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 3B: Considerations, Opportunities and Actions Steps for Addressing the Priority Wider Determinants of Health and 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 4

2. Introduction..... 6

3. Overview and Wider Context..... 7

4. Active Travel and Public Health..... 8

High Level Strategic Opportunity: 8

Rationale: 8

Considerations, Opportunities and Action Steps 9

Context and Impacts: 12

Current International and National Response(s): 15

Local East Sussex Response to Build From: 18

5. Arts, Culture and Public Health..... 22

High Level Strategic Opportunity: 22

Rationale: 22

Considerations, Opportunities and Action Steps 23

Context and Impacts: 25

Current International and National Response(s): 29

Local East Sussex Response to Build From: 35

6. Mental Health and Public Health 37

High Level Strategic Opportunity: 37

Rationale: 37

Considerations, Opportunities and Action Steps 37

Context and Impacts: 40

Current International and National Response(s): 41

Local East Sussex Response to Build From: 46

7. Physical Activity and Public Health 49
High Level Strategic Opportunity: 49
Rationale: 49
Considerations, Opportunities and Action Steps 50
Context and Impacts: 53
Current International and National Response(s): 55
Local East Sussex Response to Build From: 59

8. Climate-Responsive Sleep, Recovery Environments and Public Health 65
High Level Strategic Opportunity: 65
Rationale: 65
Considerations, Opportunities and Action Steps 65
Context and Impacts: 66
Current International and National Response(s): 70
Local East Sussex Response to Build From: 74

9. Social Connectedness Under the Stress of a Changing Climate and Public Health 75
High Level Strategic Opportunity: 75
Rationale: 76
Considerations, Opportunities and Action Steps 76
Context and Impacts: 79
Current International and National Response(s): 82
Local East Sussex Response to Build From: 86

10. 3B Section Conclusion 90

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, climate change 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 climate change.

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 section and it sub-sections apply the collaborative framework described above to each of the **principal wider determinants** of health identified through the East Sussex Environment, Climate and Health Impact Assessment (ECH-HIA). These are:

- Active Travel
- Arts and Culture
- Mental Health
- Physical Activity
- Climate-Responsive Sleep and Recovery Environments
- Social Connectedness

Together, they provide the understanding for how a changing climate is and will affect population health today, how these risks are expected to evolve over the coming decades, and where coordinated action across the East Sussex system can have the greatest impact.

This section and its sub-sections follow a consistent structure to support both strategic decision-making and practical implementation. It begins with a **High-Level Strategic Consideration and Opportunity**, supported by a clear rationale explaining why the issue is important for health, wellbeing and climate resilience. This is followed by a set of **Considerations, Opportunities and Action Steps**, which identify practical actions that organisations across the system can adopt individually and collectively. Each chapter then presents the determinant of health, summarising the latest information on how a changing climate is or will influence that determinant of health as a result of environment and climate hazards and the resulting implications for population health. To support implementation, chapters also review relevant **International and National Responses**, describe the **Current East Sussex Response** and highlight opportunities to build on existing strengths, address identified gaps and strengthen partnership working.

Although each determinant of health is presented separately, they should not be considered in isolation. The determinants of health are highly interconnected, with many sharing common drivers, vulnerable populations, health outcomes and opportunities for intervention. For example, physical activity, sleep and mental 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

A changing climate is not only an environmental issue but also a significant determinant of health and wellbeing. Beyond the direct impacts of extreme weather events, a changing climate influences many of the social, economic, and environmental factors that shape health outcomes. These wider determinants of health/'the building blocks of health' affect people's wellbeing and their ability to live healthy lives, adapt to changing conditions, and recover from climate-related shocks.

Addressing a changing climate therefore presents an opportunity to improve population health while reducing inequalities that exist across the wider/social determinants of health. Many climate adaptation and mitigation measures can deliver multiple benefits across mental wellbeing, physical activity, social connectedness, economic resilience, employment, and skills development.

The following are relevant priority wider determinants of health for East Sussex. These have been determined as the most likely to be impacted within the context of a changing climate and health:

- Active Travel
- Arts and Culture
- Mental Health
- Physical Activity
- Climate-Responsive Sleep and Recovery Environments
- Social Connectedness

Economic development, regeneration, employment and skills is covered under the opportunities, considerations and action steps within Part 3C but also is relevant to the priority wider determinants of health within the context of a changing climate and health. **See Part 3C for details.**

Mental health, physical activity, active travel, sleep and social connectedness are increasingly recognised as critical pathways through which a changing climate affects health and resilience. These determinants not only influence vulnerability to climate impacts but also represent important opportunities for adaptation and prevention. Strengthening these areas can improve individual and community resilience while delivering substantial co-benefits for public health, health inequalities, sustainability and climate adaptation.

East Sussex Systemwide stakeholders feel it is critical to understand how the above will be impacted by a changing climate and what can be done about it. Therefore, they were decided as the key criteria to be included as part of considerations for the 'Wider Determinants'. This will help to frame and articulate key public health priorities and the need to address health inequalities.

4. Active Travel and Public Health

"Cyclists don't really get affected so much by hot temperature because there's actually a cooling effect, so it's quite easy to cycle in 30°. Well, it's harder to walk 30°. And that's partly because you've got a mechanical advantage in terms of travelling when you're on a bicycle… you're better off on a bike than you are walking." - East Sussex Stakeholder – Active Travel

High Level Strategic Opportunity:

Further build and develop a climate-resilient, health-promoting active travel system that makes walking, cycling, and other low-carbon transport safe, appealing, and accessible part of daily life all year-round, while integrating emissions reduction, public health, and behavioural change strategies.

Rationale:

Active travel is one of the most effective interventions for simultaneously improving population health, reducing greenhouse gas emissions, improving air quality and creating more liveable, resilient communities. Walking, cycling and wheeling increase physical activity, improve mental wellbeing, reduce the risk of chronic disease, strengthen social connectedness and support healthier lifestyles, while contributing to Net Zero objectives by reducing reliance on private motor vehicles. However, climate-related hazards such as extreme heat, flooding, severe weather, poor air quality and infrastructure disruption can reduce the safety, accessibility and attractiveness of active travel, particularly for children, older adults, people with disabilities and

communities experiencing deprivation. Developing a climate-resilient active travel system through climate-adapted infrastructure, nature-based design, integrated transport planning, behaviour change initiatives and equitable access will help maintain safe year-round mobility, improve health and wellbeing, reduce inequalities, strengthen resilience to a changing climate and support the transition to a healthier, more sustainable and low-carbon East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1. Create Climate-Adaptive Active Travel Infrastructure that Promotes year-round active transport in a changing climate

Action Steps:

- Build **climate-resilient cycling and walking networks** (e.g., permeable surfaces, shaded lanes, flood-tolerant materials).
- Develop **heat-aware routing systems** with real-time alerts and cool zones.
- Install **sheltered bike lanes**, misting stations, and rest points in urban heat islands.

Example: Singapore's "Cycling in a Tropical City" design code.

Opportunity 2. Integrate Low-Carbon Mobility + Public Health Zones so as to Integrate transport emissions reduction with population health

Action Steps:

- Establish **Active Mobility Zones** with limited car access, safe walk/bike priority, and clean air incentives.
- Expand **'Connected and Compact Neighbourhoods'** where all essentials (work, schools, health care, groceries) are accessible by foot or bike.
- Incentivize **green commuting corridors** linking residential areas with major employment hubs.

Opportunity 3. Make use of Behavioural Change Campaigns Rooted in Climate & Health Co-Benefits

Action Steps:

- Shift norms by highlighting climate + physical activity synergies
- Launch campaigns focused on the **dual benefits** of active travel: emissions reduction + chronic disease prevention.
- Frame walking/cycling as **resilience-building acts** in a warming world.
- Engage behavioural scientists to **design nudges** (e.g., rewards for green trips, peer commitment pledges).

Example: Netherlands' "Bike to Work" tax incentive with carbon offset calculations.

Opportunity 4. Create and use Cross-Sectoral Active Travel Data Platforms

Action Steps:

- Inform planning with integrated data across mobility, emissions, and health
- Create **live dashboards** combining air quality, transport emissions, physical activity, and public health stats.
- Use anonymized mobile data to identify **barriers and potential** for modal shifts to walking/biking.
- Link transport models with GHG (greenhouse gases) accounting and cardiovascular health outcomes.

Example: Barcelona Superblocks GIS data linking traffic, air pollution, and mobility patterns.

Opportunity 5. Make active travel a seamless part of daily life by providing Multimodal Transport + Active Last Mile Systems

Action Steps:

- Integrate **bike-share and e-scooter docks** with bus and rail stations.
- Create "**green last-mile incentives**" for employers and institutions (e.g.,
- shared bikes for hospital staff).
- Enable **active travel rebates** for replacing short car trips under 3km.

Example: Berlin's BVG "Mobility as a Service" app + e-bike last-mile partnerships.

Opportunity 6. Implement Built Environment Policies

Action Steps:

- Build compact, climate-smart cities that enable movement
- Reduce car dependency and encourage mixed-use, walkable neighbourhoods.
- Mandate active transport impact assessments for new developments.
- Implement **Green Roof and Green Wall ordinances** that cool cities and enhance walkability.

Example: Portland, Oregon's Health Impact Assessments for transport infrastructure and East Sussex LTP HIA

Opportunity 7. Advance evidence on climate-activity-health relationships through Climate-Physical Activity Research and associated Hubs

Action Steps:

- Fund interdisciplinary centres studying **urban microclimates**, physical activity patterns, and health risks.
- Launch **longitudinal studies** on climate disruption and mobility behaviour.
- Develop **heat index thresholds** for safe outdoor physical activity recommended considerations, opportunities and action steps.

Example: Harvard's SHIFT project—Studying climate and human health through physical activity.

Opportunity 8. Build a skilled, informed, and engaged population through Education, Workforce Training which is Co-Design with Communities

Action Steps:

- Integrate **climate-smart mobility** into urban planning, public health, and architecture curriculums.

- Train community climate-health mobility ambassadors to co-design hyperlocal solutions.
- Use **participatory planning** to map unsafe or disconnected active travel routes, especially in marginalized areas.

Example: Copenhagen's "Bicycle Account" participatory planning reports with residents.

Context and Impacts:

Active travel—walking, wheeling and cycling for everyday journeys—is increasingly recognised as one of the most effective interventions for addressing both a changing climate and public health challenges. It sits at the intersection of climate mitigation, adaptation, health improvement, sustainable transport and healthy place-making.

Transport is one of the largest contributors to greenhouse gas emissions in the UK, accounting for approximately one-quarter of total emissions. At the same time, physical inactivity, air pollution, road traffic collisions, obesity, cardiovascular disease and poor mental health represent significant public health challenges. Active travel offers a unique opportunity to address these interconnected issues simultaneously.

A changing climate is expected to increase the frequency and intensity of heatwaves, flooding, storms and poor air quality episodes, which can disrupt transport systems and affect population health. Developing safe, accessible and climate-resilient active travel networks can therefore improve both mitigation and adaptation outcomes while strengthening community resilience.

As a changing climate increases the frequency of extreme weather events, transport systems will need to become more resilient. Designing shaded walking routes, increasing access to drinking water, improving lighting, and ensuring accessibility for disabled people and older adults will help maintain active travel opportunities throughout the year.

Health and Climate Benefits

- **Improved Physical Health** - Active travel increases daily physical activity and helps reduce the risk of cardiovascular disease, stroke, type 2 diabetes, obesity, some cancers and musculoskeletal conditions. Regular walking and cycling contribute to healthier ageing and reduced premature mortality.
- **Improved Mental Health and Wellbeing** - Walking, wheeling and cycling can improve mood, reduce stress and anxiety, increase social interaction,

strengthen community connections and enhance overall wellbeing and resilience.

- **Improved Air Quality** - Reducing reliance on private vehicles lowers emissions of air pollutants such as nitrogen dioxide and particulate matter, helping reduce respiratory and cardiovascular disease, asthma and premature deaths.
- **Mitigation, Adaptation and Transitioning** - By replacing short car journeys with active travel which improves outdoor air quality.
- **Climate Resilience** - Active travel supports more resilient transport systems and maintaining access to services during disruptions and strengthening community connectivity and local resilience.

Climate Risks to Active Travel

A changing climate may also affect the ability of people to travel actively through:

- **Heatwaves:** Increased heat stress, dehydration risks and reduced participation, particularly among vulnerable groups.
- **Flooding:** Damage to walking and cycling routes, disruption of access and reduced network connectivity.
- **Extreme Weather:** Storms, high winds and heavy rainfall can reduce safety and discourage active travel.
- **Poor Air Quality:** Increased ozone, pollen and wildfire smoke may make outdoor activity less safe and attractive.

Equity and Vulnerability

Active travel can help reduce health inequalities, but barriers remain for:

- Older adults.
- Children and young people.
- People with disabilities.
- Low-income communities.
- Rural populations.

To maximise climate and health benefits, active travel infrastructure should be **inclusive, accessible, safe and climate resilient**.

Active travel is one of the most effective climate-health interventions available, delivering multiple co-benefits through improved physical and mental health, better air quality, reduced emissions and increased community resilience. However, climate

adaptation is needed to ensure walking, wheeling and cycling remain safe, accessible and attractive in a changing climate.

