

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**

Summary Report



Acknowledgements and Citations

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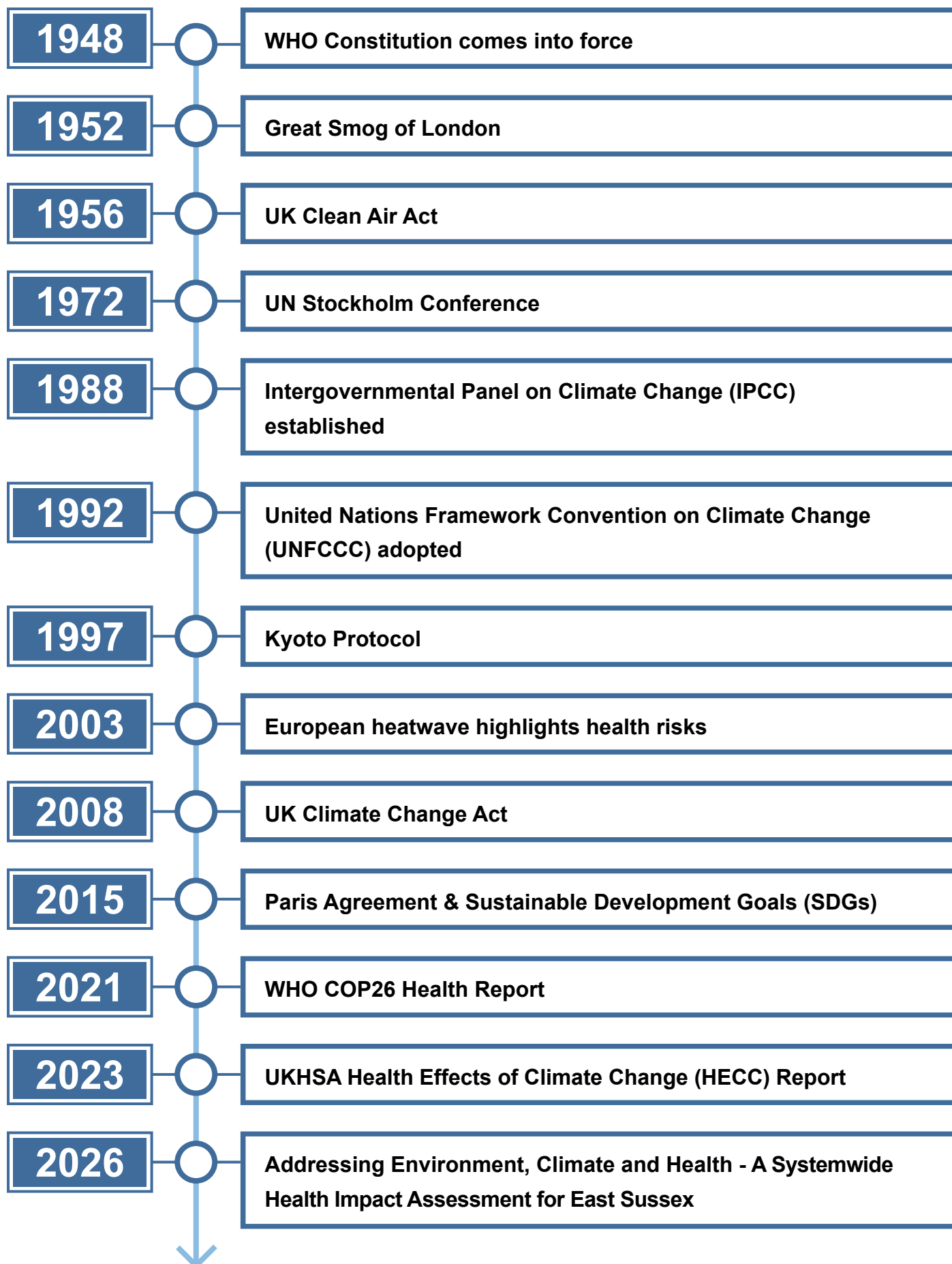
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Climate Change & Health Action Timeline: 1948 - 2026



Introduction

This Summary Report presents the key information, findings, conclusions and ‘opportunities and considerations’ from **Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment (ECH-HIA) for East Sussex: HIA Technical Report**. For the purposes of this summary, hereinafter it will be referred to as the HIA Technical Report.

The **purpose** of the Summary Report is to summarise the ‘High Level Strategic Considerations and Opportunities’, local data, economic analysis, policy review, stakeholder engagement, public consultation, climate evidence and public health intelligence from the HIA Technical Report. The HIA assessment provides the most comprehensive investigation, examination and evaluation on climate and health impacts in East Sussex. It provides the information and evidence on how a changing climate is affecting East Sussex as a whole. This includes examination and information on the health and wellbeing of East Sussex residents, communities, systems, sectors and services through a combined climate and health lens. The intention of this assessment is to provide collective systemwide guidance, action(s) and solutions as part of efforts to address the health effects of climate change and adapt to a changing climate. This includes the ambition to support the creation of climate and health resilience in East Sussex for current and future generations.

A **Health Impact Assessment (HIA)** is a structured, evidence-based process used to understand the potential effects of policies, programmes, strategies and wider system changes on health and health inequalities. For this assessment, a **systemwide HIA approach** was developed to examine and communicate the evidence and ‘considerations, opportunities and action steps’ to address, advance and integrate climate and health considerations.

A major strength of this work has been the collaborative process through which it was undertaken. In doing so, it has established a strong foundation for continued partnership working and collective action to address the health effects of climate change.

The overall conclusion of the assessment is clear. The challenge now, following the production of the HIA is to translate evidence into implementation and ensure that climate and health become shared priorities embedded across all of our approaches from policy, investment, governance and practice. The question is no longer whether East Sussex should act, but how quickly, how boldly and how collectively it chooses to do so. The HIA should not be viewed as the end of a process but as the beginning of a long-term programme of transformation. The evidence presented here points towards the need for a fundamental shift in how climate, environment, health and wellbeing are understood and addressed. The future that East Sussex experiences is not predetermined. The difference between futures will be determined by decisions made today for our current and future generations.

Seven Key Messages and Findings

The messages from the HIA are clear and compelling. The health effects of a changing climate are already here. The evidence is gripping. The costs of inaction are too great. The opportunities are too significant to ignore. The solutions are available. The partnerships exist. The assets are present. The time to act is now.

The seven key messages and findings are:



1. The Changing Climate is a Major Public Health Risk and Opportunity

Climate change is not simply an environmental issue. It is also a people issue. It is a current and escalating public health risk that is the greatest public health challenge of our time. It is already affecting the conditions in which people are born, grow, live, work and age. Without action, East Sussex is likely to experience increasing climate-related shocks, wider health inequalities, growing pressure on health and social care systems/services, and rising social and economic costs.

However, the HIA also demonstrates that climate action presents a significant opportunity. By investing in adaptation, resilience and prevention, East Sussex can create healthier and more sustainable homes and neighbourhoods, strengthen communities, restore and protect natural environments, reduce inequalities and support better outcomes for current and future generations. The choices made now will shape whether the county becomes more vulnerable or more resilient in the decades ahead.

2. Climate-Health Impacts are Already Being Experienced Locally and Unequally

Climate-related **impacts, effects and hazards** are already affecting the health and wellbeing of communities across East Sussex and are expected to intensify over time.

‘**Impacts**’ refer to the changes introduced by climate change or climate-related interventions, compared to current conditions. In this context, it is important to distinguish between:

- **Climate impacts:** Changes in environmental or physical systems (e.g. rising temperatures, increased flooding and changes in air quality).
- **Health system impacts:** Changes in determinants of health arising from climate or policy responses (e.g. housing conditions, access to green space and infrastructure resilience).
- **Climate-health impacts:** The combined or interacting changes in environmental and social determinants that directly influence population health (e.g. increased overheating in homes, disruption to services due to flooding and changes in food systems).

Impacts describe what has changed and can be positive or negative.

These impacts are not experienced equally. The county’s older population, coastal communities, rural areas and existing health inequalities mean some groups are disproportionately exposed to climate risks. Older people, children and young people, people with disabilities or long-term conditions, low-income households and deprived communities are likely to experience the

greatest health impacts. Engagement undertaken through the HIA also confirmed that residents already recognise climate change as a significant concern affecting their wellbeing, communities and future prospects. Equity, resilience and community voice must therefore remain central to future action.

‘Effects’ refer to the consequences of impacts, taking into account who or what is affected and their level of vulnerability or sensitivity.

- **Climate effects:** Consequences of environmental change on ecosystems or physical environments (e.g. coastal erosion and biodiversity loss)
- **Health effects:** Consequences for human health, wellbeing, and daily life regardless of cause (e.g. increased stress, reduced physical activity and exposure to pollutants)
- **Climate-health effects:** The specific consequences of climate-related impacts on human health and wellbeing, including both direct and indirect pathways (e.g. heat-related illness, mental health impacts from extreme weather and increased respiratory issues due to poorer air quality)

Effects may be short, medium, or long-term, may emerge over time, and can be positive or negative.

