driven detour systems.
- Embed sustainable urban drainage systems, bioswales, and stormwater reservoirs along key routes.

Opportunity 16: Climate-Resilient Health System and Emergency Access

Action Steps:

- Protect and map priority corridors to hospitals, pharmacies, and clinics.
- Equip ambulances with **off-road and all-weather capabilities** in high-risk zones.
- Ensure **digital access continuity** (telehealth) when physical transport is disrupted.

Opportunity 17: Reducing Transport-Driven Inequities

Action Steps:

- Use **transport equity audits** to guide investment in underserved areas.
- Develop **community co-design forums** for local transport planning.
- Expand climate-health-informed travel subsidies.

Context and Impacts

Transport is increasingly recognised as one of the most important sectors influencing both a changing climate and population health. It sits at the intersection of environmental sustainability, economic participation, social inclusion, access to services and community resilience. The way transport systems are planned, designed and operated affects exposure to climate risks, opportunities for healthy living, access to healthcare and employment, and the ability of communities to respond to and recover from extreme weather events.

Historically, transport policy focused primarily on mobility, connectivity and economic growth. However, international and national policy has increasingly reframed transport as a major determinant of health and a critical component of climate action. The World Health Organization, UK Health Security Agency (UKHSA), Department for Transport, National Adaptation Programme and Active Travel England all recognise that transport systems influence many of the pathways through which a changing climate affects health, including air quality, physical activity, access to services, social connectedness, inequalities and resilience to extreme weather.

Transport is also unusual because it is both a contributor to a changing climate and one of the sectors most vulnerable to its impacts. Transport remains the largest source of greenhouse gas emissions in the UK, while roads, railways, ports, public transport networks and active travel infrastructure are increasingly exposed to flooding, heatwaves, storms, coastal erosion and infrastructure failure. Consequently,

transport is now viewed not only as a climate mitigation challenge but also as a major adaptation priority.

Transport as a Determinant of Health

Transport influences health through a wide range of direct and indirect pathways. Reliable, affordable and accessible transport enables people to access healthcare, employment, education, food, social networks and community facilities. Conversely, transport disadvantage can contribute to social isolation, poorer health outcomes, reduced employment opportunities and widening inequalities.

The transport system also shapes physical activity levels. National policy increasingly recognises that walking, cycling and public transport use provide opportunities for everyday physical activity that help reduce obesity, cardiovascular disease, diabetes and poor mental health. This is reflected in policies such as the Department for Transport's active travel strategy, Active Travel England's objectives and the NHS prevention agenda, all of which emphasise transport as a public health intervention rather than simply a means of movement.

Transport additionally affects health through environmental exposures. Vehicle emissions contribute to air pollution, while traffic can generate noise pollution and reduce environmental quality. These factors are associated with respiratory disease, cardiovascular disease, poorer mental wellbeing and premature mortality. As a result, improving transport systems can deliver significant health benefits alongside climate benefits.

A Changing Climate and Transport Infrastructure

A changing climate presents growing risks to transport infrastructure and services. The UK Climate Change Risk Assessment identifies transport as one of the sectors most exposed to climate-related disruption.

Heatwaves can damage roads, railways and transport infrastructure through rail buckling, road surface degradation and overheating of equipment. Flooding poses even greater challenges, with river flooding, surface water flooding and coastal flooding capable of disrupting entire transport networks, isolating communities and restricting access to essential services. Storms and extreme weather events can damage infrastructure, disrupt public transport and affect supply chains.

These disruptions have significant health implications. They can prevent people from accessing healthcare, social care, pharmacies and support services, delay emergency responses and increase stress and anxiety. For vulnerable populations, including older

people, disabled people and those with long-term health conditions, transport disruption can directly affect health and wellbeing.

Increasingly, transport resilience is therefore viewed as a health protection issue as much as an infrastructure issue.

Air Quality, Emissions and Health

The relationship between transport, air quality and health is one of the strongest areas of evidence linking transport policy and public health.

Road transport remains a major source of nitrogen dioxide, particulate matter and other pollutants associated with respiratory and cardiovascular disease. Air pollution contributes to asthma, chronic respiratory conditions, heart disease, stroke and premature mortality, particularly among children, older people and those with existing health conditions.

A changing climate may compound these risks through higher temperatures, increased formation of ground-level ozone, longer pollen seasons and more frequent wildfire smoke episodes.

Consequently, transport policy increasingly seeks to address climate mitigation, air quality improvement and health outcomes simultaneously. Low-emission transport, modal shift, public transport investment and active travel are increasingly viewed as interventions that can reduce emissions while improving population health.

Active Travel and Climate-Health Co-Benefits

Perhaps the clearest example of the climate-health relationship within transport is active travel.

Internationally, the WHO identifies walking and cycling as interventions capable of delivering substantial health, environmental and economic benefits. Nationally, Active Travel England and the Department for Transport promote active travel as a means of reducing emissions while improving public health.

Active travel contributes to:

- Increased physical activity.
- Reduced obesity.
- Improved cardiovascular health.
- Better mental wellbeing.
- Reduced social isolation.
- Improved air quality.

- Reduced carbon emissions.

The concept of **co-benefits** has become increasingly important in transport policy because interventions designed to reduce emissions often simultaneously improve health outcomes. This has strengthened the case for investment in walking, cycling and public transport infrastructure.

Mental Health, Social Connectedness and Resilience

Transport also affects mental wellbeing and social connectedness. Reliable transport supports independence, participation in community life and access to social networks. In contrast, poor transport accessibility can contribute to loneliness, isolation and reduced quality of life.

Climate-related transport disruption can exacerbate these issues, particularly for people who are already vulnerable. During extreme weather events, transport systems often determine whether people can access support, maintain social connections and obtain essential supplies.

There is increasing recognition that transport networks contribute to community resilience by supporting the social infrastructure that helps communities cope with and recover from climate-related shocks.

Health Inequalities and Transport Justice

Climate-related transport risks are not distributed equally. Older people, disabled people, low-income households, rural communities, children and those without access to private vehicles often experience greater transport disadvantage and are more vulnerable to service disruption.

This has led to growing discussion around **transport justice** and **transport equity**, recognising that transport systems can either reduce or reinforce health inequalities.

Nationally, there is increasing emphasis on ensuring that climate adaptation measures do not disproportionately benefit already advantaged populations while leaving vulnerable groups exposed to risk. This reflects broader recognition that a changing climate is also a health inequalities issue.

Transport and Health System Resilience

Transport plays a critical role in the functioning of health and social care systems. Hospitals, GP services, community healthcare, domiciliary care, emergency services and supply chains all depend on reliable transport infrastructure.