Theme	Summary	Climate and Health Relevance
Physical Health Benefits	Increases daily physical activity and reduces the risk of cardiovascular disease, stroke, type 2 diabetes, obesity, certain cancers and musculoskeletal conditions.	Improves population health and resilience to climate-related health impacts, reducing vulnerability and premature mortality.
Mental Health and Wellbeing	Improves mood, reduces stress and anxiety, enhances wellbeing, increases social interaction and strengthens community cohesion.	Supports psychological resilience and helps mitigate climate-related mental health impacts, including stress and social isolation.
Air Quality Benefits	Reduces vehicle emissions such as nitrogen dioxide (NO_2) and particulate matter ($PM_{2.5}$ and PM_{10}).	Improves respiratory and cardiovascular health and reduces pollution-related illness exacerbated by a changing climate.
Mitigation and Transitioning	Championing walking, wheeling and cycling.	Supports active lives and contributes to physical activity. Active travel has mental health benefits.
Climate Adaptation and Resilience	Creates more resilient local transport systems, maintains access to services during disruptions and strengthens community connectivity.	Enhances community resilience and adaptive capacity during climate-related events and emergencies.
Heatwaves	Higher temperatures can discourage active travel and increase risks of heat stress and dehydration.	May reduce participation in active travel, particularly among vulnerable groups.

Theme	Summary	Climate and Health Relevance
Flooding	Flooding can damage walking and cycling infrastructure and disrupt access routes.	Reduces network connectivity and limits opportunities for active travel.
Extreme Weather	Storms, strong winds and heavy rainfall can increase safety risks and damage infrastructure.	Can discourage active travel and reduce reliability of active transport networks.
Air Quality Risks	A changing climate may increase ozone levels, pollen seasons and wildfire smoke events.	Can make outdoor activity less safe and attractive, particularly for those with respiratory conditions.
Health Inequalities and Vulnerable Groups	Barriers remain for older adults, children, people with disabilities, low-income communities and rural populations.	Climate-resilient active travel infrastructure should be inclusive, accessible and equitable to reduce health inequalities.

Current International and National Response(s):

International and National Response to Active Travel, a Changing Climate and Health

Level	Organisation / Policy	Response	Climate and Health Relevance
International	World Health Organization	Global Action Plan on Physical Activity (2018–2030) and COP26 Health Programme promote walking, cycling and active environments.	Recognises active travel as a major climate-health co-benefit that reduces emissions, improves health and supports resilient communities.

Level	Organisation / Policy	Response	Climate and Health Relevance
International	Intergovernmental Panel on Climate Change	Advocates climate-resilient development, sustainable transport, compact cities and active mobility.	Identifies active travel as a mitigation and adaptation measure that improves health while reducing greenhouse gas emissions.
International	United Nations	Sustainable Development Goals (SDGs) promote healthy cities, sustainable transport and climate action.	Supports active travel as a mechanism to achieve health, equity, sustainability and climate objectives.
International	Lancet Countdown	Annual reporting on climate-health co-benefits.	Identifies active travel as one of the most effective interventions for reducing emissions and improving population health.
International	United Nations Environment Programme	Promotes sustainable urban mobility and low-carbon transport systems.	Supports walking and cycling infrastructure to improve air quality and climate resilience.
National (UK)	UK Health Security Agency	Adverse Weather and Health Plan and climate-health adaptation work.	Recognises physical activity and active travel as contributors to health resilience and adaptation.
National (UK)	Department for Transport	Active Travel Strategy and transport	Promotes walking, wheeling and cycling to reduce emissions,

Level	Organisation / Policy	Response	Climate and Health Relevance
		decarbonisation policies.	improve health and create sustainable communities.
National (UK)	Active Travel England	National leadership for active travel investment, standards and delivery.	Supports healthier lifestyles, reduced emissions, improved air quality and climate resilience.
National (UK)	NHS England	NHS Green Plan and prevention agenda.	Recognises active travel as supporting health improvement, emissions reduction and sustainable healthcare.
National (UK)	Office for Health Improvement and Disparities	Physical activity and prevention programmes.	Promotes active travel to reduce chronic disease and health inequalities.
National (UK)	Climate Change Committee	National adaptation and mitigation advice.	Recommends modal shift towards active travel to improve resilience and reduce emissions.
National (UK)	Sport England	Uniting the Movement Strategy.	Links physical activity, active environments, sustainability and climate resilience.

Key Themes Emerging Internationally and Nationally

Theme	Response

Health Improvement	Active travel is promoted to increase physical activity, improve mental wellbeing and reduce chronic disease.
Climate Mitigation	Walking, wheeling and cycling reduce transport emissions and support net-zero ambitions.
Climate Adaptation	Climate-resilient active travel infrastructure helps communities adapt to heat, flooding and transport disruption.
Air Quality	Reduced vehicle use improves air quality and reduces respiratory and cardiovascular disease.
Health Equity	Policies increasingly focus on ensuring access to safe and affordable active travel for disadvantaged communities.
Healthy Places	Urban design, green infrastructure and sustainable transport are recognised as critical determinants of health and climate resilience.

Internationally and nationally, active travel is increasingly recognised as one of the most effective climate-health interventions available. It delivers multiple co-benefits by improving physical and mental health, reducing greenhouse gas emissions, improving air quality, supporting climate adaptation and strengthening community resilience. Consequently, walking, wheeling and cycling are becoming central components of climate action, public health improvement and sustainable place-making strategies.

Local East Sussex Response to Build From:

Active travel is already a major component of East Sussex's health, transport and climate agendas. East Sussex has one of the more developed local responses to active travel within the wider context of a changing climate and health. Although there is no standalone "Climate, Health and Active Travel Strategy," active travel is increasingly embedded across transport, planning, public health, climate adaptation, healthy places and local policy frameworks.

East Sussex's Local Transport Plan 4 identifies active travel as a key mechanism for:

- Improving health and wellbeing.
- Reducing emissions.
- Supporting sustainable communities.

- Improving accessibility.
- Building climate resilience.

The Health Impact Assessment for LTP4 found that increasing walking, wheeling and cycling would deliver significant positive impacts through:

- Increased physical activity.
- Improved mental wellbeing.
- Better access to services.
- Improved air quality.
- Reduced inequalities.
- Stronger social connections.

As part of the Public Health, Healthy Place 'Planning for Health' work, East Sussex's Planning for Health, Wellbeing and Sustainability Framework promotes:

- Walkable neighbourhoods.
- Connected communities.
- Green infrastructure.
- Safe active travel routes.

These interventions support both health improvement and climate adaptation.

A clear policy window existed with the current LTP4 and related strategies (cycling and walking, freight, rail, EV, bus service improvement plans) and in which this HIA supported its policy development.

As part of the East Sussex Local Transport Plan (LTP4) local intent has been to embed climate and health together in operative policy wording, particularly within:

- 'Creating Healthy and Sustainable Places'
- Both climate change and health chapters, ensuring mutual reinforcement rather than separation.
- Outcomes and policy measures.

Active travel schemes (e.g. School Streets**,** Healthy Streets**, Active Travel Action Plans)** are highlighted as strong local examples that already deliver combined climate and health benefits and could be used as demonstrator projects or evaluation case studies.

Implementation is a key focus, with recognition that policies alone are insufficient. Local responses include:

- Training (e.g. Healthy Streets training, lunch-and-learn sessions).
- Updating internal scheme appraisal tools to prompt consideration of climate–health impacts.
- Exploring rapid or proportionate HIA-style checklists for officers and projects.

Cross-departmental and political engagement is viewed as essential locally, including:

- Internal officer working groups.
- Cross-party member involvement through scrutiny and project boards.
- Engagement with senior political leaders to champion climate–health integration and support wider cultural change across the authority

Current Gaps and Opportunities Summary:

Theme	Current Gap / Opportunity	Potential Actions	Expected Benefits
Climate-Resilient Active Travel	Active travel infrastructure is not always designed for future climate conditions.	Incorporate shading, urban cooling, flood resilience and heatwave adaptation into walking and cycling networks.	Increased usability, safety and resilience of active travel routes during extreme weather events.
Climate and Health Monitoring	Limited data linking active travel, climate impacts and health outcomes.	Develop indicators and monitoring systems for active travel, health outcomes, climate resilience and health inequalities.	Improved evidence base, informed decision-making and better evaluation of interventions.
Cross-Sector Integration	Active travel, climate adaptation, public health and planning can still operate in silos.	Strengthen collaboration between transport, climate, public health, planning, housing and nature recovery sectors.	More coordinated, efficient and effective delivery of climate-health objectives and co-benefits.
Climate and Health	Climate and health impacts are not	Build on the LTP4 HIA model and embed	Earlier identification of risks and

Theme	Current Gap / Opportunity	Potential Actions	Expected Benefits
Impact Assessment	routinely assessed across all plans and projects.	Climate and Health Impact Assessments into transport plans, infrastructure projects and local strategies.	opportunities, stronger health outcomes and more resilient decision-making.

Strategic Summary:

Priority Area	Strategic Opportunity
Infrastructure	Create climate-resilient active travel networks that remain functional during heatwaves, flooding and extreme weather.
Evidence	Strengthen monitoring and evaluation to demonstrate climate, health and equity benefits.
Partnerships	Integrate climate, transport, health, housing and environmental agendas through a whole-systems approach.
Decision-Making	Mainstream Climate and Health Impact Assessment across policy, planning and investment decisions.

Active travel is not simply a transport intervention—it is a climate, health, resilience and equity intervention. Increasing walking, wheeling and cycling delivers multiple co-benefits that help both mitigate a changing climate and protect populations from its health impacts. Active travel is one of the most powerful interventions for addressing the health effects of a changing climate. It simultaneously reduces emissions, improves physical and mental health, enhances air quality, strengthens community resilience and supports climate adaptation. As climate risks increase, developing safe, inclusive and climate-resilient active travel networks will be critical for creating healthier, more sustainable and more resilient communities.

5. Arts, Culture and Public Health

High Level Strategic Opportunity:

Position arts, culture and heritage as core components of East Sussex's climate resilience, health improvement and community wellbeing infrastructure by embedding creative approaches within climate adaptation, public health, community resilience and place-based development. Through cross-sector collaboration, creative health, community participation and cultural leadership, harness the power of arts and culture to strengthen mental wellbeing, reduce climate anxiety, foster social connectedness, inspire climate action, support behaviour change and build healthier, more resilient and climate-ready communities.

Rationale:

For East Sussex, arts and culture should be viewed not simply as cultural provision, but as part of the county's climate resilience infrastructure, alongside public health, community development, nature recovery and economic development. Arts, culture and heritage are increasingly recognised as essential components of the social infrastructure that enables communities to adapt to a changing climate, improve health and strengthen resilience. Beyond their cultural value, creative activities foster social connectedness, support mental wellbeing, reduce loneliness and climate anxiety, strengthen place identity and belonging, and encourage participation in community life and collective climate action. Evidence demonstrates that arts and culture can translate complex climate challenges into meaningful local experiences, helping individuals and communities process change, build hope, inspire behaviour change and develop the social capital needed to respond to environmental disruption. They also provide valuable opportunities for creative health interventions, social prescribing, intergenerational engagement and inclusive participation, particularly for groups at greater risk of social isolation and climate-related health impacts. Embedding arts, culture and heritage within climate adaptation, public health and community resilience strategies will strengthen psychological resilience, social cohesion and community capacity, helping East Sussex create healthier, more connected and climate-resilient places for current and future generations.

Considerations, Opportunities and Action Steps

Opportunity 1. Establish an Arts, Culture, Climate and Health Approach

Action Steps:

- Establish a countywide Arts, Climate and Health Working Group.
- Develop a shared vision and action plan.
- Create opportunities for joint commissioning and funding.
- Share learning and evidence across sectors.
- Drive climate behaviour change (through public art, theatre, exhibitions, festivals, storytelling and digital media).
- Strengthen nature-culture-health connections (develop or link programmes related to creative practice, outdoor wellbeing, heritage interpretation and environmental stewardship).

Outcome: A coordinated and strategic approach to using arts and culture to address climate-related health impacts.

Opportunity 2. Address Climate Anxiety Through Creative Health

Action Steps:

Support cultural organisations to develop:

- Climate-themed arts programmes.
- Creative wellbeing workshops.
- Storytelling projects.
- Intergenerational arts initiatives.
- Climate and mental health festivals.
- Creative health programmes through social prescribing.

Prioritise young people and communities vulnerable to climate impacts.

Outcome: Improved mental wellbeing and reduced climate-related distress.

Opportunity 3. Create Priority Demonstrator Projects for East Sussex

Action Steps:

- **Coastal Stories and Climate Futures** – Support Creative projects in coastal communities exploring a changing climate, identity and adaptation.
- **Creative Climate Wellbeing Programme** – Nurture arts-based responses to climate anxiety for young people.
- Libraries, Museums and Cultural Venues - Position as community resilience hubs.
- **Culture and Nature Prescribing -** Link creative participation with nature recovery and outdoor wellbeing.
- **Climate Heritage Programme** – Support communities to understand and respond to environmental change affecting local heritage and landscapes.
- **Intergenerational Climate Conversations** – Develop arts-based programmes connecting older and younger residents around climate resilience and local action.
- **Use Arts and Culture to Strengthen Climate Resilience and Social Connectedness** – Integrate cultural participation into tackling social isolation and loneliness initiatives, social prescribing and healthy ageing programmes for example.

Opportunity 4. Develop a Climate-Culture Skills Programme

Action Steps:

Provide training in:

- Climate literacy.
- Creative health.
- Community engagement.
- Climate communication.
- Environmental sustainability.
- Evaluation and impact measurement.

Support workforce development across:

- Arts organisations.
- Libraries.
- Museums.
- Heritage organisations.

Outcome: A climate-aware and resilient cultural sector.

Context and Impacts:

Arts and culture are part of a community's **social infrastructure**. Just as roads, hospitals and flood defences help communities respond to climate risks, cultural assets help people develop the psychological, social and civic capacities needed to adapt to change.

Arts and culture are increasingly recognised internationally and nationally as important contributors to addressing the **health effects of a changing climate**. While they are often overlooked in climate adaptation strategies, the evidence suggests that arts, culture, heritage and creative activities can play a significant role in building resilience, supporting mental health, strengthening social connectedness, enabling behaviour change and helping communities respond to climate-related challenges.