‘Hazards’ refer to events or conditions arising from change that have the potential to cause harm to people, infrastructure, ecosystems and economies.

- **Climate Hazards:** Climate hazards are the environmental exposures created or intensified by a changing climate. The hazards may be acute (e.g. heatwaves, storms, flooding) or chronic (e.g. rising temperatures, drought and sea level rise).
- **Health Hazards:** Health hazards are biological (e.g. infectious disease and foodborne illness), chemical (e.g. air pollution and, contaminated drinking water), physical (e.g. heat stress and injury from flooding) a, behavioural or psychosocial/social factors (e.g. stress, climate anxiety, social isolation and displacement) that have the potential to cause illness, injury or death. Some health hazards are caused directly by climate hazards, whilst others are worsened indirectly.

Health hazards are therefore the mechanisms through which climate hazards affect health.

‘Outcomes’ refer to the longer-term, often cumulative results arising from impacts and effects, typically at a population level.

- **Climate outcomes:** Long-term changes in environmental conditions (e.g. stabilised or worsening climate risks, ecosystem resilience or degradation).
- **Health outcomes:** Changes in population health status (e.g. disease prevalence, life expectancy, mental health and health inequalities).
- **Climate-health outcomes:** The combined long-term population health and system-level consequences of a changing climate, shaped by both environmental change and societal response (e.g. long-term burden of climate-related disease, resilience of health systems, reduced or widened health inequalities).

Outcomes are often:

- Cumulative and system-wide
- Influenced by multiple interacting factors
- Highly dependent on early action and intervention pathways

3. The Economic Case for Early Action is Compelling

The costs associated with climate-related health impacts are substantial and will continue to grow unless action is taken. The HIA estimates that climate-related health costs are worth approximately £71 million per year by 2050, increasing to £85 million by 2080 under a 2°C warming scenario, and approaching £90 million annually under a 4°C scenario. These are conservative estimates and do not fully capture wider impacts on biodiversity, ecosystems, social cohesion and quality of life.

Evidence consistently demonstrates that investing in adaptation and resilience is more effective and more cost-effective than responding to crises after they occur. Delaying action is not a neutral choice; it increases financial, social and health costs while missing opportunities to improve health, reduce demand on public services, strengthen local economies and enhance community resilience. The costs of inaction will be reflected not only in economic losses but also in avoidable illness, poorer wellbeing, greater inequalities and increased pressure on services.

For more detail, please see Part 2 - East Sussex Changing Climate and Health Economic Evaluation within the HIA Technical Report.

4. Embedding Climate and Health into All of Our Approaches: Governance, Workforce and Decision-Making

The HIA found that climate and health considerations are not yet consistently embedded across governance, planning, commissioning, policy development and service delivery. Achieving a Population and Planetary Health in all of Our Approaches will require climate and health to become a routine consideration across the whole system, all systems, sectors, services, organisations and all decision-making processes, rather than being viewed as a separate or specialist agenda.

The East Sussex partnerships such as the East Sussex Health and Wellbeing Board for example, provides an important mechanism for systemwide responsibility, leadership, strategic oversight and accountability. There is an opportunity for the East Sussex partnerships and wider partner organisations/structures (Pan-Sussex for example) to play a stronger role in championing climate-health integration, monitoring progress and ensuring alignment across the wider system and South East region. Over time, climate and health considerations should become embedded within existing governance arrangements, including corporate strategies, service plans, commissioning frameworks, capital investment decisions, partnership programmes and performance reporting processes.

Delivering this ambition will require workforce development and transformation alongside organisational change. Climate change should not be seen solely as the responsibility of sustainability teams or environmental specialists. The same can be said for health whereby health should be delivered in ‘all’ policies. There is an opportunity to make every job a climate and health job, ensuring that staff understand how climate and public health affect their role, all aspects of life, the populations they serve and the decisions they make. Workforce development should therefore focus on building climate-health literacy, adaptation and resilience planning, health inequalities, systems approaches, sustainable service design and population health approaches. Alongside this broader capability-building, dedicated climate-health leadership roles remain essential to support advancement, integration, collaboration, implementation and system-wide coordination.

To support consistent and evidence-informed decision-making, East Sussex should also strengthen the use of assessment tools and frameworks that consider climate, health, equity, sustainability and environmental impacts together. These may include Changing Climate Health Impact Assessments (CCHIAs), Health Impact Assessments (HIAs), Equality Impact Assessments (EIAs), Carbon Impact Assessments, Climate Adaptation Assessments, Social Value Frameworks, and Natural Capital and Ecosystem Service Assessments. These can and should be integrated when needed. The longer-term ambition should be to develop a more integrated approach whereby climate, health, equity, sustainability and environmental considerations are assessed collectively rather than through separate processes.

Ultimately, climate considerations should be embedded within all health policies, while health considerations should be embedded within all climate and environmental policies. Climate and health should become integral to planning, transport, housing, economic development, education, social care, emergency planning and all other areas of public policy and service delivery. Through strong governance, a skilled workforce, effective assessment processes and shared leadership, East Sussex can further embed climate-health considerations into all of its approaches and continue to demonstrate leadership in this emerging field.

5. Collective Leadership, Partnership and Accountability are Essential

One of the strongest messages emerging from the HIA process was the need for sustained interdisciplinary collaboration and collective leadership. Climate change and health are inherently cross-cutting issues, and no single organisation, sector or service can address these challenges alone.

The HIA has already created valuable relationships across public health, environmental services, NHS organisations, local authorities, transport planners, housing providers, emergency planning teams, and voluntary and community sector partners for example. These connections represent an important foundation for future action and should be maintained and strengthened through ongoing collaboration, shared objectives and joint programmes.

Addressing the health impacts of a changing climate is ultimately a matter of collective ambition and collective responsibility. Success will depend on shared leadership, accountability and action across the whole system. The East Sussex Public Health - Healthy Places Team is particularly well positioned to provide strategic leadership due to its focus on the environmental determinants of health and the Building Blocks of Health Framework, which provides a natural bridge between climate action, place-based approaches and population health improvement.

The challenge now is to move from project-based collaboration to sustained systems leadership and from strategic assessment to operational delivery. Implementing effective adaptation measures will require long-term investment, strong partnerships, cross-sector working and enduring political commitment. By working together around a shared vision (which the HIA has helped to create), organisations across East Sussex can build greater resilience to climate change while improving health and reducing inequalities for current and future generations.

6. Stronger Data, Evidence, Intelligence and Community Insight are Needed

Responding effectively to a changing climate requires investigation and a stronger more integrated understanding of local risks, impacts and opportunities. While traditional scientific and public health evidence remains important, climate-related challenges also require wider

forms of intelligence including local data, systems modelling, service information, lived experience, community insight and environmental evidence.

The HIA demonstrated the value of bringing these different forms of knowledge together. There is an opportunity to strengthen climate-health intelligence across East Sussex through improved data sharing, joint learning, communities of practice and a shared evidence base that supports informed decision-making, reduces duplication and accelerates action.

7. The Time is Now to Move from Evidence to Action

This HIA should be viewed as the beginning of a longer-term programme of work rather than the end of a single assessment. The evidence is clear that climate change presents significant risks to health, wellbeing and public services, but also significant opportunities to improve population health, reduce inequalities and strengthen resilience.

East Sussex is entering a period of significant change through Local Government Reorganisation and the development of a Mayoral Combined County Authority. These changes provide a unique opportunity to embed climate and health within future governance, investment, growth and place-making decisions. East Sussex already has many of the assets needed to succeed, including strong partnerships, local expertise, community commitment and a growing climate agenda. The challenge now is to translate evidence into coordinated, system-wide action that delivers lasting benefits for people, places and future generations.



Seven Sisters

Overview of the Health Impact Assessment (HIA) Technical Report

Further detail is available in the **Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment (ECH-HIA) for East Sussex - Technical Report**, and specific sections will be signposted throughout this Summary Report.

The **HIA Technical Report** comprises of:

Part 1 - The What, Why and How

Part 1 provides the strategic foundations for the Health Impact Assessment (HIA), explaining why it was undertaken, the challenges that a changing climate presents for population health, how the assessment was conducted, and the long-term vision for East Sussex. It introduces the East Sussex Systemwide HIA methodology, including Health in All Policies and Population and Planetary Health in all of Our All Approaches (PaP-HiAPA), alongside governance arrangements, resident insights and the key strategic messages that guide the assessment.

Part 2 - The Evidence

Providing the evidence that underpins the assessment.