Climate-related disruption can affect workforce mobility, emergency response times, delivery of medicines and equipment, home care visits and patient access to services. As climate risks increase, maintaining transport resilience becomes increasingly important for ensuring continuity of care and protecting vulnerable populations.

This reflects a growing shift in policy thinking from viewing transport solely as infrastructure towards recognising it as an essential component of health system resilience.

Current International and National Response(s)

Across both international and national policy, several common themes are emerging.

Theme	Direction of Travel
Sustainable Mobility	Transport systems that improve health and reduce emissions
Climate Adaptation	Building resilience to flooding, heat and extreme weather
Active Travel	Walking, cycling and wheeling as public health interventions
Health Co-Benefits	Delivering health gains through climate action
Air Quality	Reducing pollution-related disease and emissions simultaneously
Health Equity	Addressing transport disadvantage and inequalities
Resilient Infrastructure	Future-proofing transport networks
Healthy Places	Linking transport with planning and place-making
Community Resilience	Maintaining access to services during climate disruptions
Climate-Resilient Development	Integrating transport, health, equity and sustainability

Internationally, transport is increasingly recognised as both a major contributor to a changing climate and one of the most powerful mechanisms for improving population health. There has been a significant shift away from viewing transport solely as a means of movement and economic connectivity towards understanding its role in reducing emissions, improving health, tackling inequalities and building climate resilience.

This reflects growing evidence that transport systems influence many of the pathways through which a changing climate affects health, including air quality, physical activity, social connectedness, access to services, economic opportunity and resilience to extreme weather. As a result, transport policy is increasingly framed around delivering climate, health and social outcomes simultaneously.

The World Health Organization (WHO) identifies transport as a major determinant of health and an important component of climate adaptation. Through initiatives such as Healthy Cities, Health in All Policies and the Global Action Plan on Physical Activity, transport is increasingly viewed as a public health intervention rather than simply an infrastructure issue. A key international theme is the promotion of sustainable mobility, recognising that transport systems should support both environmental sustainability and human wellbeing. Investment in walking, cycling and public transport is promoted because these modes reduce greenhouse gas emissions, improve air quality and increase physical activity at the same time.

Similarly, the Intergovernmental Panel on Climate Change (IPCC) identifies transport as a critical sector for both climate mitigation and adaptation. Recent reports emphasise reducing dependence on private vehicles, encouraging compact urban development, investing in public transport and ensuring transport infrastructure is resilient to flooding, heatwaves and extreme weather. Increasingly, the IPCC frames transport within the concept of **climate-resilient development**, where transport systems support health, equity, sustainability and resilience simultaneously.

The United Nations Sustainable Development Goals further reinforce the transport-health relationship, particularly through goals relating to health and wellbeing, sustainable communities and climate action. Alongside this, there is growing international emphasis on transport justice and mobility equity, recognising that climate change disproportionately affects those with the fewest transport options. Consequently, international policy increasingly promotes transport systems that are accessible, affordable and inclusive, particularly for older people, disabled people, children and low-income communities.

National Response (England)

In England, transport is increasingly positioned as a major contributor to both climate action and public health improvement. The UK's legally binding commitment to achieve Net Zero by 2050 has placed transport at the centre of climate policy because it remains the largest source of UK greenhouse gas emissions. National policy therefore focuses on reducing emissions through modal shift, active travel, public transport improvements and vehicle decarbonisation.

At the same time, transport is increasingly recognised as a determinant of health. The Department for Transport, NHS England, UK Health Security Agency and Office for Health Improvement and Disparities all acknowledge that transport influences physical activity, air quality, social connectedness, access to healthcare and wider health inequalities.

Climate Adaptation and Resilience

While transport policy has historically focused on reducing emissions, there is growing recognition that transport systems must also adapt to climate change. The UK's National Adaptation Programme (NAP3) identifies transport infrastructure as highly vulnerable to flooding, heatwaves, coastal erosion, storms and infrastructure failure. The programme highlights the need for transport networks that can continue functioning during climate-related disruptions and support communities during emergencies.

National agencies increasingly recognise that transport resilience is not only an economic issue but also a public health issue. Disruption to transport networks can affect access to healthcare, social care, medicines, employment and community support, particularly for vulnerable populations. Consequently, there is growing emphasis on climate risk assessments, resilience planning and future-proofing transport infrastructure against future climate conditions.

Active Travel and Health

One of the strongest areas of national policy development concerns active travel. The creation of Active Travel England reflects growing recognition that transport policy can deliver major public health benefits alongside climate benefits. National policy increasingly promotes walking, wheeling and cycling as mechanisms for improving health while reducing emissions.

This approach is supported by strong evidence linking active travel to increased physical activity, improved cardiovascular health, lower obesity rates, better mental wellbeing and reduced social isolation. The concept of **health co-benefits** has become

increasingly important, recognising that interventions designed to reduce emissions often simultaneously improve health outcomes.

Air Quality and Environmental Health

Transport also plays a central role in national efforts to improve air quality. Road transport remains a significant source of nitrogen dioxide and particulate pollution, both of which are associated with respiratory disease, cardiovascular disease and premature mortality.

Government air quality strategies, Clean Air Zones and vehicle emissions policies increasingly recognise that climate and health objectives are closely aligned. UKHSA identifies poor air quality as one of the most significant environmental threats to public health, and transport policy is increasingly viewed as a key mechanism for reducing exposure and improving population health.

Health Inequalities and Accessibility

National policy increasingly recognises that transport influences health inequalities. People experiencing transport disadvantage are more likely to encounter barriers to accessing healthcare, employment, education, healthy food and social opportunities. This has led to growing emphasis on accessibility, inclusion and equitable transport planning.

There is also increasing recognition that climate adaptation measures must avoid creating unintended consequences for vulnerable populations, particularly older people, disabled people, rural communities and low-income households. Consequently, transport accessibility is increasingly viewed as a public health and social justice issue rather than solely a transport issue.

Health and Care System Resilience

A further emerging theme is the role of transport in supporting health and care system resilience. Climate-related disruption can affect hospital access, emergency response times, community healthcare delivery, domiciliary care services, workforce mobility and medical supply chains. This has led to increasing collaboration between transport planners, resilience teams, emergency planners and health organisations.

Transport resilience is therefore increasingly viewed as a prerequisite for maintaining health and social care services during periods of climate-related disruption and a critical component of wider climate adaptation planning.

Overall Assessment

Internationally and nationally, transport is increasingly viewed as a central component of climate and health policy. The direction of travel is towards transport systems that are healthier, more sustainable and more resilient, recognising that the same interventions that reduce emissions can often improve physical health, mental wellbeing, air quality and social connectedness.