Drawing on the recent WHO policy brief "Role of the Arts and Culture in Addressing the Health Impacts of Climate Change" and the wider WHO evidence base on arts and health, there is a growing international recognition that climate adaptation is not solely a technical, environmental or infrastructure challenge. It is also a social, cultural and behavioural challenge that requires communities to understand, respond to and adapt to profound environmental change. The WHO argues that arts and culture can play a unique role in climate-health action because they help translate complex climate issues into meaningful human experiences, strengthen social relationships, support mental wellbeing and encourage collective action.

Arts and culture sit at the intersection of these wider determinants and therefore have an important role in strengthening community resilience to climate-related health impacts.

Arts and cultural programmes can:

- Make climate issues relatable.
- Connect global challenges to local experiences.
- Create emotional engagement.
- Inspire action.
- Build community ownership.

Stories, exhibitions, performances and creative projects often reach audiences who may not engage with scientific or policy communications.

Cultural and heritage activities help communities maintain:

- Identity
- Belonging
- Continuity

- Shared memory
- Intergenerational understanding

They also help communities interpret and respond to change rather than simply experiencing loss

One of the fastest-growing climate-related health concerns is:

- Climate anxiety
- Eco-anxiety
- Ecological grief
- Fear about the future

Creative approaches can transform anxiety into action. For example:

- Community theatre can explore local climate issues.
- Visual arts can help people communicate experiences of environmental change.
- Storytelling can help communities imagine positive futures.
- Music and creative practice can support emotional resilience.

The result is not simply greater awareness but stronger psychological resilience and adaptive capacity.

Arts and culture provide ways for people to:

- Express emotions
- Process uncertainty
- Build hope
- Explore solutions
- Engage in collective action

Creative activities can help transform anxiety into agency. Arts and cultural participation creates opportunities for:

- Meeting others
- Volunteering
- Civic participation
- Intergenerational interaction
- Community leadership
- Relationship building

Examples include:

- Festivals
- Community arts projects
- Museums
- Libraries
- Music groups
- Heritage projects
- Cultural events
- Creative workshops

These activities build social capital and trust, creating networks that can be mobilised during emergencies and periods of environmental stress. WHO identifies social cohesion as one of the most important mechanisms through which arts and culture contribute to climate-health resilience. Unlike traditional information campaigns, creative activities engage both emotional and cognitive responses. They allow people to move from awareness of climate threats towards participation in collective solutions. In this sense, arts and culture can transform anxiety into action and resilience.

The main gap is that arts and culture are rarely recognised explicitly within climate adaptation and health strategies. They are often viewed as supplementary rather than essential. However, international evidence increasingly suggests that arts and culture contribute to the same outcomes sought by climate-health programmes:

Climate-Health Objective	**Contribution of Arts and Culture**
Mental wellbeing (addressing climate anxiety and stress)	Creative expression and support Emotional resilience, hope and agency
Social connectedness (tackling loneliness and isolation)	Participation, social connectedness and relationships
Community resilience and Emergency Preparedness (addressing community vulnerability)	Community networks, shared identity, stronger social capital and trust and local leadership
Behaviour change	Storytelling and engagement as well as and public participation
Healthy ageing	Cultural participation

Health inequalities	Inclusive community opportunities and opportunities for participation
Adaptation awareness	Local understanding of climate risks, collective action and adaptive capacity

Traditionally, responses to the health effects of a changing climate have focused on:

- Flood defences
- Heat adaptation measures
- Emergency planning
- Housing improvements
- Health system resilience

These interventions remain essential. However, WHO increasingly emphasises that climate resilience also depends upon cultural factors such as:

- Values
- Beliefs
- Identity
- Social norms
- Community participation
- Sense of belonging

These factors influence how people understand climate risks, respond to public health messages, support one another during crises and engage in adaptation efforts. Arts and culture therefore operate within what WHO describes as the "cultural contexts of health", helping shape behaviours and social responses that underpin resilience.

The implication is that climate adaptation requires both **physical infrastructure** and **social infrastructure**. Arts, culture, heritage, libraries, museums and creative organisations form part of that social infrastructure. Rather than treating arts and culture as separate from climate action, WHO suggests they should be viewed as enabling adaptation, resilience and wellbeing.

This suggests that arts and culture should be considered alongside public health, community development, nature recovery and economic development as part of a whole-system response to the health effects of a changing climate in East Sussex.

Current International and National Response(s):

Arts and culture help address climate health impacts by supporting both **individual wellbeing** and **community resilience**. The international discussion has therefore shifted from seeing culture as an optional extra to recognising it as part of the social infrastructure that helps communities adapt and thrive. Internationally, there is increasing recognition that adaptation requires both physical resilience (infrastructure, housing, flood protection) and social resilience (relationships, participation, trust, identity and collective action).

In England, there is growing recognition that arts and culture contribute to prevention-based approaches to health.

Organisations such as Arts Council England and the National Centre for Creative Health have highlighted how creative activity supports:

- Mental wellbeing
- Healthy ageing
- Social prescribing
- Community resilience
- Reducing health inequalities

This aligns closely with national priorities around climate adaptation because resilient communities tend to have:

- Strong social networks
- Opportunities for participation
- Shared identity
- Local leadership

This is particularly relevant in East Sussex where communities face:

- Coastal erosion
- Flood risk
- Biodiversity decline
- Agricultural pressures
- Heatwave impacts

Arts and cultural organisations can help residents engage constructively with these challenges rather than becoming overwhelmed by them.

This links strongly with:

- The county's Tackling Loneliness Programme
- Community resilience initiatives
- Library services
- Cultural organisations
- Volunteer networks

Arts and culture can be viewed as contributing to both social connectedness and climate resilience simultaneously. Looking across the international evidence base, including the WHO policy brief on arts, culture and climate-health, alongside UK policy on climate adaptation, public health, culture and creative health, there is a growing recognition that arts and culture have an important role in addressing the health effects of a changing climate. However, there remains a significant gap between this recognition and how climate, health and adaptation policies are designed, funded and implemented.

Gaps and Tensions

Despite growing evidence, arts and culture are rarely embedded within mainstream climate adaptation strategies.

Most climate responses continue to focus on:

- Infrastructure
- Energy
- Transport
- Emergency planning
- Environmental management

while paying less attention to:

- Mental wellbeing
- Cultural resilience
- Community identity
- Social cohesion
- Behaviour change

As a result, many adaptation strategies overlook important social determinants of resilience.

Limited Recognition of Cultural Determinants of Health

The WHO increasingly highlights the importance of cultural participation, belonging, identity and creativity for health and wellbeing.

However, many health systems still focus primarily on:

- Clinical interventions
- Physical health impacts
- Emergency response

rather than recognising culture as part of prevention and resilience.

Limited Integration Between Climate, Health and Culture

England has:

- Climate adaptation policy
- Public health policy
- Creative health policy
- Cultural policy

but relatively few frameworks explicitly bring these agendas together. Arts and culture often remain absent from climate-health discussions.

Weak Evaluation and Measurement

One of the biggest international challenges is evidence translation.

There is growing qualitative evidence that arts and culture contribute to:

- Mental wellbeing
- Social connectedness
- Climate engagement
- Community resilience

but policymakers often seek:

- Quantifiable outcomes
- Cost-benefit analyses
- Economic return on investment

The evidence base remains less developed than for more traditional adaptation interventions.

Unequal Access

Access to cultural participation is uneven.

Communities most vulnerable to climate impacts are often also those experiencing:

- Deprivation
- Digital exclusion
- Geographic isolation
- Lower cultural participation

This can limit the reach of cultural approaches unless equity is deliberately addressed.

Levelling Up vs Concentration of Cultural Assets

There are significant geographic inequalities in access to:

- Cultural institutions
- Creative opportunities
- Arts funding

Many rural and coastal communities face particular challenges.

Global Climate Narratives vs Local Identity

A changing climate is often communicated through global scientific narratives. Arts and culture tend to work through:

- Local stories
- Community experiences
- Place-based identity

Tension can arise between universal climate messaging and locally meaningful engagement.

Fragmented Funding

Projects often need to navigate multiple systems:

- Arts funding
- Public health funding
- Climate funding
- Community development funding

This can be particularly difficult for smaller organisations.

Evidence Requirements

Funders increasingly require:

- Quantifiable outcomes
- Economic impacts
- Measurable health improvements

Many cultural outcomes remain difficult to capture through traditional evaluation methods.

Capacity Constraints

Many cultural organisations face:

- Workforce shortages
- Rising costs
- Building maintenance challenges
- Reduced public funding

which limits their ability to engage in climate-health work.

Strategic Opportunities

Internationally and nationally, the greatest opportunity lies in reframing arts and culture from being viewed as a discretionary service to being recognised as part of a community's resilience infrastructure.

The emerging evidence suggests that arts and culture contribute directly to outcomes that climate adaptation policies increasingly seek to achieve:

- Better mental health
- Reduced climate anxiety
- Stronger social connectedness
- Community resilience
- Behaviour change
- Civic participation
- Place attachment
- Health equity

The challenge is that policy, funding and governance systems have not yet fully caught up with this evidence. The opportunity for places such as East Sussex is to become early adopters of a more integrated model where climate adaptation, health improvement, social connectedness, community development and cultural participation are treated as mutually reinforcing rather than separate agendas.

Coastal and Rural Adaptation

Many areas facing climate impacts are also places with strong cultural identities.

This creates opportunities to use arts and heritage as tools for:

- Community engagement
- Adaptation planning
- Place-based resilience

Social Prescribing

The growth of social prescribing creates opportunities to connect:

- Arts participation
- Nature-based activities
- Climate resilience
- Mental wellbeing

within preventative health approaches.

Local East Sussex Response to Build From:

East Sussex already has many of the ingredients needed to become a national leader in climate, culture and health:

- Strong cultural infrastructure.
- A growing creative health movement.
- Significant environmental assets.
- Established work on loneliness and social connectedness.
- Community resilience programmes.
- The presence of the South Downs National Park Authority.
- Distinctive coastal and rural communities.

The opportunity is to move beyond seeing arts and culture as an optional enhancement and instead recognise them as a core part of the county's response to the health effects of a changing climate. By doing so, East Sussex can strengthen mental wellbeing, social connectedness, community resilience, place attachment and climate adaptation while simultaneously supporting culture, heritage and community participation.

East Sussex is particularly well placed to use arts and culture as part of a climate-health response because of its strong cultural and environmental assets.

These include:

- The South Downs National Park Authority
- Coastal communities
- Historic towns
- Libraries
- Museums
- Festivals
- Creative industries
- Community arts organisations
- Heritage landscapes

The county already recognises the importance of:

- Social connectedness
- Community resilience
- Prevention
- Wellbeing

- Inclusive growth

Arts and culture provide a practical mechanism for delivering these ambitions.

Opportunities for East Sussex

Creative Climate Resilience

Using arts and culture to help communities:

- Understand climate risks
- Explore local solutions
- Build community preparedness
- Reduce climate anxiety

Health and Social Prescribing

Expanding creative health approaches that support:

- Mental wellbeing
- Loneliness reduction
- Climate-related stress
- Community participation

Nature, Culture and Wellbeing

Connecting cultural activity with:

- Green spaces
- Nature recovery
- Outdoor learning
- Heritage landscapes

This is particularly relevant in areas linked to the South Downs and coastal environments.

For East Sussex, the opportunity is to position arts and culture not simply as cultural services, but as part of the county's wider **climate resilience, health improvement and community wellbeing infrastructure**, alongside public health, nature recovery, economic development and social connectedness.

6. Mental Health and Public Health

High Level Strategic Opportunity:

Build a psychologically resilient society by integrating climate–mental health strategies into education, healthcare, adaptation, and policy—ensuring proactive prevention, equitable support, and community-driven healing in the face of environmental challenges and a changing climate.

Rationale:

A changing climate can affect mental health through direct experiences of extreme weather, flooding, heat, displacement and loss, as well as through wider anxiety, uncertainty, ecological grief and concern about the future. These impacts can affect people of all ages but may be particularly significant for children and young people, people with existing mental health conditions, communities affected by climate-related events and those already experiencing social or economic disadvantage. Integrating climate and mental health strategies across education, healthcare, adaptation planning and community support will help shift responses from crisis management to prevention, strengthen emotional resilience, reduce inequalities, support recovery after climate-related events and enable communities to transform concern into connection, preparedness and collective action.

Considerations, Opportunities and Action Steps

Taking visible action to address the health effects of a changing climate (through the undertaking and delivery of this HIA) is recognised in and of itself as helping to alleviate climate anxiety and climate guilt through process of also working to get control.

Opportunity 1. Develop Climate & Mental Health Literacy - Build resilience through informed education

Action Steps:

- Integrate climate mental health into school health curricula
- Offer psychological coping workshops
- Train educators in trauma-informed climate communication.

Example: UNESCO “Greening Education” initiative with mental wellbeing components.

Opportunity 2. Develop and prepare for early detection and response to climate-related mental health burdens

Action Steps:

- Develop **predictive models** using climate and health data (e.g., extreme heat + psychiatric emergency response (ER) visits).
- Embed **mental health indicators** (e.g., eco-anxiety, trauma) into climate impact assessments.

Opportunity 3. Normalize and treat emerging climate-related psychological conditions and build Psychosocial Resilience

Action Steps:

- Develop eco-anxiety and Climate Distress Clinical Protocols. Create Diagnostic Statistical Manuals -compatible guidelines for eco-anxiety, solastalgia, and climate grief.
- **Train therapists** in climate-aware Cognitive Behavioural Therapy and ecopsychology-informed interventions.
- Develop support groups for frontline workers (firefighters, climate scientists, activists).
- Champion mindfulness, stress-reduction, and sleep resilience programs in schools, workplaces, and clinics.