This section contains the detailed evidence base informing the HIA. It synthesises:

- Climate and health data
- Economic analysis
- Policy review
- Literature review
- Stakeholder engagement
- Workshops
- Public consultation
- Local intelligence
- Evidence synthesis

This section demonstrates how conclusions have been reached and provides transparency, credibility and traceability for the recommendations presented later in the report.

Part 3 - Considerations, Opportunities and Action Steps

This is the operational heart of the HIA Technical Report.

Using the evidence presented in Parts 1 and 2, this section translates findings into practical considerations, opportunities and action steps that organisations can use to strengthen climate resilience, improve health and reduce inequalities.

Recognising the breadth of climate change impacts, Part 3 has been divided into six themed sections to allow readers to quickly locate information relevant to their area of responsibility.

● Part 3A - The Health Effects of a Changing Climate

Provides the climate and health context, impacts, responses, considerations, opportunities and action steps for specific climate hazards including heat, flooding, drought, air quality, infectious diseases, food systems, chemicals, displacement and migration, wildfires, extreme winds and other environmental risks. It identifies opportunities to reduce risks and build resilience. It identifies opportunities to reduce risks and build resilience.

● Part 3B - Wider Determinants of Health

Provides the climate and health context, impacts, responses, considerations, opportunities and action steps for the priority wider determinants that influence resilience and health, including active travel, physical activity, mental health, arts and culture, and climate-responsive sleep and recovery environments. It highlights opportunities to improve health while adapting to climate change.

● Part 3C - Sectors, Services and Stakeholders

Provides the climate and health context, impacts, responses, considerations, opportunities and action steps for sectors and services including planning, housing, transport, education, health and social care, emergency services, utilities, business, the voluntary sector and local government for example. It guides, shares and supports sectors and services on the action steps that can or are being taken as part of efforts to advance and integrate climate and health considerations into their areas of work. It provides the information on what others are doing or could be doing and where there may be opportunities for collaboration, alignment, learning, co-development, co-delivery and co-benefits.

● **Part 3D - Vulnerable Population Groups**

Provides the climate and health context, impacts, responses, considerations, opportunities and action steps for vulnerable population groups and identifies targeted opportunities to reduce inequalities and improve resilience. It supports organisations to identify and consider the climate and health implications for vulnerable population groups.

● **Part 3E - Vulnerable Settings**

Provides the climate and health context, impacts, responses, considerations, opportunities and action steps to protect vulnerable settings and where climate-related health risks are greatest. This includes the focus on hospitals, schools, care homes, hospices, nurseries and community facilities. It outlines ways to create safer and more resilient environmental settings as part of climate and health protection and adaptation measures across people and place settings.

● **Part 3F - Win-Wins, Co-Benefits and System Resilience**

Highlights actions and opportunities that deliver multiple benefits simultaneously across health improvement, climate adaptation, mitigation, biodiversity, sustainability and economic resilience. It promotes integrated approaches that strengthen long-term system resilience.

Part 4 - Conclusions and Next Steps

The final section brings together the key findings of the assessment and sets out the strategic priorities for implementation and long-term system transformation across East Sussex. It outlines future arrangements for governance, partnership working, workforce development, monitoring and evaluation, institutional strengthening and implementation. It promotes integrated approaches that strengthen long-term system resilience.

The appendices provide supporting and detailed technical resources, including the methods statement, implementation tools, policy review, literature review, engagement findings and supporting practical checklists.

Key Informants and List of Stakeholders

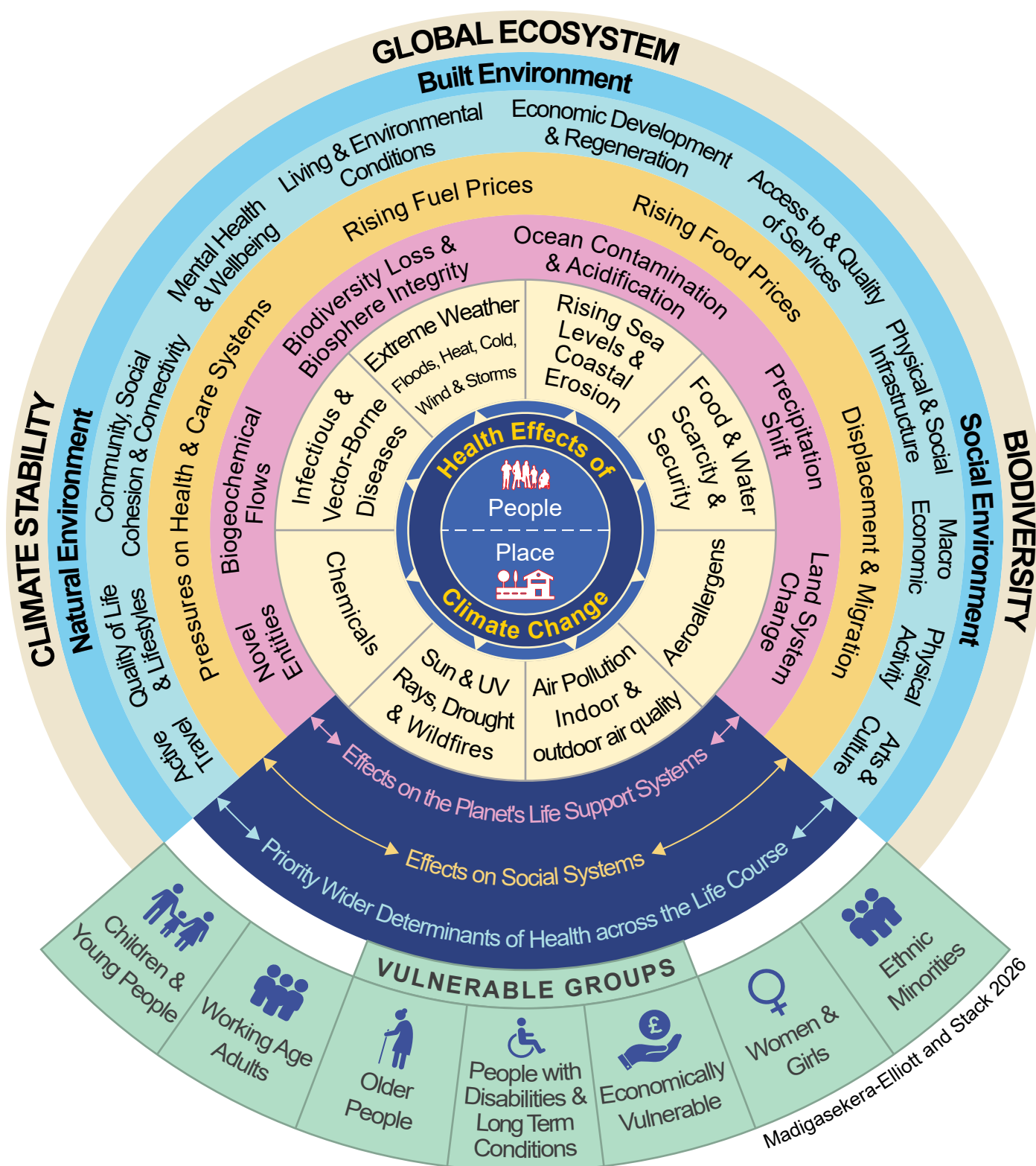
The HIA has been co-developed and received contributions from a number of services and organisations. The list of engaged services and organisations is expected to grow during the HIA Phase 2 delivery and implementation, but as a minimum would include the following departments and organisations that have inputted to the HIA:

- Active Sussex
- Adult Social Care
- Blue Heart Project
- Children's Services
- Community Voluntary Sector
- District and Borough Planning Team
- East Sussex Children's and Young People's Board
- East Sussex Community Voice
- East Sussex County Council Climate Emergency Board
- East Sussex Emergency Planning
- East Sussex Energy Partnership
- East Sussex Fire and Rescue
- East Sussex Health and Care Partnership Executive Board
- East Sussex Health and Wellbeing Board
- East Sussex Housing Partnership Board
- East Sussex Planning for Health Working Group
- East Sussex Procurement Team
- East Sussex Public Health Board
- East Sussex Strategic Housing Partnership Board
- East Sussex Voluntary, Community and Social Enterprise Alliance
- East Sussex Youth Cabinet
- Environment Agency
- Environmental Health

- Hastings Borough Council
- Healthwatch and Young Healthwatch
- Lewes and Eastbourne Councils
- Local Government Association
- Local Nature Partnership
- National Health Service (NHS)
- Natural England
- Rother District Council
- South Downs National Park
- South East and Southern Water
- Sussex Resilience Forum
- Sustrans
- UK Health Security Agency
- University of Brighton
- Wealden District Council

The list of services and organisations is simplified to the 14 Systemwide Sectoral Stakeholder groups discussed in the High-Level Strategic Considerations and Opportunities for Sectors, Services and Stakeholders. Please see page 24.