The strongest policy developments have centred on active travel, decarbonisation and air quality. However, there is growing recognition that adaptation and resilience will become increasingly important as climate impacts intensify. As a result, transport is no longer viewed simply as a mobility issue but as a critical part of wider climate adaptation, public health, health equity and community resilience strategies.

Local East Sussex Response to Build From:

Transport has particular significance within East Sussex because of the county's geography, ageing population and settlement patterns. Large rural areas, dispersed communities, coastal towns and pockets of transport deprivation create particular challenges for accessibility, connectivity and resilience. For many residents, transport is not simply a means of travel but a key determinant of access to healthcare, employment, education, social networks and community support. As a result, transport policy has important implications for both population health and health inequalities.

East Sussex has developed one of the more progressive local approaches to integrating transport, health and climate change through Local Transport Plan 4 (LTP4) 2024–2050 and its accompanying LTP4 Health Impact Assessment (HIA). Together, these represent a significant shift away from viewing transport solely as a highways and infrastructure function towards recognising its contribution to health, wellbeing, climate resilience, accessibility and economic prosperity.

The vision of LTP4 is to create a transport system that is safer, decarbonised, resilient and inclusive, helping communities to be healthy, thrive and prosper. A changing climate, health improvement and reducing inequalities are embedded throughout the strategy, reflecting growing recognition that transport influences many of the wider determinants of health. Importantly, East Sussex is one of a relatively small number of local authorities to have undertaken a comprehensive Health Impact Assessment of its transport strategy, formally assessing impacts on physical activity, accessibility, mental wellbeing, air quality, safety, economic participation and health inequalities.

A Changing Climate, Health and Transport Resilience

Climate-related risks such as flooding, coastal change, overheating and extreme weather have the potential to disrupt transport networks and affect access to essential services across East Sussex. These risks are particularly important in a county where rural communities, coastal settlements and an ageing population can already experience challenges accessing healthcare, employment and support services.

The impacts are likely to be felt most strongly by older people, people without access to private transport, rural communities, disabled people and those experiencing deprivation. Disruption to transport infrastructure can affect access to hospitals, GP surgeries, pharmacies, social care, employment and community networks, while also increasing isolation, anxiety and vulnerability.

Recognising these risks, LTP4 identifies resilience as one of its core objectives. The strategy acknowledges that transport networks must not only support economic activity and mobility but also remain functional during periods of climate stress. This reflects a broader shift in thinking, where transport resilience is increasingly recognised as a public health issue as well as an infrastructure issue.

Active Travel, Air Quality and Health

One of the strongest features of the East Sussex response is the emphasis placed on active travel as a climate-health intervention. Walking, wheeling and cycling are promoted not simply as transport modes but as mechanisms for improving physical health, supporting mental wellbeing, reducing emissions, improving air quality and strengthening community resilience.

The Health Impact Assessment identifies significant health benefits associated with increased physical activity, reduced car dependency and improved access to local services. Public transport is also recognised as contributing to health because it supports mobility, independence and social participation while reducing reliance on private vehicles.

This approach aligns closely with wider county priorities around prevention, healthy ageing, reducing obesity, improving mental wellbeing and tackling health inequalities. It also reflects growing national and international recognition that many climate mitigation measures in transport generate substantial health co-benefits.

Healthy Places and Social Connectedness

East Sussex increasingly recognises that transport shapes the places in which people live and the opportunities available to them. The transport strategy therefore links

closely with the county's Planning for Health, Wellbeing and Sustainability Framework, healthy place-making agenda and wider climate adaptation ambitions.

Transport connectivity supports access to employment, education, healthcare, leisure opportunities and community life. Strong transport networks help maintain social connectedness and reduce isolation, particularly for older people and rural communities. Conversely, poor accessibility can reinforce disadvantage and increase vulnerability during climate-related disruptions.

There is therefore increasing recognition that transport is part of the county's wider social infrastructure and contributes directly to community resilience.

Health Impact Assessment and Partnership Working

A distinctive feature of the East Sussex response is the formal integration of health evidence into transport planning. The LTP4 Health Impact Assessment assesses transport policies against a range of health pathways, including physical activity, accessibility, economic wellbeing, air quality, safety and mental wellbeing.

This reflects growing collaboration between transport planners, public health professionals and wider partners. It also demonstrates a broader shift towards recognising that transport decisions have long-term implications for health, wellbeing and resilience, and should therefore be informed by public health evidence.

Gaps

Despite significant progress, climate adaptation remains less developed than climate mitigation within transport policy. Much of the current focus is on reducing emissions through active travel, modal shift and vehicle decarbonisation, while less attention has been given to preparing transport infrastructure and services for future climate conditions such as heatwaves, flooding, coastal erosion and severe weather.

There is also limited integration between transport planning and wider health and care resilience planning. While transport is recognised as a determinant of health, there is less systematic consideration of how climate-related transport disruption could affect healthcare delivery, domiciliary care, community services and vulnerable populations during emergencies.

A further gap concerns evidence and monitoring. Although the Health Impact Assessment provides a strong foundation, there remains limited long-term data on how transport interventions influence health outcomes, resilience and inequalities over time.

Barriers

Financial constraints remain one of the most significant barriers. Delivering resilient infrastructure, improved public transport and active travel networks requires sustained investment at a time when local authority resources are under pressure.

The county's geography also presents challenges. Dispersed rural settlements, coastal communities and lower population densities can make public transport provision more difficult and expensive to sustain.

Behavioural change represents another barrier. High levels of car dependency remain embedded across many parts of East Sussex, and encouraging shifts towards active travel and public transport requires both infrastructure improvements and cultural change.

Data fragmentation can also limit progress. Information relating to climate vulnerability, transport accessibility, health inequalities and resilience is often held across multiple organisations, making integrated planning more challenging.

Tensions

A key tension exists between decarbonisation and accessibility. Measures designed to reduce car use can create challenges for rural communities, older people and those with limited transport alternatives. Achieving climate objectives while maintaining equitable access to services remains a significant balancing act.

There is also tension between economic growth and climate resilience. East Sussex requires investment in transport infrastructure to support economic development, yet infrastructure investments must also be resilient to future climate conditions and aligned with decarbonisation objectives.

A further tension exists between short-term funding cycles and long-term adaptation needs. Building climate-resilient transport systems requires investment over decades, while funding arrangements often operate within much shorter political and financial timescales.

Opportunities

Transport presents one of the greatest opportunities to deliver climate-health co-benefits across East Sussex. Improvements in active travel, public transport accessibility, sustainable mobility and climate-resilient infrastructure can simultaneously reduce emissions, improve health, strengthen social connectedness and support adaptation.