Opportunity 4. Use climate adaptation as a lever for mental wellbeing

Action Steps:

- Develop Therapeutic Climate Adaptation Programs
- Fund **community-led green recovery programs** (gardening, rewilding, ecological restoration).
- Develop nature-based therapy programs (e.g., forest therapy for disaster survivors).
- Establish urban healing spaces—cool zones, green corridors, water features.

Evidence: Access to green space reduces PTSD risk after climate disasters (Lancet Planetary Health, 2022).

Opportunity 5. Develop Policy Mandates for Psychological Justice

Action Steps:

- Recognize climate mental health as an issue of equity and justice
- Include mental health impact assessments in environmental policy reviews.
- Mandate mental health inclusion in Adaptation Plans (APs) and climate resilience funding.
- Prioritize marginalized communities (indigenous, rural, youth) for targeted mental health services.

Frameworks to align with: IPCC Health Co-Benefits, UN Sustainable Development Goals (Goal 3 - Good Health and Wellbeing, Goal 13 – Climate Action, Goal 10 – Reduced Inequalities).

Opportunity 6. Close Knowledge Gaps with Strategic Investment, Research & Innovation Acceleration

Action Steps:

- Fund interdisciplinary research chairs in climate psychiatry and eco-psychology.
- Create research clusters on mental health impacts of chronic vs acute climate stress.
- Incentivize open-access climate-mental health data repositories.

Need: Most current climate health funding excludes psychological outcomes.

Opportunity 7. Engage tech, design, and media sectors in mental climate resilience through Public-Private Partnerships for Scalable Solutions

Action Steps:

- Partner with app developers to scale climate coping tools (mindfulness, peer support, alerts).

- Co-create with media to produce climate-positive narratives that reduce fatalism and paralysis.

Work with urban planners and architects to design emotionally resilient public spaces.

Example: Calm, Headspace, and climate communication platforms integrating eco-anxiety support.

Context and Impacts:

A changing climate is increasingly recognised as a profound public health challenge, with its impacts extending beyond physical illness to significantly affect mental health and wellbeing. It is affecting mental health through both direct and indirect pathways. Rising temperatures, extreme weather events, and environmental degradation can trigger acute psychological distress during and after disasters, such as floods, wildfires, and heatwaves, while also contributing to chronic conditions like anxiety, trauma, stress, disruption, depression, and post-traumatic stress disorder. Longer-term concerns about a changing climate, often described as eco-anxiety or climate anxiety, solastalgia, and climate grief reflect the emotional toll of witnessing environmental change and anticipating future threats. They are increasingly reported among young people and communities concerned about future environmental change. These mental health impacts are often amplified among vulnerable groups—including children, the elderly, people with pre-existing health conditions, and communities already facing social or economic disadvantage—creating an urgent need for integrated approaches that address both climate resilience and psychological wellbeing.

Climate impacts also exacerbate existing mental health inequalities. Financial pressures associated with rising energy and food costs, disruption to housing and employment, and reduced access to community support networks can contribute to poorer mental wellbeing.

The literature shows that:

- There is a clear relationship between increased temperatures and number of suicides
- There is clear evidence for severe distress following extreme weather events
- People who meet criteria for mental illness are more vulnerable to the effects of climate

change on physical as well as mental health

- The climate crisis threatens to disrupt the provision of care for people with a mental illness diagnosis
- A changing climate exacerbates mental distress, particularly among young people, even for

individuals who are not directly affected (e.g. ‘eco-anxiety’).

These **impacts**:

- Will get worse without meaningful interventions, driving and exacerbating health and

social inequalities which themselves worsen mental health

- Are currently ‘hidden costs’, unaccounted for in policy and planning
- Are likely to be vastly underestimated as despite the serious effects, this has been

a neglected area of research.

Associated **outcomes** include:

- Anxiety.
- Depression.
- Post-traumatic stress disorder (PTSD).
- Grief and ecological loss ("solastalgia").
- Increased stress.
- Reduced wellbeing.

Mental health impacts are often long-lasting and may exceed the duration of physical impacts following climate-related events.

Mental health impacts disproportionately affect:

- Children and young people.
- Older people.
- Low-income communities.
- Those experiencing repeated climate-related events.

Current International and National Response(s):

Mental health is increasingly recognised as one of the most significant, yet historically under-addressed, health impacts of a changing climate. While early climate-health

policy focused primarily on physical health risks such as heatwaves, flooding and infectious diseases, there is growing international consensus that a changing climate poses substantial risks to psychological wellbeing, mental illness, social cohesion and community resilience.

Mental health impacts occur through both **direct pathways** (e.g. experiencing floods, storms, wildfires or heatwaves) and **indirect pathways** (e.g. eco-anxiety, climate grief, displacement, loss of livelihoods, food insecurity and uncertainty about the future). Consequently, international and national responses are increasingly moving beyond disaster recovery towards prevention, resilience-building, community support and climate-informed mental health services.

In the UK, the national context for addressing the health and mental health impacts of a changing climate is shaped by a growing recognition within government, public health agencies, and the NHS that a changing climate is both a health crisis and a health inequality multiplier. The UK Health Security Agency (UKHSA) emphasises heatwave planning, flood response, and air quality alerts, while the NHS Net Zero strategy commits to reducing emissions across healthcare delivery and integrating climate resilience into service planning. National policies, such as the Climate Change Act 2008 and subsequent carbon budgets, provide the legal framework for emissions reductions, and the National Adaptation Programme outlines priorities for protecting people from climate-related health risks.

At the same time, climate adaptation measures can support positive mental health outcomes. Access to green spaces, active travel routes, community resilience initiatives, and opportunities for participation in local climate action have been associated with improved wellbeing, reduced social isolation, and stronger community cohesion.

On mental health, the response is still emerging but gaining momentum. The NHS Long Term Plan and Mental Health Implementation Plan highlight the need for community-based mental health support, which is increasingly being linked to climate-related stressors. Initiatives such as the UKHSA's Climate and Health Observatory and the Met Office–NHS collaboration provide data and early warning systems to protect vulnerable groups. However, while there is growing national guidance on physical health impacts from climate hazards, integrated policy and investment specifically targeting climate-related mental health—such as addressing eco-anxiety, disaster-related trauma, and resilience-building—remains limited. Strengthening cross-government collaboration, embedding climate–mental health risk assessments into adaptation planning, and expanding public mental health services that are climate-informed are emerging priorities in the UK's national response.

There are win-win opportunities (co-benefits) for improving mental health and emotional wellbeing associated with taking actions to reduce greenhouse gas

emissions and adapt to a warming climate. Adaptation opportunities and responses include:

- Strengthening community resilience
- Increasing access to nature
- Trauma-informed climate adaptation
- Climate-aware mental health services
- Social prescribing
- Community-led resilience programmes

The international and UK response is increasingly moving towards five interconnected themes:

- Prevent - Reduce climate risks and future psychological harm.
- Prepare - Strengthen mental health systems and community resilience.
- Protect - Support vulnerable populations and those affected by climate events.
- Adapt - Embed mental health within climate adaptation planning.
- Thrive - Create healthy, connected and resilient communities capable of maintaining wellbeing in a changing climate.

The WHO recognises climate change as a major and growing threat to mental health.

Key Priorities:

1. Integrating Mental Health into Climate Policy

The WHO advocates embedding mental health considerations within:

- Climate adaptation plans.
- National health strategies.
- Emergency preparedness programmes.
- Disaster risk reduction frameworks.

2. Climate-Resilient Mental Health Systems

The WHO promotes:

- Strengthening community mental health services.
- Training health professionals on climate-related mental health impacts.
- Building mental health resilience before disasters occur.
- Supporting vulnerable populations.

3. Community Resilience

The WHO highlights social connectedness, community cohesion and social capital as important protective factors that reduce psychological harm during climate-related events.

WHO COP26 Special Report on Climate Change and Health

The report identifies mental health as one of the priority health impacts requiring greater attention and investment, noting that climate anxiety, trauma and psychological distress are likely to increase as climate impacts worsen.

The annual Lancet Countdown reports consistently identify mental health as an emerging climate-health priority.

Opportunities include:

- Better monitoring of climate-related mental health impacts.
- Increased investment in prevention.
- Integration of climate considerations into mental health services.
- Greater focus on young people and vulnerable populations.

The Countdown highlights increasing levels of climate anxiety among children and young people globally.

Globally, there is growing recognition of:

Eco-Anxiety - Persistent worry about a changing climate and environmental degradation.

Climate Grief - Emotional responses to loss of landscapes, ecosystems and ways of life.

Solastalgia - Distress caused by environmental change occurring within one's home environment.

Community-Based Adaptation - Strengthening:

- Social networks.
- Community resilience.
- Nature-based interventions.
- Peer support programmes.

These approaches increasingly form part of climate adaptation strategies.

There is growing concern about increasing levels of climate-related anxiety among children and young people.

International and UK responses increasingly focus on:

- Climate education.
- Empowerment and participation.
- Youth engagement in climate action.
- Mental health support.

Research suggests that action and involvement can help reduce feelings of helplessness and anxiety.

A major shift internationally is the recognition that strong communities protect mental health during climate-related events.

Interventions increasingly focus on:

- Community hubs.
- Peer support networks.
- Volunteer programmes.
- Intergenerational activities.
- Social prescribing.

These approaches are viewed as critical climate adaptation measures.

Despite growing recognition of the mental health impacts from a changing climate, significant challenges remain:

Evidence Gaps

- Limited long-term studies.
- Limited evaluation of interventions.
- Insufficient local-level data.

Policy Gaps

- Mental health often remains secondary to physical climate risks.
- Limited integration between climate and mental health policy.

Service Capacity

- Existing mental health services are already under pressure.
- Limited climate-specific training for professionals.

Mental health impacts disproportionately affect:

- Children and young people.
- Older people.
- Low-income communities.
- Those experiencing repeated climate-related events.

Local East Sussex Response to Build From:

East Sussex Schools have Climate Change Action Plans: East Sussex schools create local Climate Action Plans aligned with the Department for Education's sustainability framework. These plans target four core pillars: decarbonization, adaptation and resilience, biodiversity, and climate education/green careers. They are supported by the East Sussex Climate Change Charter for Education Settings.

The East Sussex response to the mental health impacts of a changing climate is currently emerging rather than being delivered through a single dedicated "climate and mental health strategy." Instead, it is being addressed through a combination of climate adaptation planning, public health approaches, healthy places work, community resilience programmes, mental health strategies, social connectedness initiatives and wider determinants of health interventions.

East Sussex has developed an innovative Planning for Health, Wellbeing and Sustainability Framework and associated tools that embed health and wellbeing considerations within planning policy and decision-making.

The framework explicitly recognises the links between:

- Climate adaptation
- Natural environments
- Green and blue spaces
- Physical activity
- Mental wellbeing
- Community resilience

and highlights the role of planning in creating climate-resilient places that support both physical and mental health.

The framework promotes mental health benefits via:

- Access to nature
- Quality green spaces
- Walkable neighbourhoods
- Climate-resilient communities
- Reduced social isolation

all of which are protective against climate-related psychological distress.

These interventions deliver multiple co-benefits:

- Reduced carbon emissions
- Improved mental health
- Increased physical activity
- Stronger social connections
- Enhanced climate resilience

Although significant progress has been made, several **gaps** remain.

Climate-Specific Mental Health Planning - There is currently no dedicated:

- Climate and mental health strategy
- Climate anxiety action plan
- Climate-informed mental health pathway

for East Sussex.

Climate Anxiety and Young People - Limited local work has explicitly focused on:

- Eco-anxiety
- Climate grief
- Young people's concerns about a changing climate

despite increasing evidence that these are growing public health issues.

Climate-Informed Mental Health Services - There is limited evidence of:

- Climate-related mental health training
- Climate-informed psychological support
- Climate-health mental health assessments

being systematically embedded across services.

Monitoring and Data - There is limited local data on:

- Climate-related mental health impacts
- Community resilience indicators
- Social connectedness metrics
- Climate anxiety prevalence

Building on existing strengths, East Sussex could become a national leader by:

1. Developing a Climate and Mental Health Framework

Integrating into a single programme:

- Adaptation
- Prevention
- Community resilience
- Mental wellbeing

2. Embedding Mental Health into Climate Adaptation

Ensuring all climate adaptation projects consider alongside physical infrastructure

- Psychological resilience
- Social cohesion
- Community wellbeing

3. Developing Climate-Resilient Communities

Through:

- Community hubs
- Cooling and resilience centres
- Social prescribing
- Intergenerational programmes
- Nature-based interventions

4. Monitoring Climate Mental Health Impacts

Including indicators on:

- Social connectedness
- Community resilience
- Wellbeing
- Climate anxiety
- Mental health outcomes

within climate-health monitoring systems.

East Sussex has some of the building blocks needed to address the mental health impacts of a changing climate through its Healthy Places work. The next stage is to explicitly connect existing and new programmes under a climate and health framework that recognises mental wellbeing, social connectedness and community

resilience as essential components of climate adaptation and public health protection.

7. Physical Activity and Public Health

"The best way to get your physical activity is to do it as part of your normal routine. You know, you walk to work or you walk to school or you or cycle to school and get around that way." – East Sussex Stakeholder – Active Travel

High Level Strategic Opportunity:

Create an inclusive, climate-resilient movement ecosystem that ensures safe, equitable, and adaptive opportunities for physical activity across all environments, life stages, and abilities—before, during, and after climate extremes. Ensure everyone can stay active, healthy, and connected in a warming world by building an equitable, climate-resilient movement ecosystem that adapts spaces, guidance, technology, and community support to all abilities and conditions.