Environment, Climate and Health Map for People and Place



This diagram illustrates a **systems-based understanding of how environment and climate change affects health and wellbeing**, showing that health impacts arise through a complex interaction of environmental, social, economic and place-based factors. Rather than affecting everyone equally, environment and climate change influences health through multiple pathways that are shaped by people's circumstances, where they live, and their ability to adapt.

At the centre of the framework are **People and Place**, recognising that health outcomes depend on both individual characteristics, such as age and existing health conditions, and the quality of homes, neighbourhoods and communities. Surrounding this are the direct hazards associated with climate and ecological change, including **extreme temperatures, flooding, storms, sea-level rise, coastal erosion, air pollution, water scarcity, wildfires, allergens and infectious diseases**.

The model highlights that climate change affects health not only through direct exposure to these hazards, but also through a range of **indirect impacts**. Environmental changes can contribute to biodiversity loss, contamination of water supplies, food insecurity, rising living costs, displacement and migration, creating wider social and economic pressures that influence health.

These impacts operate through the **wider determinants of health**, including housing quality, living conditions, employment, transport, access to services, food availability, community cohesion, natural environments and the capacity of health and social care services. The framework therefore demonstrates that climate change is not solely an environmental issue; it is also a housing, planning, economic development, transport, public health and social justice issue.

The diagram places these determinants within broader systems: the **natural environment, built environment and social environment**, all of which depend on a healthy **global ecosystem**. Climate stability and biodiversity sit at the outermost level, reinforcing the principle that human health ultimately relies on functioning natural systems and environmental resilience.

A key feature of the framework is its focus on **health inequalities**. Groups such as children and young people, older people, people with disabilities or long-term conditions, economically vulnerable households, women and girls, and Black, Asian and Minority Ethnic communities may be disproportionately affected because exposure, sensitivity and adaptive capacity are unevenly distributed. Climate change can therefore act as a **multiplier of existing inequalities**, widening differences in health outcomes between communities.

The framework also adopts a **life-course perspective**, recognising that climate-related risks and vulnerabilities vary across different stages of life. Children's health, educational opportunities

and development may be affected differently from the impacts experienced by working-age adults or older people.

Overall, the diagram describes a cascading pathway from **climate and ecological change** → **environmental hazards** → **disruption to social and economic systems** → **unequal exposure and vulnerability** → **health outcomes**.

Its central message is that improving population health requires more than responding to climate emergencies. It requires preventive action that creates **climate-resilient, healthy, sustainable and equitable places**, through measures such as resilient housing, green infrastructure, sustainable transport, clean air, flood resilience, food security and strong community networks.

For public health, wider sectors and services, the framework demonstrates that **climate adaptation, healthy placemaking and reducing health inequalities are fundamentally interconnected objectives**. The most effective responses are those that simultaneously reduce environmental risks, strengthen resilience and improve health outcomes for the communities that face the greatest disadvantage.



Cuckmere Valley Flood Environment

Vision - The Possible Futures for East Sussex

What options and alternatives are available for us to choose from?

We know that a changing climate represents one of the defining challenges of the twenty-first century. Before considering the detail of the evidence, methods, findings and opportunities, it is important to establish a clear vision for the future. What kind of East Sussex do we want to create? What future are we choosing through the decisions we make today?

The future is not predetermined. The choices made now by sectors, services, organisations, communities, and residents will shape the extent to which East Sussex is able to adapt, thrive and prosper in a changing climate. Environmental challenges, a changing climate and public health presents risks, but it also presents opportunities. The question is not whether change will occur, but how prepared we choose to be.

This HIA identifies three broad future **pathways** for East Sussex:

Option 1: Act, Mobilise, Integrate and Thrive

This pathway involves early action, collective leadership, coordinated investment and system-wide adaptation. Climate and health considerations become embedded across decision-making, services, infrastructure and communities. Organisations work together to maximise co-benefits, reduce inequalities and build resilience. This pathway delivers a healthier population, stronger communities, a more resilient economy and a more sustainable environment.

Option 2: Hesitate and Incrementally Respond

This pathway is characterised by partial action, fragmented implementation and a tendency towards reactive rather than preventative responses. Some progress is made, but opportunities are missed, adaptation is slower than required and climate impacts increasingly place pressure on public services, infrastructure and budgets. Costs continue to rise as organisations are forced to respond to increasingly frequent climate-related events.

Option 3: Delay, Fragment and React

This pathway is characterised by insufficient adaptation, limited collaboration and continued reliance on crisis management. Climate risks increasingly affect health, wellbeing, infrastructure, services and local economies. Inequalities widen, costs escalate and resilience is weakened. Public services become increasingly focused on responding to emergencies rather than preventing them.

The preferred future for East Sussex is clearly **Option 1**.

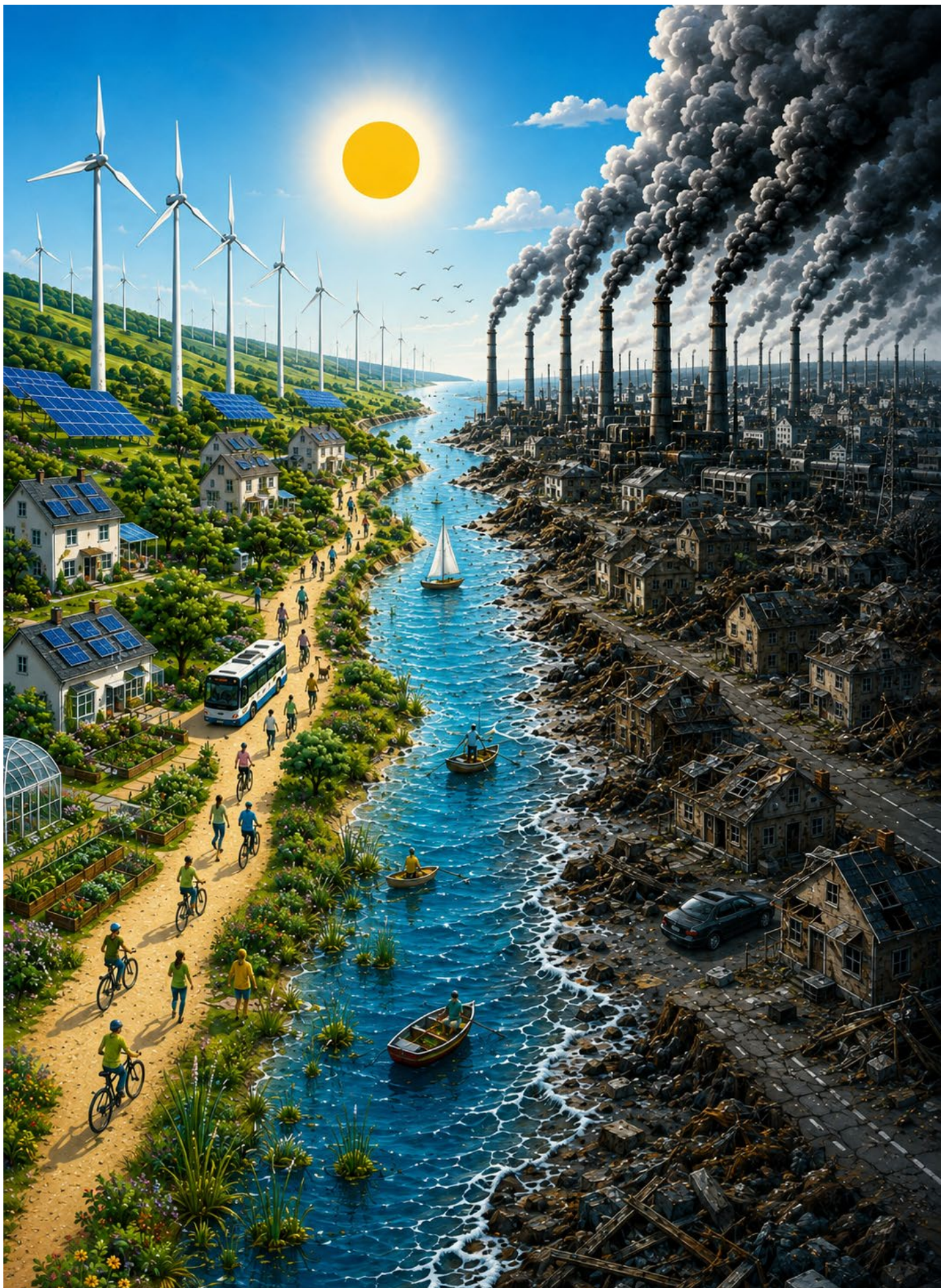
Option 1 offers the greatest opportunity to secure a healthy, prosperous, resilient and environmentally sustainable future. It is the pathway most likely to protect vulnerable populations, vulnerable settings, reduce future costs, strengthen public services and create places where people can thrive and not just hope to survive. This HIA has been developed to support the delivery of this future.