There is a significant opportunity to position transport as a core component of the county's climate-health resilience system. Stronger integration between transport planning, public health, NHS Sussex, adult social care, emergency planning, district and borough councils and climate adaptation programmes could help ensure that transport investment supports both resilience and health outcomes.

The county also has an opportunity to build on its leadership in Health Impact Assessment by embedding climate-health considerations more consistently into transport investment decisions. This could strengthen understanding of how transport influences access to healthcare, loneliness, healthy ageing, emergency preparedness and community resilience.

Green corridors, active travel infrastructure and nature-based transport solutions offer particularly strong opportunities because they deliver multiple benefits for climate adaptation, biodiversity, physical health and mental wellbeing simultaneously.

Overall Assessment

East Sussex has developed a relatively mature and progressive response to transport, climate change and health through Local Transport Plan 4, its Health Impact Assessment and wider healthy place-making agenda. The county increasingly recognises transport as a determinant of health, climate resilience and social equity rather than simply a means of movement.

The strongest aspects of the response are its focus on active travel, accessibility, health impact assessment and recognition of transport as a contributor to healthier places and communities. However, climate adaptation remains less developed than climate mitigation, and stronger connections between transport planning, health and care resilience, emergency preparedness and climate adaptation are still needed.

Transport should increasingly be viewed as part of the public health response to a changing climate rather than solely an infrastructure or mobility function. Modern transport policy is increasingly built around the principle that healthier transport systems are also more sustainable and more resilient. For East Sussex, decisions about transport infrastructure, accessibility and mobility will influence not only carbon emissions, but also future health outcomes, resilience, social inclusion and the ability of communities to thrive in a changing climate.

17. Utilities

High Level Strategic Opportunity:

Further develop resilient, equitable, and climate-adapted utility systems by accelerating the transition to community-beneficial clean energy, modernising and safeguarding water infrastructure, embedding climate resilience into all utility design and operations, protecting vulnerable households from energy and water insecurity, integrating data and risk-sharing across sectors, and ensuring participatory governance that aligns with health, equity, and environmental goals.

Rationale:

Energy and water systems are fundamental to the health, wellbeing, resilience and prosperity of communities, yet they are increasingly vulnerable to the impacts of a changing climate, including extreme heat, drought, flooding, severe weather and rising demand. Disruptions to these essential utilities can compromise healthcare delivery, public health, business continuity, food security and the operation of critical infrastructure, while disproportionately affecting vulnerable households, particularly those experiencing fuel or water poverty, older people, people with disabilities and those with long-term health conditions. At the same time, the transition to low-carbon energy and resilient water systems presents significant opportunities to improve population health through cleaner air, warmer and healthier homes, reduced greenhouse gas emissions, enhanced environmental sustainability and greater community resilience. Developing climate-resilient utility systems through investment in clean energy, modernised infrastructure, integrated planning, data sharing, equitable access and collaborative governance will help safeguard essential services, reduce inequalities, strengthen resilience to future climate risks and support the transition to a healthier, fairer and more sustainable East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1: Accelerate Resilient, Equitable Energy Systems for Adaptation

Action Steps:

- **Lobby national government for changes to policy and regulation to enable upgrades grid capacity**, especially in rural and low-income areas to ensure resilience in especially rural and low-income areas.
- Accelerate grid modernization using AI and real-time monitoring to anticipate stress during heatwaves or cold snaps.
- Invest and develop community-owned microgrids and local energy solutions in climate-vulnerable zones (e.g. wildfire-prone, rural, or low-income neighbourhoods).
- Expand dual-use infrastructure (e.g. solar panels on car parks, battery storage in affordable housing developments).
- Promote low-emission green gas (biogas, hydrogen)
- Deploy green hydrogen hubs near industrial clusters to decarbonize heat and freight sectors.
- Collaborate on land-efficient, community-beneficial energy infrastructure.
- Ensure a just transition through:
- Local hiring mandates in green infrastructure projects
- Reskilling programs for fossil fuel workers and underserved youth
- Living wage policies for clean energy jobs

Implementation Priorities:

- **Integrate equity metrics** (energy poverty, outage exposure) into regional energy planning
- Embed clean energy into resilience strategies, not just decarbonization agendas

Opportunity 2: Update and modernise Climate-Resilient, Health-Safe Water Systems

Action Steps:

- Lobby for funds to help modernise water infrastructure to reduce leaks and drought risk. This includes the need to digitize water systems, make them ‘smart’

and work with customers to enable predictive maintenance and rapid leak detection at all times and especially during drought stress.

- Work with the water companies to undertake water audits and make use of smart meters by customers/community which will allow the detection and management of water leaks.
- Better align water availability with priority of need (residential, vulnerability) with tensions for high demand and commercial usage (e.g. golf clubs)
- Lobby national government to provide funding to enable the creation of new and resilient sewage systems and separate storm drain systems to help increase the resilience of sewage systems particularly in relation to extreme flood events.
- Eliminate sewage discharge to protect ecosystems and food safety by mandating zero-sewage discharge targets, especially near farmland, shellfish zones, and recreational waters.
- Align water planning with housing and migration trends.
- Update infrastructure design with dual-purpose storm and wastewater systems that flex during floods.
- Improve groundwater protection and public awareness by improving the public's perception and understanding of water as a resource that is valuable. The affordability of water does not warrant its usability given that water is a finite water and in short supply in the Southeast region.
- Encourage the public to harvest rainwater for gardening including golf courses rather than over rely on the availability of drinking water (and which has to be treated).
- Encourage business such as golf courses and other recreational activities and spaces (such as rugby and football in the summer) to harvest rainwater and use it to irrigate their fields and pitches.
- Develop planning processes that prepare and plan for current and future water demands and especially regarding new developments.
- Lobby national government for new building standards that support rain water harvesting.
- Incentivize decentralized water reuse systems (e.g., greywater for landscaping, rain capture tanks for households).
- Launch public water security campaigns that encourage rainwater harvesting and educate on groundwater protection, climate risks, and conservation behaviours.
- Align water resilience with housing policy, population growth forecasts (including the inclusion for consideration of transient populations), and climate migration trends
- Involve public health, housing, and environment departments in joined-up planning

Opportunity 3: Create Infrastructure Prepared for Climate Shocks

Action Steps:

- Taking into consideration future trends and climate related issues, create resilience standards for buried utilities: thermal-resistant materials, flood-sealed access points, and fire-retardant coatings.
- Increase the general public's understanding of water usage and shocks to help reduce water wastage.
- **Use nature-based solutions and right nature in the right place, link it up with water protection zones** (e.g., wetland buffers, bioswales, urban trees) for flood mitigation to protect utility corridors and reduce surface flooding. The South Downs National Park is a good example of systems planning for biodiversity and water together.
- **Build AI-powered early warning systems** for critical utility stress (e.g., low pressure + heat = failure risk). Smart networks and use these to predict leaks in the future will help reduce 'failed assets'.
- Enhance emergency operations protocols that are already in place across utilities:
- Explore opportunities and methods to more easily move large volumes of water when needed
- Prioritize energy/water restoration in high-vulnerability zones
- Establish mutual aid networks between regional providers
- Include climate-health indicators in response plans (e.g., dialysis access, cooling shelter needs) by utilising the East Sussex Vulnerability Register to ensure that vulnerable locations and residents receive water provisions as needed.
- **Improve infrastructure design** to prevent contamination and failure, especially:
- Cross-contamination from sewage in flood zones. Nature based solutions help to enable this but they must be in the right place otherwise they can lead to unintended consequences such as the contaminations of water.
- Explore the potential risks of wildfire damage to drinking water pipes (e.g., chemical leaching).
- Backup systems for power-dependent water pumps in blackouts

Opportunity 4: Combat 'Water Poverty' as well as Fuel Poverty and Improve Indoor Health

Action Steps:

- Explore opportunities for championing social tariffs for water costs where appropriate, whilst being mindful of balancing the reduction of water costs with ensuring that water is valued as a finite resource. Use climate change adaptation reporting and environmental social governance boards to look at these kinds of tensions.
- Expand retrofit-first insulation programs targeting low-income and medically vulnerable households.
- Scale home battery and energy storage solutions for off-grid and blackout-prone homes.
- Prioritize energy support for chronic care needs (e.g., dialysis, oxygen therapy, refrigerated medications).

Opportunity 5: Deliver Public Cooling and Air Quality Infrastructure

Action Steps:

- Install solar-shaded bus stops, public seating, and cooling shelters, particularly near health clinics and senior centres.
- Integrate real-time air quality and heat index sensors at schools, community hubs, and outdoor workplaces.
- Use public-facing dashboards and alert systems to guide health-based behaviour (e.g., avoid outdoor activity at high PM2.5 levels).

Opportunity 6: Reduce Chemical and Pathogen Risks in Water Systems

Action Steps:

- Support the work of WINEP (Water Industry National Environment Programme) to monitor pharmaceuticals, PFAS (per-and polyfluoroalkyl substances), new chemicals and industrial toxins.
- Where there is awareness of new chemicals of concern, support water companies to find the source and work with regulators to remove the source.

- Enhance the cleaning up of contaminated land prior to development and to be aware that chalk geology in East Sussex is leaky and there are higher risks for the contamination of water sources.
- Support and trial new innovative ways to remove contaminants from water. For example, removal of nitrates. As appropriate, work as a system to dispose of any 'sludge' that is left after treatment, so that by solving one hazard another hazard is not created (knock on consequences).
- Educate households and SMEs on chemical-safe disposal practices and provide take-back options to avoid water deterioration. For example, where there locations with sceptic tanks.
- Partner with health authorities to trace contaminant exposure clusters and track antimicrobial resistance pathways.

Opportunity 7: Utilities in Vulnerability Mapping and Protection

Action Steps:

- Better integrate utilities into local vulnerability registers to ensure continuity of service for:
- Elderly, disabled, and medically dependent persons
- Households in climate risk zones (e.g., flood plains, urban heat islands)
- Better enable automated prioritization protocols for repair crews and outage notifications.

Opportunity 8: Data Integration and Risk Sharing Across Systems

Action Steps:

- Where appropriate and possible consider future opportunities for sharing real-time infrastructure stress data (e.g., low water pressure, substation overheating) with emergency responders and health agencies.
- Use common climate-risk modelling platforms across utilities, planners, and public health as appropriate and viable.

Opportunity 9: Create Interagency Climate Utility Task Forces

Action Steps:

- Formalize planning groups linking water, energy, emergency services, housing, and health.
- Develop joint response scenarios for compounding threats (e.g., heatwave + blackout + flood).
- Include utilities in early design phases of:
- Urban regeneration
- Public health infrastructure
- Migrant and housing strategy

Opportunity 10: Community-Centred Utility Co-Design

Action Steps:

- Further increase the involvement of residents (particularly the underrepresented and vulnerable groups) in shaping local water and energy solutions through participatory design labs.
- Explore future considerations and inclusion of migrant, and underserved communities in utility governance consultations.
- Upscale, support and champion the funding of community-run energy or water cooperatives with technical support from utility providers.

Opportunity 11: Sustainable Water Use and Rainwater Harvesting in Agriculture and Industry

Action Steps:

- Champion behaviour changes to make more use of rainwater harvesting and storage especially as there is more agriculture in East Sussex compared to many other areas in the country.
- Partner with agricultural producers to install precision irrigation, soil moisture tracking, and reclaimed water systems.
- Provide incentives for water-efficient technologies in food processing, textile, and chemical industries.
- Create nutrient recycling pathways from wastewater to compost for regenerative farming.

Opportunity 12: Behaviour Change and Tariff Design for Health and Climate Goals

Action Steps:

- Implement tiered pricing structures that:
- Ensure affordability for basic needs
- Disincentivize (where supported by the evidence and research) excessive or wasteful consumption
- Offer rebates for verified conservation behaviours (e.g., low-flow fixtures, smart thermostats).
- Champion water efficient houses that use water saving tools (e.g. shower heads and taps).
- Pilot social tariffs tied to vulnerability registers and climate adaptation needs.

Cross-Sector Implementation Supports:

- Climate-health utility strategy maps that link system investment with health, equity, and emissions goals
- Joint training for utility planners and public health staff on shared climate risks
- Public-facing utility climate impact scorecards to build transparency and trust

Context and Impacts:

For the purposes of this assessment, **utilities** refer to the essential infrastructure and service systems that provide energy, water, wastewater, sewerage, telecommunications and digital connectivity. This includes electricity generation and distribution, gas networks, water supply, wastewater treatment, sewerage systems, communications infrastructure, renewable energy systems and smart-grid technologies. These services underpin everyday life and are fundamental to public health, housing, health and social care delivery, emergency response, food systems and community resilience.

Utility companies are increasingly recognised as critical partners in addressing the health effects of a changing climate because they provide the infrastructure that enables people to live safely, remain connected and access essential services. Historically, utilities have been viewed primarily as technical infrastructure providers. However, a changing climate is transforming their role. They are now expected not only to maintain reliable services, but also to support decarbonisation, strengthen

resilience to extreme weather, protect vulnerable customers and work with public services to reduce climate-related risks.