Rationale:

Regular physical activity is one of the most important determinants of physical health, mental wellbeing, healthy ageing and resilience, yet a changing climate is increasingly disrupting opportunities to be active through extreme heat, flooding, poor air quality, severe weather and damage to recreational infrastructure and public spaces. These impacts disproportionately affect children and young people, older adults, people with disabilities, those with long-term health conditions and communities experiencing deprivation, potentially widening existing health inequalities. At the same time, active lifestyles and active travel contribute to climate mitigation by reducing carbon emissions, improving air quality and strengthening community resilience. Developing a climate-resilient movement ecosystem through climate-adapted public spaces, inclusive infrastructure, accessible information, flexible activity opportunities, digital innovation and community-led programmes will help maintain safe participation in physical activity throughout the year, protect health and wellbeing, reduce inequalities, strengthen social connectedness and support healthier, more resilient and sustainable communities across East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1. Develop and ensure there is access to safe, inclusive movement environments in a warming world

Action Steps:

- Design universal access active spaces that are climate-adaptive (shaded, cooled, storm-resilient).
- Install adaptive equipment in parks and public gyms (e.g., wheelchair-accessible outdoor gyms, low-impact paths).

Example: Tokyo's "Green and Accessible Parks" initiative combining heat mitigation and disability inclusion.

Opportunity 2. Enable safe activity during climate extremes through Heat-Aware Physical Activity Guidelines & Alerts

Action Steps:

- Develop personalized, adaptive physical activity guidelines based on temperature, humidity, and individual risk factors.
- Launch smart alert systems (apps, wearables, SMS) for high-heat exposure risk tied to suggested activity modifications.
- Include low-intensity alternatives (e.g., indoor tai chi, aquatic therapy, home stretching) in public health campaigns.

Opportunity 3. Decentralize access to movement and recovery spaces through Neighbourhood-Based Movement Hubs with Climate Resilience Functions

Action Steps:

- Establish climate-controlled community activity centres in underserved and vulnerable areas.
- Co-locate exercise, hydration, cooling, and health monitoring services during extreme weather events.
- Integrate resilience infrastructure (e.g., solar power, passive cooling) to ensure continuity of use during grid stress.

Example: Barcelona's climate shelters now include accessible exercise areas for seniors.

Opportunity 4. Integrate climate and mobility risk into clinical care through Climate-Informed Physical Activity Prescription (PAP) in Healthcare

Action Steps:

- Train clinicians to prescribe safe, adaptable physical activity plans based on local climate forecasts.
- Include indoor physical activity options and portable equipment loans (e.g., resistance bands, pedal bikes).
- Connect prescriptions to local climate-smart activity programs (e.g., early morning walking groups during heat).

Model: Sweden's PAP (Physical Activity on Prescription) model could be adapted for climate contexts.

Opportunity 5. Address psychological and motivational barriers to staying active through Behavioural Support for Climate-Disrupted Movement Routines

Action Steps:

- Create digital and group-based coaching programs focused on habit formation in changing climates.
- Address climate-related anxiety and fatigue that reduce motivation to engage in physical activity.
- Offer tele-exercise and virtual community movement spaces as alternatives during extreme events or displacement.

Example: Community-based Zoom movement classes launched during wildfires in California for respiratory-vulnerable groups.

Opportunity 6. Identify and address populations at risk of physical inactivity due to climate by Monitoring and Mapping Movement Vulnerability

Action Steps:

- Map inactivity deserts overlapping with climate vulnerability zones (heat, flooding, pollution).
- Use wearables and mobility trackers to assess declines in movement during extreme climate events.
- Integrate climate-activity risk indices into public health surveillance systems.

Tools: Link GIS data on green space, air quality, walkability, and heat exposure with demographic data.

Opportunity 7. Support those with limited mobility to remain active during climate disruption through Assistive Technology & Adaptive Active Mobility Innovation

Action Steps:

- Fund climate-adaptive mobility aids (e.g., ventilated wheelchairs, solar-charged scooters).
- Design modular, weather-resilient active mobility aids for urban and rural users.
- Provide public subsidies for accessible e-assist bicycles or trikes with climate protection features.

Model: German federal programs support e-bike access for seniors and those with limited mobility.

Opportunity 8. Equip professionals and communities with practical tools through Education and Capacity Building in Climate-Safe Physical Activity

Action Steps:

- Develop training modules for fitness professionals, physical therapists, and recreation staff on climate-safe movement.

- Include climate risk adaptation in national physical education curriculums.
- Empower peer-led programs in high-risk communities to model safe physical activity practices.

Example: WHO's HEPA (Health Enhancing Physical Activity) toolkit could be expanded for climate factors.

Opportunity 9. Ensure climate and movement interventions close—not widen—inequality gaps through development and implementation of Equity-Centred Policy and Investment Frameworks

Action Steps:

- Require inclusivity audits in climate action plans to ensure infrastructure supports people with limited mobility.
- Tie public health and climate funds to universal design compliance in recreational and active transport projects.
- Incentivize active living grants for marginalized groups facing climate-related movement barriers (e.g., seniors in heat-prone urban housing).

Alignment: With Sustainable Development Goals 3 (Health), SDG 11 (Sustainable Cities), and UNCRPD (Rights of Persons with Disabilities).

Context and Impacts:

Physical activity is one of the most important determinants of health and wellbeing and is strongly influenced by climate and environmental conditions. Physical activity plays a critical role in preventing non-communicable diseases, improving mental health, reducing health inequalities and increasing resilience across the life course. Within the context of a changing climate, physical activity is both affected by a changing climate and part of the solution for addressing its health impacts.

Physical activity is increasingly recognised internationally and nationally as one of the most effective **climate-health co-benefit interventions**. Unlike many climate adaptation measures that focus solely on reducing risks, physical activity simultaneously delivers benefits for health, wellbeing, climate mitigation, adaptation, social connectedness and health equity.

There is growing recognition that physical inactivity and a changing climate share many of the same underlying causes, including car dependency, unsustainable urban development, poor air quality, inequitable access to green space and inactive

lifestyles. Consequently, physical activity is increasingly embedded within climate adaptation, active travel, healthy places, sustainable development and public health policies.

A changing climate can both hinder and promote physical activity depending on how communities adapt. Traditionally, physical activity has been viewed primarily as a public health intervention. However, there is growing recognition that physical activity is also a climate adaptation and resilience strategy. Well-designed environments that support safe and accessible physical activity can simultaneously improve population health, strengthen community resilience, reduce vulnerability to climate-related health risks and contribute to climate mitigation objectives.

Physical inactivity is a major risk factor for poor health, contributing to cardiovascular disease, diabetes, obesity, some cancers, and poor mental health. Climate-sensitive environments can either support or hinder opportunities for physical activity.

Extreme heat, poor air quality, flooding, and severe weather can reduce people's ability to exercise outdoors and participate in recreation. Vulnerable groups, including older adults, children, and people with long-term health conditions, may be particularly affected.

However, many climate mitigation measures can simultaneously promote physical activity. Investment in walkable neighbourhoods, cycling infrastructure, green spaces, and active travel networks can support healthier lifestyles while reducing greenhouse gas emissions and improving air quality. These measures offer significant opportunities to improve both physical and mental health across the population.

A changing climate is reshaping the conditions in which people can safely and regularly engage in physical activity, with rising temperatures, extreme weather events, and deteriorating air quality posing direct risks to health and limiting opportunities for active living. Heatwaves increase the risk of heat exhaustion, dehydration, and cardiovascular strain during outdoor exercise, while flooding, storms, and poor air quality can deter walking, cycling, and other forms of active travel. These impacts are particularly concerning for vulnerable groups such as children, older adults, people with disabilities, and those in areas with limited access to safe, climate-adapted spaces.

Adaptation opportunities include investment in the following which can increase physical activity while reducing heat exposure:

- Climate-resilient parks.
- Shaded walking routes.
- Green infrastructure.
- Urban greening.

- Active travel networks.

Current International and National Response(s):

The international and national response has evolved from viewing physical activity purely as a health issue to recognising it as a **whole-system climate adaptation and resilience strategy**. Internationally and nationally, physical activity is increasingly recognised as one of the most effective interventions for addressing the health effects of a changing climate. It delivers multiple co-benefits by improving physical and mental health, reducing emissions, strengthening community resilience and reducing health inequalities. The policy direction of travel is towards integrating physical activity, active travel, healthy places, climate adaptation and public health within a single whole-system approach. As climate impacts intensify, creating environments that enable safe, accessible and climate-resilient physical activity will become an increasingly important component of both climate adaptation and population health strategies.

The World Health Organization (WHO), Intergovernmental Panel on Climate Change (IPCC), UK Health Security Agency (UKHSA) and Lancet Countdown all identify physical activity as a key climate-health co-benefit and an important component of healthy, climate-resilient communities.

The WHO places physical activity at the centre of efforts to create healthier, more sustainable and climate-resilient societies.

WHO Global Action Plan on Physical Activity (GAPPA) 2018–2030

The plan promotes:

- Active societies.
- Active environments.
- Active people.
- Active systems.

The WHO explicitly recognises that physical activity contributes to:

Climate Mitigation

- Reduced vehicle use.
- Lower greenhouse gas emissions.
- Improved air quality.

Climate Adaptation

- Improved population health resilience.
- Stronger communities.
- Better mental wellbeing.

The WHO states that investment in walking, cycling and active environments can simultaneously address climate change, air pollution and non-communicable diseases. This is also communicated in the COP26 special report on climate change and health: the health argument for climate action . The report identifies active travel and physical activity as one of the most important climate-health interventions available to governments.

Opportunities include:

Healthy Urban Design

Creating:

- Walkable communities.
- Green infrastructure.
- Safe cycling networks.
- Accessible public transport.

Co-Benefits Approach

Delivering:

- Reduced emissions.
- Improved health outcomes.
- Increased physical activity.
- Reduced health inequalities.

The report highlights active travel as a "win-win" solution for both climate and health.

These principles are echoes by the IPCC — Intergovernmental Panel on Climate Change, the Lancet Countdown: Tracking Progress on Health and Climate Change and the 17 GOALS | Sustainable Development

In the UK, the national response is evolving, with strategies like Active Travel England, Sport England's Uniting the Movement, and the Department for Transport's Gear Change policy aiming to expand active travel networks, improve infrastructure, and promote safe, inclusive participation. The UKHSA guidance on heat, air quality, and

cold weather also provides frameworks for adapting activity to climate risks, while local authorities are increasingly incorporating shade provision, green space improvements, and extreme weather planning into sport and recreation strategies. However, a coordinated, climate-specific approach to safeguarding and promoting physical activity—linking health, transport, urban planning, and sport sectors—remains an area for further development.

Sport England research indicates that three in five adults feel that extreme weather has negatively affected their ability to be physically active. The sector is also facing challenges related to sustainability, with many organizations citing lack of funding as a barrier to addressing environmental issues.

A total of £45m will be used “to help more people get active in nature, restore flooded sports pitches and help sports clubs become sustainable”.

Major sports governing bodies will also be required to tackle climate change through “robust sustainability action plans” by 2027 in order to receive public funding.

By 2070, winters in the UK will be up to 30% wetter than they were in 1990 and that rainfall will be up to 25% more intense.

The most violent downpours in summer - more than 30mm of rainfall in an hour - are expected to occur twice as often as they used to.

Sport England’s research found that:

- Four in 10 organisations are being affected by weather-related interruptions to play already.
- Three in five people say climate change is negatively impacting sport and physical activity.
- Eight in 10 people want their organisations to be ambitious on environmental sustainability.
- More than half of organisations (55%) see a lack of funding as the greatest barrier to acting on environmental sustainability.

Sport England’s 'Every Move' Sustainability Strategy will require 130 partners, including national governing bodies, to have sustainability plans in place “as a condition of their funding”, as well as reducing its own carbon emissions by 50% by 2030 and achieving net zero by 2040.

The UKHSA increasingly recognises physical activity as part of climate adaptation and health resilience. UKHSA identifies opportunities to:

- Build resilience through healthy behaviours.
- Reduce vulnerability to climate-related illness.

- Improve population health.

Physical activity contributes to:

- Better cardiovascular health.
- Improved mental wellbeing.
- Increased resilience to climate-related stressors.

The Office for Health Improvement and Disparities OHID promotes physical activity through:

Prevention Programmes

Reducing:

- Obesity.
- Cardiovascular disease.
- Diabetes

Health Equity

Improving access to:

- Green spaces.
- Active travel.
- Community physical activity opportunities.

Many of these interventions simultaneously support climate adaptation goals.

NHS England's - NHS Long Term Plan

Promotes:

- Prevention.
- Population health.
- Physical activity.
- Community wellbeing.

NHS Green Plan

Recognises that:

- Active travel reduces emissions.

- Physical activity improves health outcomes.
- Sustainable transport supports healthier communities.

The NHS increasingly views physical activity as part of climate-smart healthcare and prevention.

The Third National Adaptation Programme (NAP3) identifies the importance of:

Healthy Places

Supporting:

- Walkable communities.
- Access to green spaces.
- Climate-resilient environments.

Community Resilience

Physical activity contributes to:

- Healthier populations.
- Improved wellbeing.
- Reduced vulnerability.

Although physical activity is not always discussed explicitly, many adaptation measures support active lifestyles.

The Department for Transport's - Gear Change Strategy

England's national cycling and walking strategy aims to:

- Increase walking and cycling.
- Improve health outcomes.
- Reduce transport emissions.
- Improve air quality.

The strategy is increasingly framed as both a climate and public health intervention.

Local East Sussex Response to Build From:

East Sussex does not currently have a standalone a changing climate and physical activity strategy. However, physical activity is increasingly embedded across the

county's work on Healthy Places, Planning for Health, Active Travel, Health and Wellbeing, Climate Adaptation, Community Resilience and Health Inequalities.

The local response reflects a growing recognition that physical activity is not only a public health intervention but also an important climate adaptation and resilience measure. Much of the work underway in East Sussex aligns strongly with international and national best practice, particularly around creating healthy, active and climate-resilient communities.