Vision for East Sussex

‘A united, resilient, prosperous and thriving East Sussex where climate adaptation is embedded across people, places, communities, services, sectors and landscapes, enabling everyone to live healthy, safe and fulfilling lives despite a changing climate. Through early action, collective leadership, coordinated investment and system-wide adaptation, climate and health considerations and opportunities are integrated into decision-making, infrastructure and service delivery. Working together, the East Sussex system as a whole, prevents and minimises climate-related health impacts and environmental risks, reduces inequalities, strengthens resilience and maximises the social, economic and environmental co-benefits of adaptation. By investing in resilience today, East Sussex creates stronger communities, a more resilient economy and a sustainable environment, securing lasting benefits for current and future generations.’

Achieving this vision will require climate and health considerations to become embedded across all aspects of decision-making. It will require organisations to move beyond traditional boundaries and work collectively to protect and enhance the social, economic, environmental and community assets that underpin health and wellbeing.

This is demonstrated in the graphic vision on the next page:



Summary of the Health Impact Assessment (HIA) High-Level Strategic Considerations and Opportunities

The following is a summary of the HIA **high-level strategic** considerations and opportunities which have been co-developed by the East Sussex systemwide stakeholders across sectors and services. Supporting practical implementation, additional detail on these considerations and opportunities is set out within the HIA Technical Report in Part 3.

Recognising that organisations engage with climate change and health from different responsibilities, statutory duties and operational perspectives, the considerations, opportunities and action steps are presented through seven complementary lenses:

1. The Health Effects of Climate Change (Part 3A)
2. Priority Wider Determinants of Health (Part 3B)
3. Systemwide Sectors, Services and Stakeholders (Part 3C)
4. Vulnerable Population Groups (Part 3D)
5. Vulnerable Settings (Part 3E)
6. Systemwide Win-Wins and Co-Benefits (Part 3F)
7. Delivering Asset Based Systemwide Resilience and Protection (Part 3F)

Summary by The Health Effects of a Changing Climate

See HIA Technical Report Part 3A for more the more detailed considerations and opportunities and associated action steps.

- **Alert about Aeroallergens:** Develop a coordinated approach to reduce respiratory health risks by creating an evidence-based planting list that balances public health, biodiversity, and climate benefits, alongside implementing a real-time aeroallergen alert system with targeted advice for vulnerable groups.
- **Improve Indoor and Outdoor Air Quality:** Adopt a whole-system, health-centred air quality strategy that applies the prevent → mitigate → avoid hierarchy to reduce pollution at source, lower environmental concentrations, and minimise exposure—while prioritising protection for vulnerable populations. This should include accelerating low- and zero-emission transport and active travel, lobbying for strengthening regulation of industrial, construction, agricultural, and domestic heating emissions, and embedding climate-health considerations in planning and development. Complement these measures by improving indoor and outdoor air quality through ventilation standards, green infrastructure, and targeted clean air zones, while empowering communities and healthcare professionals

with real-time air quality information and guidance to reduce exposure. Delivery should be supported by equity-focused interventions in high-risk communities, strengthened monitoring and data transparency, alignment with the World Health Organisation (WHO) and UK Health Security Agency (UKHSA) air quality guidelines, and coordinated cross-sector governance across public health, planning, transport, housing, and environmental systems.

- **Promote Food Systems, Food Supply and Food Security:** Promote a resilient, sustainable, and healthy local food system by investing in research and monitoring, empowering communities, expanding local food production and access, and strengthening connections across the local food economy.
- **Minimise Chemicals:** Protect public health and the environment by adopting a health-first chemical policy, phasing out harmful chemical use in public services, and prioritising soil restoration as a strategic resource for food security, climate resilience, and ecosystem health.
- **Prepare for Drought:** Boost climate resilience by mandating and incentivising rainwater harvesting, retrofitting water-saving infrastructure, and promoting community-scale systems to conserve water, reduce flooding and coastal impacts, and prepare for drought.
- **Prevent Flooding:** Enhance coastal climate resilience by integrating flood-resilient infrastructure, strengthened planning regulations, comprehensive risk assessments, community health and social support, and inclusive adaptation planning with local engagement and education.
- **Respond to Infectious Diseases:** Develop a climate-informed infectious disease prevention and preparedness system that shifts public health from reactive response to proactive risk management, while ensuring equity and environmental sustainability. This should include strengthening integrated surveillance and early warning systems that combine climate data, vector monitoring, and epidemiological intelligence, supported by advanced analytics and AI-driven modelling to anticipate outbreaks of climate-sensitive diseases. At the same time, policies should prioritise equity and protection for vulnerable populations, addressing the social determinants of health, safeguarding precarious workers, and ensuring fair access to healthcare and public health interventions. All preparedness and response measures should also incorporate sustainable and environmentally responsible practices, ensuring that climate adaptation actions minimise ecological harm and support long-term public and planetary health.
- **Plan for Displacement and Migration:** Plan for climate-driven displacement and migration by integrating domestic and international mobility scenarios into local strategies, assessing

infrastructure and housing impacts, and fostering inclusive, resilient communities through coordinated planning, education, and migrant-led initiatives.

- **Protect against Sun and Ultraviolet Rays:** Enhance heat resilience and equity by integrating urban cooling design, ensuring universal access to safe shaded spaces, promoting UV risk awareness, and innovating with sustainable solar-powered shading solutions.
- **Manage Temperatures and Extreme Temperatures:** Advance climate resilience and public wellbeing by expanding climate-smart urban greening, regenerating public spaces for year-round use, and promoting climate-adaptive housing and neighbourhood design.
- **Deliver on Transitioning and Adapting Infrastructure:** Deliver an integrated, inclusive and equitable net zero transition by aligning climate adaptation, infrastructure investment, public health, and economic resilience through community engagement, workforce development, healthy housing, clean energy reform, and transparent communication.
- **Address Vector-borne Diseases:** Strengthen vector-borne disease resilience through localised risk assessment, cross-sector workforce collaboration, community engagement, sustainable environmental design, and the strategic use of innovation, technology, and governance.
- **Prepare for Wildfires:** Build wildfire resilience through integrated land-use planning, proactive vegetation management, community preparedness, strengthened emergency response, ongoing research and innovation, and continuous learning from past wildfire events.
- **Protect from Extreme Wind and Extreme Winds:** Increase resilience to extreme wind events by strengthening buildings and infrastructure, protecting vulnerable residents, integrating wind risks into emergency planning, investing in nature-based defences, ensuring power continuity, and delivering inclusive public health and safety communications.

Summary by Priority Wider Determinants of Health

See HIA Technical Report Part 3B for more the more detailed considerations and opportunities and associated action steps.

- **Advance Active Travel:** 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.

- **Arts and Culture:** 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.
- **Economy Development, Regeneration, Employment and Skills:** Transform East Sussex into a climate-resilient, low-carbon and inclusive economy by embedding health, climate and sustainability across economic development, regeneration and investment. Integrate climate risk into economic planning, safeguard vulnerable sectors, jobs and infrastructure, strengthen food, energy and resource security, foster green innovation and skills, and co-design healthy, resilient places. Align public and private investment around shared health, environmental and economic outcomes to drive adapting infrastructure, reduce inequalities, strengthen local resilience and support sustainable prosperity.
- **Support Mental Health:** 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.
- **Adapt Physical Activity:** 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.
- **Promote Climate Responsive Climate-Responsive Sleep and Recovery Environments:** 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.
- **Enhance Social Connectedness Under Climate Stress:** 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. Support 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.

Summary for Systemwide Sectors, Services and Stakeholders

See HIA Technical Report Part 3C for more the more detailed considerations and opportunities and associated action steps.

- **Agriculture:** Advance a climate-resilient, net-zero, and health-protective land use system by fostering cross-sector collaboration, supporting regenerative local food production, integrating multi-purpose and adaptive land management, and safeguarding communities from environmental and disease-related risks while strengthening ecosystem services.
- **Community Voluntary Sector:** Empower and integrate the Community Voluntary Sector (CVS) as a central partner in countywide climate-health resilience. Do this by establishing a unified vision, building climate-health literacy, fostering grassroots ownership, embedding CVS into statutory systems, leveraging research and lived experience, strengthening emergency readiness, and supporting inclusive, peer-led, and youth-driven initiatives that reach all communities.
- **Economic Development, Regeneration, Employment and Skills:** Deliver and strengthen climate-health-inclusive regeneration that drives Net Zero, health equity, and resilient local economies. Do this by embedding health and climate in all strategies, decarbonising and localising economic systems, fostering green innovation, co-designing inclusive developments, and aligning public-private investment around shared indicators that link growth to environmental and wellbeing outcomes.
- **Education:** Champion and transform education systems to equip every learner, educator, and school community with the skills, infrastructure, and practices needed for climate and health resilience. Embed climate literacy across the curriculum, future-proof school environments, foster sustainable travel and nutrition, integrate health and safety measures, and ensure inclusive, community-connected learning that prepares young people for a net-zero, climate-adapted future.
- **Environmental Services:** Strengthen environmental health resilience by embedding cross-sector governance, sustainable land and water management, clean air and waste systems, and vector control into coordinated local strategies. Leverage nature-based solutions, circular economy principles, data sharing, and inclusive community engagement to protect ecosystems, public health, and climate readiness.