This shift reflects growing evidence that access to safe drinking water, sanitation, electricity, heating, cooling and communications are core determinants of health. Disruption to these systems can have immediate consequences for physical health, mental wellbeing, healthcare delivery, social care provision and wider community resilience. During heatwaves, floods, storms, droughts or power outages, utility failure can rapidly become a public health emergency.

Why Utilities Matter for Health

Utilities support the basic conditions required for health. Reliable energy enables heating, cooling, lighting, refrigeration of food and medicines, operation of medical equipment and delivery of health and social care. Safe water and sanitation prevent infectious disease, support hygiene, enable food preparation and maintain healthcare environments. Telecommunications support emergency alerts, healthcare coordination, remote consultations, social connection and access to information.

A changing climate increases the likelihood of disruption across all these systems. Heatwaves increase electricity demand for cooling while placing stress on energy networks. Flooding can damage substations, water treatment works, pumping stations, sewers and communications infrastructure. Drought can reduce water availability and increase competition between domestic, agricultural, industrial and environmental needs. Storms and extreme weather can damage overhead power lines, digital infrastructure and transport routes needed for repair and maintenance.

The health implications are significant. Power outages can affect people dependent on oxygen, dialysis, stairlifts, refrigeration of medicines or electrically powered medical devices. Water shortages can affect hygiene, hydration, care homes, hospitals and households. Telecommunications failure can isolate vulnerable residents and disrupt emergency response. Wastewater and sewer failures can contaminate homes, rivers and coastal waters, creating environmental and public health risks.

Energy Systems and Health

Energy systems are one of the most important pathways linking a changing climate, utilities and health. Reliable and affordable energy is essential for maintaining safe indoor temperatures, powering medical equipment, supporting digital connectivity and enabling health and care services to function.

A changing climate creates new risks for energy systems. Hotter summers increase demand for cooling, while storms, flooding and extreme weather increase risks of

infrastructure damage and service interruption. At the same time, the transition to low-carbon heating, electric vehicles and electrified public services will place new demands on electricity networks.

Energy affordability is also a major public health issue. Fuel poverty is associated with cold homes, damp, mould, respiratory disease, cardiovascular illness, poor mental health and excess winter mortality. As summers become hotter, energy vulnerability may increasingly include the inability to cool homes safely, particularly for older people, people with long-term conditions and low-income households. This means energy policy must address both decarbonisation and adaptation, ensuring that the transition to cleaner energy also improves health equity and resilience.

Water, Wastewater and Public Health

Water companies play a central role in climate adaptation and public health protection. A changing climate affects both water quantity and water quality through drought, reduced river flows, changing rainfall patterns, flooding, higher water temperatures and pollution events. Safe and reliable access to drinking water is fundamental to health, while water scarcity can increase risks to hydration, hygiene, food preparation, healthcare delivery and community wellbeing.

Wastewater and sewerage systems are also increasingly exposed to climate-related pressures. More intense rainfall can overwhelm drainage and sewer networks, increasing the risk of flooding, sewage overflows, pollution incidents and contamination of homes, rivers and coastal environments. These impacts can affect physical health, mental wellbeing, recreational water quality, biodiversity and public confidence in local environments.

The water sector is therefore required to balance several objectives at once: maintaining safe supply, protecting water quality, reducing leakage, managing drought, improving environmental performance, reducing pollution and strengthening infrastructure resilience. These are no longer only environmental or regulatory issues; they are public health issues.

Telecommunications and Digital Resilience

Telecommunications and digital infrastructure are often less visible in climate-health discussions but are increasingly essential to resilience. Reliable communications support emergency warnings, health service coordination, telecare, remote consultations, social contact, community mobilisation and access to public information.

As health and care systems become more digitally dependent, disruption to telecommunications can increase vulnerability, particularly for older people, rural communities, socially isolated residents and people dependent on telecare or digital health services. Climate-related damage to telecommunications infrastructure can therefore affect both emergency response and everyday health support.

Vulnerable Populations

Climate-related utility disruption does not affect all people equally. Older people, disabled people, people with long-term health conditions, low-income households, care home residents, people living alone, rural communities and those dependent on medical equipment are at greater risk. For these groups, disruption to electricity, water or communications can quickly become a health emergency.

This has led to increasing emphasis on priority service registers, vulnerability mapping, emergency planning and targeted customer support. However, vulnerability is dynamic. People may become vulnerable during a heatwave, flood, outage or drought even if they are not usually identified as high risk. This creates a need for better data sharing, stronger local partnerships and more flexible approaches to identifying and supporting at-risk residents.

Policy and Regulatory Context

The utility sector operates within a strengthening climate and resilience policy framework. Internationally, the Paris Agreement, UN Sustainable Development Goals and World Health Organization guidance on climate-resilient systems all recognise the importance of resilient infrastructure, clean energy, safe water, sanitation and equitable access to essential services.

In the UK, the sector is shaped by the Climate Change Act 2008, the UK's legally binding **Net Zero by 2050** target, the UK Climate Change Risk Assessment, and the **Third National Adaptation Programme**. These frameworks identify risks to energy, water, digital and transport infrastructure from flooding, heat, drought, storms and sea-level rise, and require stronger adaptation planning across critical infrastructure.

The energy sector is regulated by Ofgem, which has responsibilities relating to network resilience, consumer protection, vulnerability and the transition to a low-carbon energy system. The water sector is regulated by Ofwat, with the Environment Agency and Drinking Water Inspectorate also playing key roles in water quality, environmental protection and resilience. Water companies are required to produce Water Resource Management Plans, Drainage and Wastewater Management Plans and long-term investment plans, all of which are increasingly shaped by climate projections and resilience requirements.

Policy is also increasingly focused on the social dimensions of utility resilience. Priority Services Registers, fuel poverty strategies, water affordability support, social tariffs, energy efficiency programmes and consumer vulnerability duties all reflect recognition that essential services are directly linked to health inequalities.

Climate Mitigation and Health Co-Benefits

Utilities also have a central role in reducing emissions. Decarbonising energy supply, expanding renewable energy, improving grid resilience, supporting low-carbon heating, reducing water sector emissions and improving resource efficiency can all contribute to climate mitigation.

These actions can also generate health co-benefits. Cleaner energy reduces air pollution. Energy efficiency can improve housing conditions and reduce fuel poverty. Resilient water systems protect hygiene and environmental quality. Smart grids and local renewable energy can improve energy security and community resilience. However, mitigation must be designed carefully to avoid unintended consequences, such as increasing energy costs for vulnerable households or creating new infrastructure risks without adequate adaptation planning.