One of the strongest local responses is through East Sussex's Planning for Health, Wellbeing and Sustainability Framework **and Toolkit**, which promotes the creation of environments that support active lifestyles, wellbeing and resilience.

The Framework highlights the importance of:

- Walkable neighbourhoods.
- Cycling infrastructure.
- Access to green and blue spaces.
- Healthy urban design.
- Sustainable transport.
- Climate-resilient places.

The Framework recognises that planning decisions can influence:

Physical Activity

Through:

- Safe walking routes.
- Cycling networks.
- Access to recreation.
- Active communities.

Climate Adaptation

Through:

- Urban cooling.
- Green infrastructure.
- Climate-resilient public spaces.
- Reduced car dependency.

This represents a practical application of a Health in All Policies approach to climate and health.

In addition to the wider Healthy Places, Active Travel and Health and Wellbeing work underway across East Sussex, one of the strongest examples of integrating physical activity, climate change and health is the adoption of the East Sussex Local Transport Plan 4 (LTP4) 2024–2050 and the accompanying LTP4 Health Impact Assessment (HIA). Together, these represent a significant step towards embedding climate and health considerations within transport policy and planning.

LTP4 sets out a long-term vision for an inclusive, decarbonised, resilient and healthy transport system that supports communities, businesses and the environment. The plan explicitly links transport, climate change, health, wellbeing and sustainability, with objectives to:

- Develop healthy places that enable people to live well.
- Decarbonise transport and support net zero.
- Enable safer and more accessible journeys.
- Strengthen resilience to a changing climate.
- Support equitable and sustainable economic development.

Importantly, one of the six core objectives is to "Support Healthier Lifestyles and Communities", recognising transport as a major determinant of health. The plan seeks to:

- Increase walking, wheeling and cycling.
- Increase public transport use.
- Improve access to green space and recreational opportunities.
- Improve air quality through reduced emissions.
- Redesign road space to support healthier travel choices.
- Deliver behaviour change programmes that encourage active travel.

The LTP4 HIA is particularly noteworthy because it systematically assessed the health implications of transport policy across a range of health determinants, including:

- Lifestyle and physical activity.
- Access and accessibility.
- Community severance.
- Economic health.
- Safety.
- Air quality.
- Noise.

- Congestion and stress.

The HIA concluded that many of the transport interventions proposed within LTP4 are likely to have significant beneficial health impacts, particularly through increasing active travel and improving accessibility. It identified strong links between transport, physical activity, mental wellbeing, social connectedness and access to services.

While often framed as a transport strategy, LTP4 also contributes directly to climate adaptation by:

- Reducing reliance on private vehicles.
- Improving air quality.
- Supporting access to green spaces.
- Enhancing community connectivity.
- Promoting resilient and sustainable transport networks.
- Encouraging active and low-carbon travel.

This aligns closely with international evidence that active travel and physical activity are among the most effective climate-health interventions available.

Taken together, East Sussex's response goes beyond traditional physical activity promotion. Through the Planning for Health Framework, Healthy Places work, Active Travel programmes, LTP4 and its Health Impact Assessment, East Sussex has developed a strong foundation for integrating:

Physical Activity + Active Travel + Climate Adaptation + Health Improvement + Health Equity

into a single whole-system approach.

Current Gaps and Challenges

Despite significant strengths, several opportunities remain.

1. **Climate-Specific Physical Activity Planning** - Physical activity is not yet explicitly framed as a climate adaptation intervention within many local strategies.

2. **Heat-Resilient Activity Infrastructure** - Further work may be required to develop:

- Shaded walking routes.
- Cooling corridors.
- Climate-responsive public spaces.

3. **Climate and Physical Activity Monitoring** - There is currently limited local monitoring of:

- How a changing climate affects physical activity levels.
- Climate-related barriers to exercise.
- Health resilience outcomes.

4. **Cross-Sector Integration** - Opportunities exist to strengthen links between:

- Climate adaptation.
- Active travel.
- Public health.
- Planning.
- Transport.
- Green infrastructure.

Key Local Opportunity

The next stage is to make this connection more explicit by positioning physical activity and active travel not simply as health promotion activities, but as core components of East Sussex's Climate and Health Adaptation Response.

This would help frame walking, wheeling, cycling, green infrastructure, healthy places and community connectivity as interventions that:

- Improve population health.
- Reduce health inequalities.
- Strengthen resilience to climate impacts.
- Support decarbonisation.
- Deliver wider social, economic and environmental co-benefits.

Building on existing strengths, East Sussex could further strengthen its response by:

1. Embedding Physical Activity Within Climate Adaptation - Recognising physical activity as a formal adaptation and resilience intervention.

2. Recognising physical activity as a formal adaptation and resilience intervention.

3. Developing Climate-Resilient Active Environments - Including:

Including:

- Shaded routes.
- Cooling spaces.

- Heat-resilient parks.
- Flood-resilient active travel networks.

4. Expanding Green and Blue Infrastructure

Supporting:

- Recreation.
- Mental wellbeing.
- Physical activity.
- Climate resilience.

5. Integrating Climate and Health Assessments

Using Health Impact Assessments and Planning for Health tools to evaluate:

- Physical activity opportunities.
- Active travel access.
- Climate resilience benefits.

6. Developing Climate and Health Indicators

Monitoring:

- Physical activity.
- Active travel.
- Climate vulnerability.
- Health outcomes.
- Community resilience.

East Sussex's response focuses on creating healthy, active and resilient places through planning, active travel, green infrastructure and community wellbeing programmes. The key opportunity now is to explicitly integrate physical activity into climate adaptation and climate-health strategies, recognising it as both a public health intervention and a critical tool for building resilience to the health effects of a changing climate.

8. Climate-Responsive Sleep, Recovery Environments and Public Health

High Level Strategic Opportunity:

Safeguard sleep health in a warming world by combining climate-adaptive housing design, resilient cooling solutions, and public education to reduce heat and environmental stress impacts on rest and recovery.

Rationale:

Sleep is a fundamental determinant of physical health, mental wellbeing, cognitive function and resilience, yet it is increasingly threatened by a changing climate. Rising night-time temperatures, poor indoor environmental quality, noise, humidity and other climate-related stressors can disrupt sleep, increasing the risk of cardiovascular disease, respiratory illness, mental ill health, reduced productivity, impaired learning and accidents. These impacts are particularly significant for older adults, young children, people with long-term health conditions, shift workers and those living in poorly insulated or overcrowded housing, potentially widening existing health inequalities. As warmer nights become more frequent, protecting sleep health will become an increasingly important public health and climate adaptation priority. Embedding sleep considerations into housing design, retrofit programmes, urban planning, healthcare advice and public awareness initiatives will help reduce heat-related health impacts, improve recovery and wellbeing, strengthen resilience and support healthier, more climate-ready communities across East Sussex.

Considerations, Opportunities and Action Steps

Opportunity 1. Protect sleep health under rising nighttime temperatures and environmental stressors

Action Steps:

- Implement passive cooling design standards (ventilation, insulation, green roofing) for homes and apartments.
- Deploy resilient energy solutions (e.g., solar-powered cooling) for heat-vulnerable populations.

- Raise public awareness on sleep hygiene in high-heat conditions, noise pollution, and disaster recovery settings.

Data: High nighttime temperatures are linked to lower sleep quality and increased cardiovascular stress.

Context and Impacts:

Strategic Summary

Theme	Key Issue
Gap	Sleep remains largely absent from climate-health policy despite growing evidence of climate-related sleep disruption.
Tension	Balancing energy efficiency, overheating prevention and net-zero objectives.
Barrier	Ageing housing stock, fragmented governance and limited awareness of sleep as a climate-health issue.
Opportunity	Embed climate-responsive sleep and recovery environments into housing, planning, healthcare and adaptation policy.

Sleep is increasingly recognised as a critical, yet often overlooked, determinant of health within the climate and health agenda. While considerable attention has focused on heatwaves, flooding, air pollution and infectious diseases, there is growing evidence that a changing climate is already affecting sleep quality, sleep duration and physiological recovery, with important implications for physical health, mental wellbeing, productivity, healthcare demand and resilience.

Sleep is essential for:

- Physical recovery.
- Cognitive function.
- Mental wellbeing.
- Immune function.
- Cardiovascular health.
- Metabolic regulation.
- Emotional resilience.

A changing climate affects sleep through rising temperatures, increased night-time heat, humidity, extreme weather events, poor air quality, noise disruption and climate-related stress. As global temperatures continue to rise, sleep disruption is emerging as one of the most widespread and underappreciated health impacts of a changing climate.

Consequently, there is growing interest in creating **Climate-Responsive Sleep and Recovery Environments**—homes, buildings, communities and healthcare settings that support restorative sleep and recovery despite changing climatic conditions.

Climate-responsive sleep and recovery environments represent an emerging frontier within climate and health policy. While often overlooked, sleep disruption may become one of the most widespread health impacts of a changing climate as temperatures continue to rise. Protecting sleep through climate-resilient housing, healthy places, green infrastructure and overheating prevention can deliver significant benefits for physical health, mental wellbeing, productivity and resilience.

Sleep underpins almost every aspect of health.

Poor sleep is associated with increased risks of:

Physical Health Conditions

- Cardiovascular disease.
- Hypertension.
- Stroke.
- Obesity.
- Type 2 diabetes.
- Reduced immune function.

Mental Health Conditions

- Anxiety.
- Depression.
- Psychological distress.
- Reduced emotional regulation.

Cognitive and Social Impacts

- Reduced concentration.
- Poor decision-making.
- Lower workplace productivity.

- Increased accident risk.

Sleep therefore plays a fundamental role in individual and population resilience to climate-related stressors.

Rising Night-Time Temperatures and Heatwaves

Increasing night-time temperatures reduce the body's ability to cool and recover after daytime heat exposure. Research shows that higher temperatures are associated with:

- Reduced sleep quality and duration.
- Increased night waking.
- Disruption to deep and REM sleep.
- Reduced physical and mental recovery.

The greatest risks occur during prolonged heatwaves when buildings retain heat overnight, preventing restorative sleep.

Air Quality and Respiratory Impacts

A changing climate contributes to:

- Longer pollen seasons.
- Increased ozone concentrations.
- Wildfire smoke.
- Air pollution episodes.

These factors can worsen asthma, allergies and respiratory symptoms, leading to poorer sleep quality and increased sleep disturbance.

Extreme Weather and Psychological Stress

Flooding, storms and other extreme weather events can disrupt sleep through:

- Noise and environmental disturbance.
- Housing damage and displacement.
- Anxiety, uncertainty and stress.

Sleep problems may persist long after the event itself, contributing to longer-term mental health impacts.

Climate Anxiety

Growing concern about a changing climate is associated with:

- Worry and stress.
- Eco-anxiety.
- Rumination and uncertainty about the future.

These psychological impacts can contribute to insomnia and poor sleep quality, particularly among children and young people.

Vulnerable Populations

Certain groups are disproportionately affected by climate-related sleep disruption, including:

- **Older adults**, due to reduced ability to regulate body temperature.
- **Children and young people**, where poor sleep can affect learning, development and mental wellbeing.
- People with chronic physical or mental health conditions, whose symptoms may worsen with sleep disruption.
- **Low-income households**, who are more likely to live in homes prone to overheating and with limited cooling or ventilation options.

This creates important climate and health inequalities.

Climate-Responsive Sleep and Recovery Environments

Climate-responsive environments aim to maintain healthy conditions for sleep, recovery and wellbeing despite changing climatic conditions.

Climate-Responsive Housing

Adaptation measures include:

- Passive cooling (shading, shutters, solar-control glazing).
- Improved ventilation and night-time cooling.
- Heat-resilient building design.
- Green roofs and walls.
- Urban greening to reduce heat island effects.

These measures improve thermal comfort and support healthy sleep.

Healthcare and Care Settings

Hospitals and care homes are particularly vulnerable to overheating. High indoor temperatures can:

- Affect patient recovery.
- Disrupt sleep.
- Reduce medication effectiveness.
- Increase health risks for vulnerable patients.

Climate-resilient healthcare design increasingly focuses on thermal comfort, ventilation and overheating prevention.

Recovery Environments

Access to restorative environments can support sleep and wellbeing:

- **Green spaces** improve sleep quality, reduce stress and enhance wellbeing.
- **Blue spaces** (coasts, rivers and lakes) promote relaxation and mental restoration.
- **Quiet, safe neighbourhoods** reduce environmental stressors and support healthy sleep.

Improving sleep and recovery environments is an important climate adaptation strategy because it reduces vulnerability, improves resilience, protects vulnerable populations and reduces health and social care demand.

Current International and National Response(s):

Despite growing evidence that a changing climate is affecting sleep through rising temperatures, heatwaves, poor air quality, extreme weather and climate anxiety, sleep remains one of the least recognised and least developed areas within climate and health policy. Most climate-health responses continue to focus on heat mortality, flooding, infectious diseases and infrastructure resilience, with relatively limited attention given to sleep as a determinant of health, resilience and adaptation.

However, there is increasing recognition internationally and nationally that overheating, thermal comfort, housing quality and recovery environments are critical public health and climate adaptation issues.

The World Health Organization (WHO) recognises thermal comfort, healthy housing and climate-resilient environments as important determinants of health. Through its

climate adaptation and health programmes, the WHO promotes climate-resilient housing, healthy urban design, heat-health action plans, protection of vulnerable populations and climate-resilient healthcare facilities. While sleep is rarely addressed directly, these measures help reduce overheating and improve indoor environmental quality, supporting healthy sleep, recovery and wellbeing.

Intergovernmental Panel on Climate Change (IPCC)

The IPCC identifies rising temperatures, increasing heat stress, urban overheating and growing risks to vulnerable populations as major climate-related health challenges. It advocates climate-resilient buildings, urban greening, nature-based solutions and cooling interventions, all of which can help create healthier sleep and recovery environments by reducing exposure to excessive heat.