- **Emergency Services:** Build an integrated, climate-ready emergency response system. It should unify public alerts, multi-hazard simulation, inclusive community engagement, resilient equipment, interagency resource sharing, and mobile access innovations. This should include the incorporation of wildfire-specific training, infectious disease protocols, global best practices, and adaptive routing to protect all populations under increasingly complex and overlapping climate threats.
- **Health and Social Care:** Transform health and social care into a climate-resilient, equitable, and net-zero system. Do this by prioritising prevention for the most vulnerable, embedding climate risk into governance and service delivery, decarbonising and adapting infrastructure, safeguarding mental and physical health. Ensure access to secure food, water, and energy supplies. Protect against environmental hazards, and strengthening community partnerships, multi-hazard preparedness, and integrated system-wide leadership to maintain care continuity under escalating climate threats.
- **Housing:** Champion, create and foster a climate-resilient, health-promoting, and low-carbon housing systems. Do this by prioritising equitable retrofits, embedding climate-smart design in all new builds, integrating active and healthy neighbourhood planning, safeguarding air and water quality, mitigating health and chemical risks, enhancing flood and drought resilience. Prepare adaptable housing solutions to support climate displacement and migration.
- **Media:** Build an inclusive, solutions-focused climate-health communication ecosystem that promotes trust, hope, and action by pairing urgent risks with tangible solutions. Amplify diverse and local voices, using accessible and creative formats, championing equitable climate-health literacy, countering misinformation, and linking storytelling directly to protective behaviours and community engagement.
- **Members of the Public:** Empower individuals and communities to protect health and advance climate resilience. Do this by building climate-health literacy, adopting regenerative daily habits, safeguarding personal and neighbour wellbeing during extreme events, fostering inclusive and connected neighbourhoods, and advocating for systemic policies that deliver climate-health equity.
- **Planning:** Further develop and strengthen the embedding of climate-health priorities into all planning policy, guidance, design standards, and development processes. Do this by mandating resilient, low-carbon, and inclusive urban form; enforcing compliance with climate-health outcomes; integrating nature-based and hazard-specific design solutions; protecting food systems and vulnerable populations. Align local planning with national standards to deliver healthier, safer, and more climate-adapted places.

- **Private Industry and Procurement:** Develop a climate-resilient, healthy and sustainable private sector across East Sussex. Do this by embedding climate adaptation, environmental sustainability, population health and health equity into business leadership, governance, training and decision-making. Through collaborative action, responsible investment, resilient workplaces, sustainable operations and innovation, businesses should reduce environmental impacts, protect workforce and community health, strengthen economic resilience, and support the transition to a fair, low-carbon economy that benefits both people and the planet.
- **Transport:** Expand the delivery of a climate-resilient, net-zero, and health-promoting transport system by decarbonising fleets, expanding active and inclusive travel infrastructure, integrating local food and logistics systems, safeguarding access to health and emergency services, and embedding hazard-specific, climate-adapted design to protect communities, reduce inequities, and maintain mobility under changing climate conditions.
- **Utilities:** Further develop resilient, equitable, and climate-adapted utility systems. Do this by accelerating the transition to community-beneficial clean energy, modernising and safeguarding water infrastructure, embedding climate resilience into all utility design and operations, protecting vulnerable households from energy and water insecurity, integrating data and risk-sharing across sectors. Ensure participatory governance that aligns with health, equity, and environmental goals.

Summary by Vulnerable Population Groups

See HIA Technical Report Part 3D for more the more detailed considerations and opportunities and associated action steps.

- **Adults (25-64 years of age):** Create a climate-resilient workforce and working-age population that is protected from climate-related health risks. They need to be empowered to contribute to climate action, and supported by healthy, sustainable and adaptive workplaces that enhance productivity, wellbeing, economic resilience and population health.
- **Children and Young People:** Adopt a child-centred, climate-resilient health approach that prioritises the protection, wellbeing, and future health of children and young people. Do this by integrating their needs across climate, public health, education, planning, and environmental policies. This should focus on reducing children's exposure to climate-related risks such as air pollution, extreme heat, infectious diseases, and flooding; creating safe, healthy, and sustainable environments in homes, schools, and communities; and ensuring health systems are equipped to recognise and respond to climate-related health impacts on children. Action should also prioritise reducing inequalities affecting vulnerable

children, support mental health and wellbeing in the context of a changing climate, and enable meaningful participation of children and young people in shaping climate and health solutions. Strengthened monitoring, research, and cross-sector collaboration will be essential to ensure evidence-based policies that safeguard the long-term health and resilience of future generations.

- **Ethnic Minority Groups:** Create a climate-resilient East Sussex where ethnic minority communities are protected from climate-related health risks. They need to experience equitable access to healthy environments, housing, services and opportunities, and benefit fairly from climate adaptation and the transition to a low-carbon economy. Through inclusive decision-making, culturally responsive services and targeted action on environmental inequalities, climate adaptation should contribute to improved health outcomes, stronger community resilience, greater social inclusion and reduced health inequalities.
- **Gypsy and Traveller Communities:** Create a climate-resilient East Sussex where Gypsy and Traveller communities are protected from climate-related health risks. They should be able to access trusted information and services, live in safe and resilient environments, and are actively involved in shaping the policies and decisions that affect them. Through a strengths-based and community-centred approach, climate adaptation should contribute to improved health outcomes, reduced inequalities, stronger community resilience and greater trust between services and communities.
- **Homeless:** Create a climate-resilient East Sussex where people experiencing homelessness are protected from climate-related health risks. They should have access to safe and climate-adapted accommodation, receive integrated health and support services, and are actively involved in shaping the policies and services designed to protect them. Climate adaptation should contribute to preventing avoidable illness and deaths, improving health outcomes, reducing inequalities and strengthening inclusion health across the county.
- **Low Income Households:** Create a climate-resilient East Sussex where low-income households are protected from climate-related health risks. Households should be able to live in safe, affordable and climate-resilient homes, supported by strong community networks and able to benefit from the economic, health and social opportunities created through climate adaptation and the transition to a low-carbon economy. Through targeted investment and inclusive decision-making, climate action should reduce fuel poverty, improve health outcomes, strengthen financial resilience and narrow health inequalities.
- **Older Adults (65+ years of age):** Develop a climate-resilient ageing population. Do this by embedding climate adaptation, health protection, accessible housing, community resilience and age-friendly environments across health and social care services, housing, infrastructure,

emergency planning and local communities. This will enable older adults to maintain their health, wellbeing, independence and social connectedness while reducing climate-related illness, avoidable hospital admissions, mortality and inequalities.

- **People with Disabilities and Long-Term Health Conditions:** Create a climate-resilient, inclusive and accessible system that proactively identifies, protects and supports people with disabilities and long-term health conditions before, during and after climate-related events. This should ensure continuity of care, safeguard access to essential medicines, medical equipment and support services, strengthen individual and community resilience, and reduce climate-related health inequalities.
- **Women and Girls:** Create a climate-resilient East Sussex where all women and girls can live safely, healthily and equitably in a changing climate. They should be supported by resilient services, climate-adapted homes and communities, accessible infrastructure, responsive health and care systems. This should include the need for inclusive decision-making processes that reduce gender inequalities and improve health, wellbeing, safety and opportunity.

Summary by Vulnerable Settings

See HIA Technical Report Part 3E for more the more detailed considerations and opportunities and associated action steps.

- **Care Homes:** Create a climate-resilient care home sector across East Sussex. The sector should protect residents, staff and services from climate-related risks while supporting healthy ageing, reducing avoidable illness and mortality, maintaining continuity of care and strengthening resilience across the wider health and social care system. Through proactive adaptation, care homes should become safer, healthier, more sustainable and better equipped to respond to the challenges of a changing climate.
- **Community Sports Facilities:** Create a climate-resilient network of community sports facilities across East Sussex. They can support the delivery of public health, support delivery of physical activity and wellbeing, strengthen community resilience and maintain access to sport and recreation despite increasing climate-related challenges. Through resilient buildings, sustainable grounds management, nature-based solutions and adaptive infrastructure, sports facilities should contribute to healthier communities, environmental sustainability and long-term climate resilience.
- **Hospices:** Create a climate-resilient hospice sector across East Sussex. They can continue to safeguard patient comfort, dignity, wellbeing and quality of care while maintaining continuity of specialist palliative and end-of-life services during climate-related events.

Through resilient facilities, climate-aware clinical practice, strong partnership working and adaptive leadership, hospices should be equipped to protect patients, families, carers, staff and volunteers from climate-related risks whilst strengthening resilience across the wider health and care system.