Strategic Implications

A changing climate is transforming utilities from background infrastructure providers into core partners in public health, climate adaptation and community resilience. Their services underpin housing, healthcare, social care, emergency response, digital inclusion, food safety, environmental quality and everyday wellbeing.

A climate-health approach to utilities requires more than technical infrastructure resilience. It requires joint planning between utility companies, local authorities, public health, NHS partners, adult social care, emergency services, housing providers and voluntary sector organisations. It also requires better identification of vulnerable populations, stronger communication during emergencies, targeted support for those most at risk and investment that delivers both decarbonisation and adaptation.

Utility infrastructure should therefore be understood not simply as an economic asset, but as essential public health infrastructure. Protecting and adapting these systems will be fundamental to ensuring that communities can remain safe, healthy and connected in a changing climate.

Current International and National Response(s):

Several themes increasingly characterise the national response:

Theme	Direction of Travel
Infrastructure Resilience	Strengthening critical infrastructure against climate risks
Systems Thinking	Recognising interdependencies between energy, water, communications and health
Vulnerability and Equity	Protecting vulnerable populations during service disruptions
Adaptation and Resilience	Preparing utility systems for future climate conditions
Nature-Based Solutions	Using catchment management and ecosystem restoration to improve resilience
Decarbonisation	Transitioning to low-carbon energy systems
Energy and Water Security	Ensuring reliable access to essential services
Health Integration	Increasing recognition of utilities as public health infrastructure

Internationally, the role of utilities in responding to a changing climate has expanded from ensuring reliable service provision to becoming a central component of climate adaptation, resilience and public health protection. Organisations such as the World Health Organization (WHO), the Intergovernmental Panel on Climate Change (IPCC) and the United Nations increasingly recognise that access to reliable energy, water, sanitation and communications infrastructure underpins health, wellbeing and societal resilience. Utility systems are now viewed as critical infrastructure whose failure can amplify health risks during heatwaves, flooding, droughts and other climate-related events.

A major international policy shift has been the move towards **climate-resilient infrastructure**. The IPCC highlights energy, water and communications networks as essential adaptation systems that must be designed to withstand future climate

conditions rather than historic weather patterns. Increasing emphasis is placed on understanding interdependencies between sectors, recognising that disruption to one utility system can have cascading impacts across healthcare, social care, transport, food systems and emergency response.

The **UN Sustainable Development Goals**, particularly those relating to health, water, energy, sustainable communities and climate action, provide a framework for integrating environmental sustainability, resilience and health outcomes. Increasingly, utility providers are expected to contribute not only to emissions reduction but also to protecting vulnerable populations and supporting community resilience.

Nationally, the UK has adopted a similar direction through the **Climate Change Act 2008**, the **UK Climate Change Risk Assessment (CCRA)** and the **National Adaptation Programme (NAP3)**. These frameworks identify energy, water, wastewater and telecommunications infrastructure as among the sectors most exposed to climate-related risks. Particular concerns include flooding, overheating, drought, water scarcity, coastal change and the increasing interdependence of critical infrastructure systems.

The national response increasingly focuses on strengthening the resilience of essential services while supporting the transition to a low-carbon economy. Within the energy sector, this includes investment in network resilience, renewable energy generation, electrification and consumer protection. Water policy has increasingly focused on long-term water security, drought resilience, sustainable resource management and reducing environmental pressures on rivers and ecosystems. Telecommunications resilience is also becoming more prominent as health and care systems become increasingly dependent on digital infrastructure and remote service delivery.

A notable feature of recent national policy is the growing emphasis on **vulnerability and resilience**. Regulators and utility providers are increasingly expected to identify and support populations who may be disproportionately affected by service disruptions, including older people, disabled people, people with long-term health conditions and those reliant on medical equipment or care services. Programmes such as Priority Services Registers, resilience planning and emergency response arrangements reflect a broader recognition that utility resilience is fundamentally linked to health protection.

Another emerging theme is the increasing use of **nature-based solutions** to support utility resilience. Water companies, regulators and environmental agencies are investing in catchment management, natural flood management and ecosystem restoration to improve water quality, reduce flood risk and strengthen resilience to drought. These approaches are increasingly recognised as delivering environmental, climate and health benefits simultaneously.

Overall, the international and national response reflects a growing understanding that utilities are not simply providers of technical infrastructure but are fundamental components of climate adaptation and public health systems. The direction of travel is towards more resilient, low-carbon and equitable utility services that can continue to support communities, health services and vulnerable populations in the face of increasing climate-related pressures.

Local East Sussex Response to Build From:

The local East Sussex response is shaped by the fact that utilities are both essential public health infrastructure and climate-vulnerable systems. Water, wastewater, energy and digital services underpin safe homes, care delivery, healthcare access, hygiene, food storage, emergency response and social connection. Climate-related disruption to these systems can therefore quickly become a health issue, particularly for older people, people with long-term conditions, households in fuel poverty, care homes, rural communities and people dependent on medical equipment.

East Sussex County Council's climate work provides the local framing. The council declared a climate emergency in 2019 with an interim target to halve emissions every five years. Its 2025–2030 Climate Emergency Plan continues this work, while the 2024 Climate Change Risk and Vulnerability Assessment identifies key local climate risks under different warming scenarios. These provide an important basis for considering utilities not only as infrastructure issues, but as part of local health resilience.

For water, **South East Water** has published its fourth-round climate adaptation reports, including a technical document and public summary. Its adaptation work identifies climate risks around water scarcity, infrastructure resilience and deterioration in water quality. This is directly relevant to East Sussex because water shortages, outages or quality problems can affect hydration, hygiene, food preparation, care homes, hospitals, people using medical equipment and households already experiencing vulnerability.

Southern Water has also published a Climate Change Adaptation Report, describing the likely impacts of climate change across its region and how it plans to respond. Its reporting highlights the need to adapt to future risks now, and earlier adaptation material identifies actions such as leakage reduction, drought planning and reviewing the safety and health impacts of operating at extreme temperatures. This is important for East Sussex because wastewater, sewerage and drainage systems are closely linked to flood risk, environmental quality, coastal waters and public health.

Energy resilience is also central. **UK Power Networks**, which operates electricity distribution infrastructure across the South East, has published adaptation material on climate risks to electricity networks and more recent sustainability work around

carbon, waste, water use, pollution and biodiversity. East Sussex's earlier climate roadmap also referenced UKPN modelling of heat pump uptake, illustrating how electrification of heating and transport will increase reliance on a resilient electricity grid.