United Nations (UN)

Through the Sustainable Development Goals (SDGs), the UN promotes healthy housing, sustainable cities, climate adaptation and wellbeing. These agendas support the development of climate-responsive living environments that improve thermal comfort, health, resilience and sleep quality.

Global Heat-Health Initiatives

International adaptation efforts increasingly focus on:

- **Heat Action Plans** (cooling centres, public health alerts and heat-health communications).
- **Healthy Buildings** (passive cooling, building adaptation and overheating prevention).
- **Urban Cooling Measures** (urban trees, green infrastructure and climate-resilient neighbourhoods).

Although primarily designed to reduce heat-related illness and mortality, these interventions also support healthy sleep, recovery and resilience in a warming climate.

While sleep is not yet a major focus of international climate-health policy, many existing adaptation measures—particularly those addressing overheating, housing quality, urban cooling and heat-health resilience—indirectly support sleep, recovery and wellbeing, highlighting an emerging opportunity to explicitly incorporate sleep into climate and health strategies.

The UK is increasingly recognising overheating and rising temperatures as significant public health and climate adaptation challenges, although sleep is rarely addressed explicitly within policy.

Key National Responses

UK Health Security Agency (UKHSA)

- The Adverse Weather and Health Plan highlights risks from night-time overheating, indoor temperatures and heat vulnerability, particularly for older people and care home residents.
- The Heat-Health Alert System provides early warnings, public advice and targeted support for vulnerable groups, including guidance on keeping homes cool and promoting overnight recovery.

National Adaptation Programme (NAP3)

- Recognises overheating risks across homes, schools, hospitals and care settings.
- Promotes climate-resilient buildings, housing adaptation and urban cooling measures that indirectly support sleep, recovery and wellbeing.

Climate Change Committee (CCC)

- Identifies overheating as one of the UK's most significant climate adaptation risks.
- Highlights concern around rising indoor temperatures, vulnerable housing stock, inadequate building standards and healthcare infrastructure resilience.

NHS England

- Through the NHS Green Plan and healthcare estate programmes, increasing attention is being given to overheating risks, patient recovery, thermal comfort and climate-resilient healthcare facilities.
- New healthcare infrastructure increasingly incorporates ventilation, passive cooling and resilience measures.

Building and Planning Policy

- Building Regulations Part O seeks to reduce overheating risks in new homes through improved ventilation, solar gain control and thermal comfort measures.
- Planning policy increasingly promotes urban cooling, green infrastructure and climate adaptation, all of which contribute to healthier sleep environments.

Key Gaps

- Sleep remains largely absent from climate-health policy and adaptation frameworks.
- Limited evidence exists on long-term climate-related sleep impacts and adaptation effectiveness.
- Few local authorities monitor sleep quality, overheating impacts or climate-related sleep disruption.
- Most adaptation plans focus on heat mortality, flooding and infrastructure rather than sleep, recovery and thermal comfort.
- Limited integration between health, housing and planning policy despite strong links to sleep outcomes.

Key Tensions

- Energy Efficiency vs Overheating - Efforts to improve energy efficiency and retain heat in winter can inadvertently increase overheating risks during summer if not carefully designed.
- Cooling vs Net Zero - Increased demand for air conditioning can reduce heat risks but may increase energy use, emissions and inequalities, creating tension between adaptation and mitigation goals.
- Individual vs System Responsibility - Current guidance often focuses on personal actions (e.g. hydration and ventilation) rather than addressing wider structural issues such as housing quality, urban design and environmental conditions.

Key Barriers

- Much of the UK's housing stock was designed for cold winters rather than hot summers and is vulnerable to overheating.
- Retrofitting homes, hospitals and care settings requires substantial investment.
- Responsibility for delivery is fragmented across health, housing, planning, climate and building regulation sectors.
- Public awareness of sleep as a climate-health issue remains low, limiting political attention and action.

Key Opportunities

- **Elevate Sleep as a Climate-Health Priority -** Recognise sleep as a health outcome, resilience factor and adaptation opportunity within climate and health strategies.
- Invest in Climate-Responsive Housing - Promote passive cooling, ventilation, shading, green roofs and heat-resilient building design.
- Create Healthy Places - Use planning policy to deliver urban greening, reduced heat islands, quieter neighbourhoods and climate-responsive design that supports sleep and recovery.
- Adapt Healthcare Settings - Develop hospitals and care homes as exemplars of thermal comfort, overheating prevention and recovery-focused environments.
- Expand Nature-Based Solutions - Increase investment in trees, parks, blue spaces and green infrastructure to provide urban cooling, improve wellbeing and support healthier sleep while delivering wider climate and biodiversity benefits.

Local East Sussex Response to Build From:

East Sussex does not currently have a specific response focused on climate-responsive sleep and recovery environments. There is currently no dedicated East Sussex strategy, policy or programme specifically focused on climate-responsive sleep and recovery environments. However, many of the foundations for addressing climate-related sleep impacts already exist across climate adaptation, healthy places, housing, planning, public health and health and wellbeing work.

East Sussex reflects many of the national gaps:

- No explicit recognition of sleep within climate and health planning.

- No local assessment of climate-related sleep disruption.
- Limited consideration of overheating impacts on sleep and recovery.
- Limited data on vulnerable populations most at risk from climate-related sleep impacts.
- Sleep is not routinely considered within Health Impact Assessments, adaptation plans or climate risk assessments.

Sleep and recovery should be recognised as emerging climate-health outcomes. By integrating thermal comfort, overheating prevention, healthy housing, green infrastructure and recovery-focused environments into planning and adaptation policies, East Sussex can strengthen population resilience, reduce inequalities and better prepare communities for a warming climate.

The **key opportunity** is to explicitly recognise sleep and recovery as climate-health issues and integrate them into future climate adaptation, Healthy Places and Health Impact Assessment work. This can be done through:

1. Planning for Healthy and Sustainable Places - Embed thermal comfort, overheating prevention, quiet environments and recovery-focused design within planning policy and Health Impact Assessments.
2. Climate and Health Adaptation - Include sleep and recovery environments within future Climate and Health Impact Assessments, adaptation plans and heatwave preparedness strategies.
3. Housing and Retrofit - Promote passive cooling, improved ventilation, shading and climate-resilient housing design, particularly for vulnerable populations.
4. Healthcare and Care Settings - Assess overheating risks, night-time temperatures and recovery environments within hospitals, care homes and supported housing.
5. Nature-Based Solutions - Expand urban tree cover, green infrastructure and access to green and blue spaces to support cooling, wellbeing and healthier sleep.

9. Social Connectedness Under the Stress of a Changing Climate and Public Health

High Level Strategic Opportunity:

Strengthen community resilience and wellbeing under climate stress by protecting and enhancing social connectedness and community cohesion. This should involve investing in climate-adaptive public spaces that enable safe social interaction during extreme weather, supporting intergenerational and peer-led community networks that

promote physical activity, shared support, and regular wellbeing checks, and leveraging digital tools to maintain communication and mutual aid during climate-related disruptions or disasters. Together, these measures can help reduce social isolation, support mental and physical health, and build stronger, more resilient communities capable of responding collectively to climate-related challenges.

Rationale:

Social connectedness and community cohesion are fundamental determinants of health and resilience, influencing how individuals and communities prepare for, respond to and recover from climate-related events. Strong social networks reduce loneliness and social isolation, improve mental and physical wellbeing, facilitate the sharing of information and resources, and enable communities to provide mutual support during periods of disruption. A changing climate can weaken these protective factors by limiting opportunities for social interaction through extreme weather, damaging community infrastructure and increasing displacement and inequality. Conversely, communities with high levels of trust, participation and social capital are better able to cope with and recover from climate-related shocks. Investing in climate-adapted public spaces, inclusive community networks, intergenerational programmes, digital connectivity and community-led resilience initiatives will strengthen social cohesion, reduce inequalities, improve health and wellbeing, and enhance the collective capacity of communities across East Sussex to adapt to a changing climate.

Considerations, Opportunities and Action Steps

Opportunity 1. Embed Social Connectedness in Climate Policy

Action Steps:

- Recognise social cohesion as a core determinant of resilience
- Invest in community networks, social prescribing, and local support systems

Opportunity 2. Preserve community cohesion and belonging in disrupted environments through Social Connectedness Under Climate Stress

Action Steps:

- Create **climate-adaptive public spaces** that foster gathering during extreme weather (e.g., shaded plazas, cooling centres with social programming).
- Support **intergenerational and peer-based networks** for physical activity, shared meals, and wellness checks.

Leverage **digital tools** to maintain social ties during disasters (virtual support groups, neighbourhood check-in apps).

Opportunity 3. Target Inequalities and Vulnerable Groups

Action Steps:

- Prioritise interventions in high-risk and deprived communities
- Address housing, access to services, and social determinants

Opportunity 4. Invest in Climate-Adaptive Social Infrastructure

Action Steps:

- Develop cooling/warming hubs and resilient community spaces
- Integrate green and shared spaces into urban planning

Opportunity 5. Support Community-Led and Co-Produced Approaches

Action Steps:

- Enable local leadership and participatory decision-making
- Fund grassroots and voluntary sector initiatives

Opportunity 6. Strengthen Digital Inclusion and Communication Systems

Action Steps:

- Expand digital tools for alerts and coordination
- Address digital exclusion to ensure equitable access

Opportunity 7. Deliver Whole-System Governance

Action Steps:

- Align health, planning, housing, and climate policy
- Establish cross-sector partnerships and accountability mechanisms

Opportunity 8. Improve Data, Monitoring, and Evaluation

Action Steps:

- Develop indicators for social resilience and connectedness
- Invest in longitudinal and outcome-based research

Examples of Activities and Outputs:

Activities	Outputs
Develop climate-adaptive public spaces	Increased number of resilient community spaces
Build and support community networks	Strengthened local networks and partnerships
Implement participatory and co-design approaches	Improved access to information and services
Expand digital communication and alert systems	Enhanced community engagement and participation

Deliver targeted interventions for vulnerable groups	Increased number of resilient community spaces
Develop climate-adaptive public spaces	Strengthened local networks and partnerships

Examples of Outcomes:

Short-Term Outcomes	Medium-Term Outcomes	Long-Term Outcomes / Impact
Improved social connectedness	Increased community resilience	Reduced climate-related morbidity and mortality
Increased awareness and preparedness	Reduced health inequalities	Healthier, more resilient communities
Reduced social isolation	Improved mental and physical health	Equitable climate adaptation
Better access to support during climate events	Stronger local adaptive capacity	Sustainable, integrated climate-health systems

Cross-Cutting Principles

- Equity and inclusion
- Prevention and early intervention
- Community empowerment
- Sustainability
- Systems thinking

Context and Impacts:

“Strong, connected communities are essential infrastructure for climate resilience, health protection, and reducing inequalities.”

Social connectedness refers to the relationships, networks, trust and sense of belonging that exist between individuals, families, communities and organisations. It encompasses social support, community cohesion, social capital, civic participation and connectedness to place.

Increasingly, social connectedness is recognised as a **critical determinant of health and climate resilience**. Whilst a changing climate is often framed as an environmental or infrastructure challenge, evidence demonstrates that the strength of social relationships and community networks can significantly influence vulnerability, preparedness, response and recovery during climate-related events.

The World Health Organization (WHO), Intergovernmental Panel on Climate Change (IPCC), Lancet Countdown, UK Health Security Agency (UKHSA) and extensive disaster resilience literature identify social connectedness as one of the most important protective factors against climate-related health impacts.

As climate impacts intensify, social connectedness is increasingly being viewed as a form of **social infrastructure** that is as important as physical infrastructure in protecting health and wellbeing.

Social connections are a protective factor for health and wellbeing and play an important role in helping communities respond to climate-related challenges. Strong social networks can support vulnerable individuals during heatwaves, flooding, storms, and other emergencies by facilitating information sharing, practical assistance, and emotional support.

A changing climate **can both strengthen and weaken social connectedness**. Extreme weather events may disrupt community infrastructure and increase isolation, particularly among older people, disabled people, carers, and those living alone. Conversely, community climate action initiatives can foster stronger local relationships, volunteering, and collective resilience.

Building social connectedness through community hubs, neighbourhood networks, faith groups, voluntary organisations, and local resilience initiatives can improve health outcomes while strengthening the capacity of communities to adapt to future climate risks.

A changing climate poses significant and uneven risks to population health, with **social and community factors acting as critical determinants of vulnerability, resilience, and recovery** (WHO, 2021). While much policy focuses on environmental exposures, there is growing evidence that community cohesion and social capital are equally critical in shaping health outcomes (Aldrich and Meyer, 2015).

Evidence highlights the importance of **social infrastructure** (e.g., community centres, parks, libraries) in supporting resilience:

- Climate-adaptive spaces (cooling centres, shaded areas) enable **safe gathering during extreme weather**
- Green and shared spaces promote physical activity, mental wellbeing, and social cohesion

Urban design and planning are therefore key determinants of **community-level resilience** (Klinenberg, 2018).

Emerging evidence points to the role of **digital tools** in maintaining social cohesion during disruptions:

- Virtual support groups
- Neighbourhood communication platforms
- Early warning and alert systems

Digital tools support:

- Communication during emergencies
- Community coordination
- Access to information

However, **digital exclusion remains a significant barrier**, requiring inclusive approaches as digital approaches risk **excluding digitally marginalised populations**, (ONS, 2022). This highlights the need for inclusive design (ONS, 2022).

Several sources emphasise the importance of **whole-system approaches**, including:

- Health in All Policies (HiAP) frameworks
- Cross-sector collaboration (health, planning, housing, environment)
- Integration of social, environmental, and economic policy

Effective responses require:

- Cross-sector collaboration
- Integration of health into all policies
- Long-term, coordinated planning

Fragmented governance is a major barrier to implementation. Effective responses require **alignment across governance systems**, rather than isolated interventions (WHO, 2018).