- **Hospitals:** Create a climate-resilient acute care system across East Sussex that protects vulnerable patients, supports staff, maintains critical services, strengthens hospital infrastructure and reduces climate-related disruption to care. Hospitals should be equipped to anticipate, absorb, respond to and recover from climate-related events while continuing to deliver safe, high-quality and sustainable healthcare.
- **Nurseries and Early Years Settings:** Create a network of climate-resilient early years settings across East Sussex that protects young children from climate-related health risks, maintains safe and nurturing environments, supports healthy child development and ensures continuity of childcare provision during extreme weather events. Through resilient buildings, climate-adapted outdoor spaces, secure infrastructure and long-term investment, nurseries and early years settings should contribute to improved health, wellbeing, resilience and life chances for current and future generations.
- **Nursing Homes:** Create a climate-resilient nursing home sector that proactively identifies and manages climate-related health risks, protects clinically vulnerable residents, maintains continuity of healthcare delivery and strengthens resilience across the wider health and social care system. Through climate-informed clinical practice, resilient infrastructure, strong governance and integrated partnership working, nursing homes should be equipped to prevent avoidable illness, reduce hospital admissions and maintain safe, effective and person-centred care during climate-related events.
- **School Buildings:** Create a climate-resilient, healthy and sustainable school estate across East Sussex that protects pupils, staff and educational infrastructure from climate-related risks while maintaining safe, comfortable and effective learning environments. School buildings and grounds should be capable of adapting to future climate conditions, supporting biodiversity, reducing environmental impacts and contributing to wider community resilience.

Summary by Systemwide Win-Wins and Co-Benefits

See HIA Technical Report Part 3F for more the more detailed considerations and opportunities and associated action steps.

- Embed Population and Planetary Health in all of Our Policies and Approaches. Do this by

ensuring that climate action, health improvement, nature recovery and social equity are planned and delivered together. Systematically identify, maximise and communicate the environmental, health, social and economic co-benefits of climate action. Strengthen nature-based solutions and ecological resilience. Adopt integrated climate-health communication and engagement approaches that inspire collective action, improve wellbeing and build healthier, more resilient and sustainable communities across East Sussex.

Summary for delivering Asset Based Systemwide Resilience and Protection

See HIA Technical Report Part 3F for more the more detailed considerations and opportunities and associated action steps.

Develop an asset-based approach to climate adaptation by protecting, strengthening and mobilising East Sussex’s social, human, cultural, political, natural, financial and built assets. They contribute towards efforts to improve population health, reduce inequalities and strengthen whole-system resilience. Through collaborative stewardship, integrated planning, asset mapping and strategic investment, maximise the value of existing assets while ensuring they remain resilient to current and future climate risks.

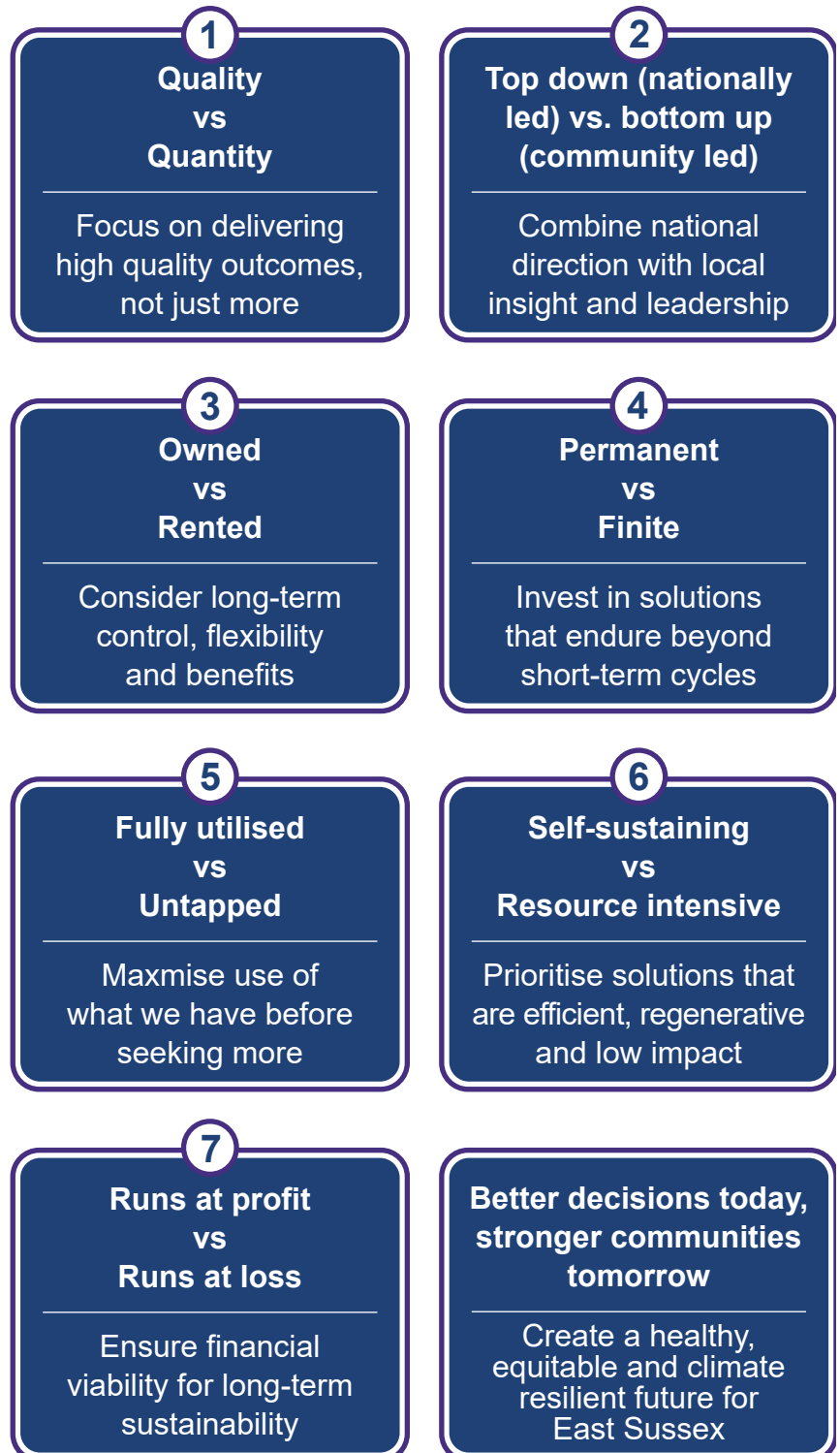
Our Assets

A holistic approach recognises the many types of assets that contribute to community health and climate resilience