Gaps

The main local gap is that utility resilience is not yet consistently framed as a public health issue. Water supply, wastewater, energy networks and digital connectivity are usually planned through sector-specific regulatory and business planning processes, while health impacts are often considered indirectly rather than as core outcomes.

There is also a data-sharing gap. Priority Services Registers, care records, vulnerability data, flood risk information, outage data and community intelligence sit across different organisations. This makes it difficult to identify, in real time, who is most at-risk during heatwaves, water outages, flooding, power cuts or telecommunications failures.

A further gap is around cumulative and cascading risk. A flood may affect electricity, wastewater, roads, care delivery and digital communications at the same time. Local planning does not yet always fully capture these interdependencies or their combined health effects.

Barriers

The biggest barriers are fragmented governance, regulatory silos and long investment cycles. Utility planning is shaped by national regulators such as Ofwat and Ofgem, while health impacts are experienced locally by councils, NHS partners, care providers and communities. Aligning these systems is difficult.

Climate uncertainty is another barrier. Utilities must plan for drought, flooding, heat, sea-level rise, population growth and changing demand, but the timing and severity of impacts remain uncertain. This can delay investment or lead to under-preparation.

There are also practical barriers around infrastructure capacity. Grid reinforcement, water resource schemes, sewer upgrades and digital resilience require major investment, technical capacity, planning consent and public acceptance.

Tensions

A major tension is between affordability and resilience investment. Utility companies need to invest in reservoirs, leakage reduction, network reinforcement, wastewater upgrades, flood protection and decarbonisation, but these costs often flow through to

customer bills. This creates a health equity issue because higher bills can worsen fuel poverty, water poverty and financial stress.

There is also a tension between mitigation and adaptation. Electrifying heating and transport is essential for decarbonisation, but it increases dependence on electricity networks. Similarly, water infrastructure solutions such as desalination, tankering or large infrastructure schemes may improve drought resilience but can raise questions about cost, carbon, environmental impact and public acceptability.

Another tension concerns public trust. Water companies in the South East have faced scrutiny over supply failures, leakage, pollution and investment decisions, while customers are being asked to change behaviour and pay for resilience improvements. Trust will be essential if communities are to support water saving, retrofit, smart systems and emergency preparedness.

Opportunities

The strongest opportunity is to treat utilities as part of East Sussex's climate-health resilience infrastructure. This means involving water, energy and digital providers more explicitly in public health, adult social care, emergency planning, housing, transport and community resilience work.

There is a clear opportunity to improve vulnerability mapping by linking utility Priority Services Registers with local authority, NHS, social care and voluntary sector intelligence, within appropriate information governance. This could help target welfare checks, emergency communications and support during outages or extreme weather.

Water companies' adaptation plans also create opportunities for catchment-based and nature-based solutions, including natural flood management, water efficiency, leakage reduction, sustainable drainage and river restoration. These can support climate resilience while improving environmental quality and wellbeing.

Energy network planning offers opportunities to align decarbonisation with health: resilient electricity networks can support heat pumps, electric vehicles, care technologies, cooling, telehealth and community energy schemes. Local renewable energy and community energy models could also improve resilience and reduce fuel poverty if targeted well.

Overall assessment

East Sussex has a strong starting point: county climate planning, utility adaptation reporting, water resilience planning, electricity network decarbonisation work and

growing awareness of vulnerability. However, the response remains largely infrastructure-led and sector-specific.

The next step is to make utilities a more explicit part of East Sussex's climate and health system. That means planning not only for assets and service continuity, but for the health consequences of disruption, especially for vulnerable residents. Done well, utility resilience could become a major contributor to safer homes, resilient care, reduced inequalities and healthier communities in a changing climate.

18. 3C Section Conclusion

Part 3C demonstrates that addressing the health effects of a changing climate is not the responsibility of any single organisation, profession or sector. It requires coordinated action across the whole East Sussex system, recognising that decisions made within sectors such as planning, housing, transport, education, agriculture, emergency services, economic development, utilities, health and social care, the voluntary and community sector, businesses and communities all influence population health, climate resilience and sustainable development.

This section translates the evidence presented throughout the Health Impact Assessment into sector-specific strategic considerations, opportunities and action steps, providing organisations with a practical framework to understand both their individual contribution and their collective role in delivering a whole-system response. Although each sector is presented separately, the findings consistently demonstrate that climate and health challenges are highly interconnected. Consequently, effective action requires collaboration across organisational boundaries to maximise health, environmental, social and economic co-benefits.

A key conclusion is that many organisations do not traditionally identify themselves as having a climate or public health role. However, decisions relating to investment, regeneration, infrastructure, education, transport, employment, procurement, environmental management, housing and community development are all powerful determinants of health and resilience. Embedding climate and health considerations into routine policy, planning, investment and service delivery therefore represents one of the greatest opportunities to prevent harm, reduce inequalities and create healthier, more resilient communities.

The considerations, opportunities and action steps presented throughout this section provide a shared strategic framework for strengthening climate resilience and protecting population health across East Sussex. Rather than prescribing a single approach, they offer flexible pathways that organisations can adapt to their own responsibilities, priorities and operating contexts whilst contributing to shared

system-wide outcomes. They are intentionally ambitious yet grounded in practical implementation, encouraging organisations to build upon existing strengths, strengthen partnerships, identify opportunities for innovation and embed climate resilience, health improvement and equity within existing strategies, programmes and decision-making.

The assessment also demonstrates that East Sussex already possesses many of the foundations required for success, including strong partnerships, established governance arrangements, active community organisations, planning policies and collaborative networks. However, these strengths are often dispersed across organisations and programmes. Greater integration, shared leadership, coordinated governance, improved intelligence and data sharing, and stronger alignment of policies, investment and delivery will be essential to maximise collective impact and avoid fragmented approaches.

Importantly, the considerations, opportunities and action steps should be viewed as the beginning of an ongoing programme of system transformation rather than the end of the Health Impact Assessment. Their greatest value will be realised through implementation, continuous learning and regular review as evidence, climate risks, technologies and local priorities evolve. During the Mobilisation Phase (2026–2030), the strategic opportunities identified throughout this section will be translated into organisation-specific SMART objectives, delivery plans, governance arrangements and measurable outcomes, creating a coordinated programme of action across the East Sussex system.

The overarching conclusion from Part 3C is that climate adaptation should be viewed not solely as an environmental response, but as an opportunity to transform the way organisations work together to improve health, reduce inequalities, strengthen communities and support sustainable development. By embedding **Health in All Policies** and **Population and Planetary Health in All Approaches** across every sector, East Sussex has the opportunity to create a healthier, fairer, more resilient and climate-ready future for current and future generations.