Common Opportunity Interventions

- Climate-adaptive community spaces (cooling/warming hubs)
- Social prescribing and community-based wellbeing programmes
- Volunteer and neighbourhood support networks
- Active travel and shared community activities
- Public engagement and climate education

Tools and Methods

- Community mapping and asset-based approaches
- Participatory planning and co-design
- Data dashboards and early warning systems
- Social vulnerability indices

Social connectedness is one of the most powerful and cost-effective interventions for addressing the health effects of a changing climate. Strong social networks, community cohesion and social infrastructure improve physical and mental health, reduce vulnerability, strengthen resilience and support recovery from climate-related events. As climate impacts increase, investing in social connectedness should be considered a core climate adaptation, public health and health equity strategy.

Strong, connected communities are essential infrastructure for climate resilience. Social connectedness protects health, reduces inequalities, strengthens community resilience and helps people prepare for, cope with and recover from the health effects of a changing climate.

Current International and National Response(s):

The international and national response to **social connectedness** has evolved significantly over the last decade. There has been a shift from viewing loneliness as an individual emotional issue to recognising **social connection as a public health, wellbeing and community resilience issue**.

Across countries and international organisations, six common themes are emerging:

Theme	International Trend
Public Health	Loneliness recognised as a health determinant
Prevention	Focus on building connection before crisis occurs
Community Development	Investment in local groups and community assets
Social Prescribing	Connecting people to community activities
Place-Based Approaches	Designing connected neighbourhoods and public spaces

Systems Thinking	Multiple sectors working together rather than isolated services

The most significant recent development is the establishment of the WHO Commission on Social Connection (2024–2026). The WHO now describes social isolation and loneliness as important social determinants of health affecting people of all ages. Around one in six people globally experience loneliness, with impacts on physical health, mental health, quality of life and longevity.

The WHO approach focuses on:

- Building social connection across the life course
- Embedding connection into health and social care systems
- Creating age-friendly and inclusive communities
- Measuring loneliness and social connection nationally
- Reducing stigma
- Promoting connection as a public health intervention rather than simply a social issue

Importantly, WHO has reframed the conversation from "tackling loneliness" to "**promoting social connection**", recognising that quality relationships, belonging and participation are protective factors for health and wellbeing.

Organisation for Economic Co-operation and Development (OECD): Social Connectedness as a Wellbeing Indicator

The Organisation for Economic Co-operation and Development OECD has incorporated social connections into its wellbeing framework. Social connectedness is now treated as a core dimension of societal progress alongside health, income, education and environmental quality. The OECD encourages countries to measure:

- Social support
- Time spent with others
- Relationship quality
- Community trust
- Civic participation
- Social capital

This reflects a growing international consensus that economic growth alone does not create thriving communities; social relationships are a fundamental part of wellbeing.

United Nations Decade of Healthy Ageing

Through the UN Decade of Healthy Ageing (2021–2030), social connection is recognised as essential for healthy ageing. Many countries are developing age-friendly communities, intergenerational programmes and community participation initiatives to reduce isolation among older adults.

National Response (England and the UK)

The UK became the first country to publish a national loneliness strategy in 2018:

"A Connected Society: A Strategy for Tackling Loneliness."

The strategy marked a significant policy shift by recognising that:

- Loneliness affects all ages.
- Loneliness is a public health issue.
- Government alone cannot solve the problem.
- Strong social relationships are fundamental to wellbeing.

The vision was:

A society where people have strong social relationships and where loneliness is recognised and acted upon without stigma.

The government has provided updates on the progress made against commitments in the strategy through:

- Loneliness Annual Report: the first year, published in 2020
- Loneliness Annual Report: the second year, published in 2021
- Loneliness Annual Report: the third year, published in 2022
- Loneliness Annual Report: the fourth year, published in 2023

The Every Mind Matters Loneliness Campaign, aims to raise awareness of loneliness so people understand the problem and stigma is reduced, encouraging people to talk and act on loneliness. The latest campaign was launched in January 2022 and focussed on encouraging young people aged 18-24 to “Lift Someone Out of Loneliness” by carrying out small acts of kindness to help someone who may be feeling lonely.

The Tackling Loneliness Network, a group of high-profile charities, businesses and public figures, formed by the government to help connect groups at risk of loneliness. The members of this network have been challenged to develop innovative ideas and commit to action to tackle loneliness, and the commitments were published in the Tackling Loneliness Action Plan. These organisations communicate and share

insights through the government's Digital Platform, the Tackling Loneliness Hub, which allows them to work seamlessly together, sharing data and research.

In combination with these two strands, the government will also drive forward action by continuing to encourage other government departments and more organisations across society to commit to tackling loneliness in their own work.

In line with the objective to build up the evidence base, government is also committed to improving and sharing evidence on loneliness and what works tackling it so people and organisations know how best to act. The tackling loneliness evidence review, published in 2022, highlights the current evidence gaps.

In May 2021 we published our Employers and Loneliness guide, produced by The Campaign to End Loneliness, to act as the starting point to a wider conversation about what organisations can do to address loneliness. It follows a consultation with thirty-four businesses and employers who recognise loneliness in the workplace and support employee's social wellbeing.

In June 2021, the UK and Japanese Ministers for Loneliness met to discuss tackling loneliness. As outlined in a joint statement, they agreed to strengthen bilateral cooperation with regular meetings between the UK and Japan; sharing knowledge on measures and policy; and working to increase global awareness of loneliness.

Social Prescribing

One of England's most influential responses has been **social prescribing**.

Rather than only offering medical treatment, GPs and healthcare professionals can refer people to:

- Walking groups
- Arts activities
- Volunteering opportunities
- Community groups
- Exercise programmes
- Peer support networks

This approach recognises that many health problems are linked to social isolation and that community participation can improve wellbeing.

Cross-Government Approach

The UK strategy emphasises that loneliness is influenced by:

- Housing
- Transport
- Employment
- Planning and public spaces
- Digital inclusion
- Health services
- Community infrastructure

As a result, responsibility extends beyond health departments to local government, education, transport and community development sectors.

Building Community Capacity

National funding has supported:

- Community hubs
- Voluntary organisations
- Local charities
- Befriending schemes
- Intergenerational projects
- Community spaces and activities

The emphasis increasingly mirrors East Sussex's approach: strengthening the social infrastructure that enables relationships to develop.

Tackling Stigma

National campaigns such as Every Mind Matters and wider loneliness awareness initiatives seek to normalise conversations about loneliness and encourage people to seek support or reach out to others.

Local East Sussex Response to Build From:

East Sussex is closely aligned with international best practice.

The county's community-led approach reflects the same principles promoted by WHO, OECD and the UK Government:

- Moving from loneliness to social connectedness.
- Treating connection as a public health issue.
- Building community capacity and social capital.
- Creating opportunities for participation and belonging.

- Using partnership and systems leadership.
- Reducing stigma and encouraging conversations about loneliness.

In many respects, East Sussex can be viewed as a **local implementation of the wider international movement towards social connectedness**, translating WHO and UK policy principles into practical action through communities, voluntary organisations and local partnerships. Its response to social connectedness is an advanced developed place-based approach. Rather than treating loneliness solely as an individual problem, East Sussex has adopted a whole-system, community-building approach that aims to strengthen relationships, community participation, and social infrastructure across the county. The approach is often described as "**building a connected East Sussex**."

The core vision is:

"East Sussex to be a place where no-one feels lonely."

The mission is to "reduce loneliness and build a connected and supportive community for all." This reframes the issue from simply helping lonely individuals to strengthening the social connections that prevent loneliness from developing in the first place.

East Sussex recognises loneliness as a public health issue affecting physical health, mental health, wellbeing, resilience and community participation. The county's approach acknowledges that loneliness is influenced by health conditions, inequalities, life transitions and place-based factors, meaning no single organisation can solve it alone.

Delivered as a partnership model rather than a single service, the response is led through collaboration between:

- East Sussex County Council
- Sussex Community Development Association
- NHS organisations
- Voluntary, Community and Social Enterprise (VCSE) organisations
- Faith groups
- Local community organisations
- Private sector partners

This partnership structure emerged from earlier work, including the Connected People and Places project, which concluded that tackling loneliness requires system-wide action rather than isolated interventions.

The Tackling Loneliness Programme

The county's main delivery mechanism has been the Tackling Loneliness Programme, hosted by Sussex Community Development Association (SCDA) and funded by East Sussex County Council. The 2024–2025 programme was built around four workstreams:

6. Shared learning and networking
7. Building community capacity
8. Communication and engagement
9. "Connection tests" (testing new approaches)

The programme uses a stewardship approach and Human Learning Systems methodology, which emphasises learning, relationships and adapting to local needs rather than relying solely on performance targets.

Building social capital and community networks

A distinctive feature of East Sussex's response is its focus on strengthening the people and organisations that create connection.

Examples include:

- "Connecting the Connectors" networking events
- Shared learning groups
- Knowledge exchange events
- Loneliness Matters training
- Small grants programmes
- Awareness campaigns
- Guided conversations about loneliness in communities and workplaces

The Tackling Loneliness Programme Evaluation Report 2026 found that these activities generated:

- New partnerships
- Collaborative projects
- Better understanding of local needs
- Stronger relationships across sectors

The evaluation highlights that connections and relationships between organisations were among the programme's most important outcomes.

Community-based interventions

Rather than relying on clinical services, East Sussex promotes social connectedness through community participation opportunities, including:

- Volunteering
- Physical activity programmes
- Reading Friends and library activities
- Community events
- Family hubs
- Seniors' groups
- Local festivals
- Peer support and community groups

The philosophy is that participation, belonging and meaningful relationships are protective factors against loneliness.

Culture change and awareness raising

Another major strand is reducing stigma around loneliness. The county's Face Loneliness campaign aims to:

- Increase public understanding of loneliness
- Show that loneliness can affect anyone
- Encourage conversations about loneliness
- Help residents recognise loneliness in themselves and others
- Promote simple acts of connection within communities

This reflects evidence that loneliness is often hidden because people feel embarrassed or fear judgement. East Sussex therefore treats awareness and social attitudes as part of the solution.

The 2026 programme evaluation suggests several strengths:

Positive findings:

- Strong relationship-building across sectors.
- New collaborative initiatives emerging from networking activities.
- High value placed on shared learning opportunities.
- Greater awareness of loneliness across participating organisations.
- Increased system capacity to respond collectively.

Challenges identified:

- Need for clearer governance and roles.
- More trust-building within some partnership structures.
- Stronger mechanisms for shared reflection and learning.
- Greater clarity about objectives and responsibilities.

Importantly, the evaluation argues that success should be understood not only through direct service outcomes but through strengthening the wider system's ability to create connection and belonging.

East Sussex's response to social connectedness can be understood as a public-health, community-development and systems-change approach. Rather than focusing only on treating loneliness after it occurs, it seeks to:

- Build stronger communities.
- Increase opportunities for participation and belonging.
- Strengthen relationships between organisations.
- Reduce stigma around loneliness.
- Support residents to connect with others through everyday community life.
- Create a county-wide culture where social connection is recognised as essential to wellbeing.

In policy terms, East Sussex has moved from a narrow "loneliness intervention" model toward a broader social connectedness ecosystem, where community organisations, public services, volunteers and residents all play a role in creating a more connected county.

10. 3B Section Conclusion

The wider determinants of health represent some of the most significant opportunities for addressing the health effects of a changing climate. While a changing climate presents substantial risks to mental wellbeing, physical activity, active travel, sleep and recovery, social connectedness and the wider conditions in which people live, work and interact, it also provides an opportunity to redesign communities in ways that are healthier, fairer, more resilient and more sustainable.

The evidence presented throughout this section demonstrates that these wider determinants are highly interconnected. Improvements in one area frequently deliver benefits across many others. For example, investment in active travel and climate-

responsive neighbourhoods can increase physical activity, improve mental wellbeing, strengthen social connectedness, reduce air pollution, lower greenhouse gas emissions and enhance resilience to extreme weather. Likewise, expanding access to green and blue spaces, strengthening community participation, embedding arts and culture within resilience programmes, and creating healthy sleep and recovery environments can generate multiple co-benefits for both population health and climate adaptation.

Across all themes, a consistent message has emerged: climate adaptation should not be viewed solely as protecting communities from future hazards, but as an opportunity to improve the wider determinants of health that underpin long-term wellbeing. The greatest benefits will be realised through integrated, place-based approaches that align public health, planning, transport, housing, education, culture, community development, environmental management and climate action around shared objectives.

East Sussex is well positioned to build upon existing strengths. The county already has strong foundations through its Healthy Places approach, Planning for Health Framework, Local Transport Plan 4, Health Impact Assessment methodology, community resilience programmes, active travel initiatives and partnership working. These provide an important platform from which to embed climate and health considerations more systematically across policy, service delivery and investment decisions.

However, important gaps remain. Climate-related mental health, sleep and recovery environments, arts and culture, social connectedness and climate-resilient physical activity remain under-recognised within many adaptation and public health strategies. Greater integration of climate, health and the wider determinants of health will therefore be essential if East Sussex is to maximise prevention, reduce inequalities and strengthen resilience over coming decades.

Collectively, the considerations, opportunities and action steps presented throughout this section provide a strategic framework for embedding Health in All Policies and Climate in All Policies across the wider determinants of health. They are intended to guide organisations in identifying practical actions that deliver multiple environmental, health, social and economic co-benefits while strengthening the resilience of individuals, communities and places.

Ultimately, creating healthier, more connected and more climate-resilient communities will depend not on isolated interventions, but on sustained collaboration across the whole East Sussex system. By investing in the wider determinants of health today, East Sussex has the opportunity, to reduce future climate-related health impacts, improve quality of life, address health inequalities and create places in which both people and the environment can thrive.