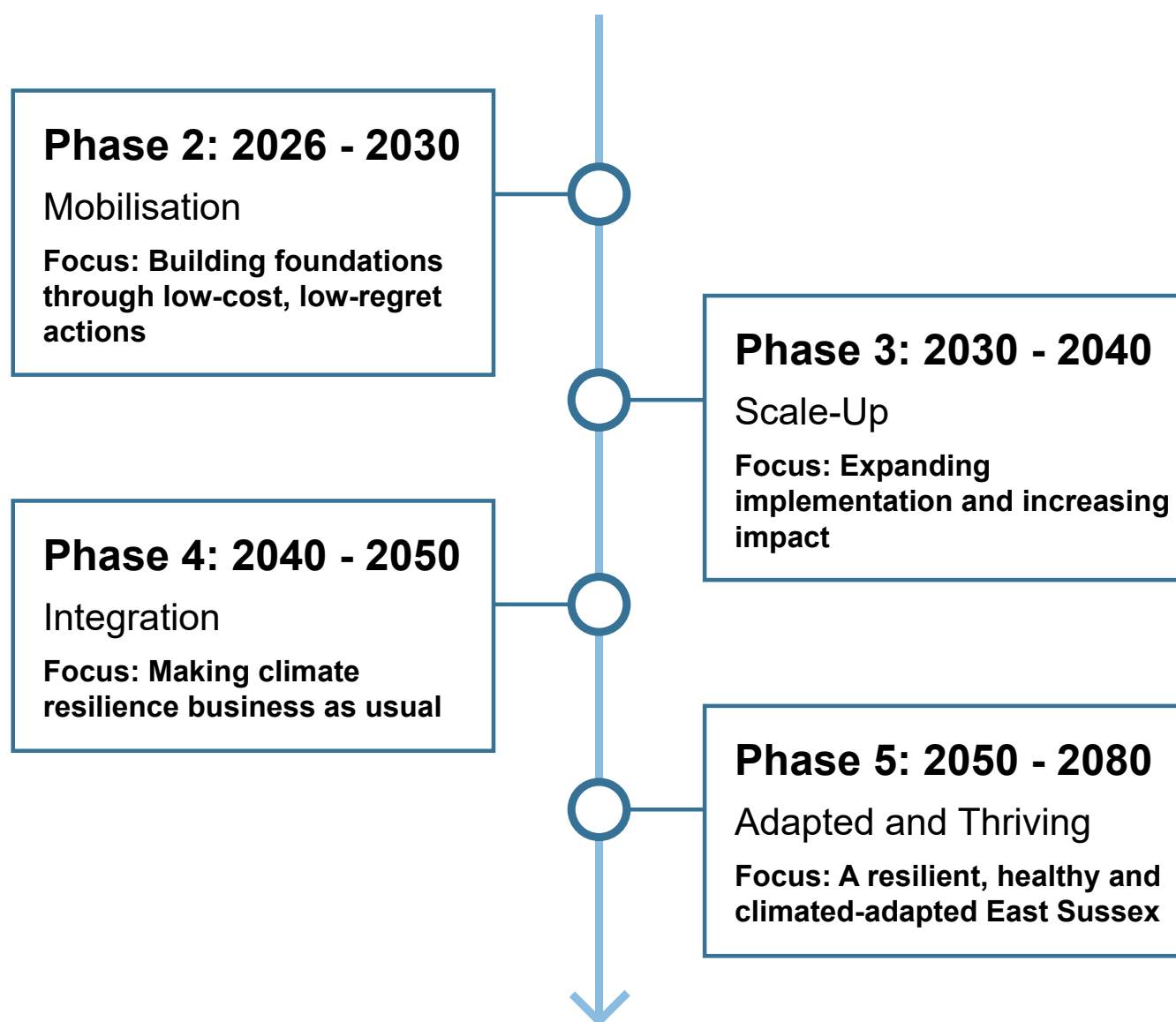
Key Considerations for Decision-Making

Balancing trade-offs to make choices that deliver the greatest long-term value for people, places, and the planet



Implementation Road Map, Timelines and Milestones for Delivery

The East Sussex Systemwide Environment, Climate and Health Impact Assessment (HIA) sets out a long-term roadmap all the way up to 2080 for building a healthier, more resilient, and climate-adapted East Sussex. Recognising that climate adaptation is an ongoing process rather than a one-off intervention, the HIA is designed as a living framework that will be formally reviewed and refreshed every five years to ensure it remains aligned with emerging evidence, climate risks, policy developments and local priorities.



The roadmap adopts a long-term outlook to 2080 because climate-related risks—including extreme heat, flooding, coastal change and emerging health threats—will continue to evolve over the decades to come. A longer planning horizon supports preventative action, enables major infrastructure and service changes, strengthens the economic case for early investment, and ensures decisions made today benefit future generations.

Phase 2 Delivery and Implementation: Mobilisation (2026-2030)

Focus: Building foundations through low-cost, low-regret actions

This phase establishes the governance, partnerships and systems needed to embed climate and health considerations across policy and practice. Priorities include developing SMART objectives, creating a system-wide delivery plan, strengthening governance and reporting arrangements. This phase also includes the need for developing and delivering climate-health training, developing local climate-health data profiles, integrating climate considerations into services and strategies, and implementing early “quick win” projects that demonstrate progress and build momentum.

Phase 3 Delivery and Implementation: Scale-Up (2030-2040)

Focus: Expanding implementation and increasing impact

The emphasis shifts from planning and pilot projects to large-scale delivery. Successful initiatives from the mobilisation phase are expanded across sectors and communities. Key priorities include scaling up adaptation and prevention programmes, delivering larger cross-sector projects, developing action plans, strengthening partnerships, increasing community engagement, and embedding climate-health considerations into mainstream service delivery and organisational practice.

Phase 4 Delivery and Implementation: Integration (2040-2050)

Focus: Making climate resilience business as usual

By this stage, climate resilience and health improvement are fully integrated into governance, investment, policy development and service delivery. Adaptation is no longer treated as a separate programme but becomes standard practice across organisations. Priorities include aligning governance and policy frameworks, mainstreaming successful interventions, strengthening monitoring and accountability, and undertaking formal evaluations. Modelling suggests East Sussex could realise around £50 million in avoided costs and financial benefits by 2050 through reduced climate-related health impacts and preventative adaptation measures.

Phase 5 Delivery and Implementation: Adapted and Thriving (2050-2080)

Focus: A resilient, healthy and climate-adapted East Sussex

This final phase represents the long-term vision where communities, infrastructure, services and natural systems are fully resilient to climate change. The most significant climate-related health impacts have been reduced or avoided, resilience is embedded in planning and investment decisions, and earlier adaptation investments continue to generate health, social,

environmental and economic benefits. East Sussex is positioned as a county that successfully anticipated climate risks, acted early, and created lasting benefits for current and future generations.

Overall Outcome

The roadmap provides a structured pathway from mobilisation → scale-up → integration → long-term adaptation, supporting continuous improvement, early preventative action, and sustained partnership working. Its ultimate aim is to create a healthier, fairer, more resilient East Sussex that is prepared to thrive in a changing climate because of the decisions made today.



Pevensey Levels Landscape

Immediate Next Steps: Phase 2 Delivery and Implementation - Mobilisation (2026-2030)

East Sussex's Blueprint for a System-Wide Approach (stages, activities and principles)

Principles for delivery and implementation of Phase 2 - Putting in 'Place' the Systems and Processes that allow partners to mobilise and work towards addressing the health effects of a changing climate:

- a) Continue and grow systemwide stakeholder relationships and engagement
- b) Deliver 'No-regrets' interventions
- c) Identify and make use of systemwide quick wins, opportunities and co-benefits
- d) Take economic cost saving actions now
- e) Implement actions with multiple benefits at every opportunity
- f) Continue to alleviate barriers and tensions where possible

Next Steps - Phase 2: Mobilisation (2026-2030) - Little to Low Cost

Focus: East Sussex is establishing Activities, Working Arrangements, Deliverables and early Win-Wins



Deliverables and Action Steps

- 1. Develop a Changing Climate and Health Charter and MOU(s) to keep addressing the health effects of a changing climate as a systemwide priority:**
 - a) Raise awareness of this HIA as a key resource/toolbox for action to address a changing climate as well as to advance and integrate climate and health considerations.
 - b) Continue the 'Climate and Health Conversations' and Systemwide Workshops to support deliver of 'Population and Planetary Health in all of Our Approaches'.
 - c) Develop a shared memory/library of data, activities and guidance etc.
- 2. Establish a Climate and Health Partnership across East Sussex. Include the Mayoral Combined Authority**
- 3. Extend data analysis and intelligence of local vulnerabilities, impacts, effects, hazards and risks. For example:**
 - a) UK Climate Risk, Spatial indicators of vulnerability to climate related hazards in the UK (Sayers and Partners) July 2025.
 - b) Share and map systemwide data bases and intelligence on a changing climate and health. Use this to also map system impacts and vulnerabilities which can be overlayed.
- 4. Formulate a Delivery Plan, associated Action Plans and establish governance partnership(s):**
 - a) Using the Implementation support tool for considerations, opportunities and action steps (Appendix C) advance and integrate climate and health considerations and opportunities into existing and new partner strategies, implementation plans and budgets. Do not reinvent the wheel where possible.
 - b) Work with systemwide partners to sequence actions by urgency and feasibility (short-, medium-, long-term). The 'Considerations, Opportunities and Action Steps' can be translated into organisational SMART objectives. SMART i.e. specific,

measurable, achievable, realistic and timely:

Specific - outline in a clear statement precisely what is required.

Measurable - include a measure to enable you to monitor progress and to know when the objective has been achieved.

Achievable - objectives can be designed to be challenging, but it is important that failure is not built into objectives. Employees and managers should agree to the objectives to ensure commitment to them.

Realistic - focus on outcomes rather than the means of achieving them.

Timely - (or time-bound) - agree the date by which the outcome must be achieved. Specific, measurable, achievable, realistic and as part of Phase 2 systemwide partners will choose and agree which of the recommendations they will take forward and when they will be achieved by.

5. Develop 'climate and health training' to increase capacity building - build internal capability across sectors. For example:

- a) Climate & Health literacy training for policy leads, project officers and planners.
- b) Systemwide learning events ("Climate and Health Conversations").

6. Continue policy integration and advancement by embedding climate-health considerations. For example, into:

- a) Local Plan revisions (spatial planning, development control).
- b) NHS Green Plans and ICS planning.
- c) Procurement, transport and emergency planning strategies.
- d) Re-review the system policies related to environment, climate and health. Use the policy review tool to assess, update and co-develop policies. Feedback loops.
- e) Integrate and advance climate and health considerations into assessments, projects, procurement and emergency planning.
- f) Resource toolkits with checklists, case studies and briefing notes.

7. Update and Develop Local Data and Research:

- a) Develop and launch a comprehensive, publicly accessible local Climate-Health Monitoring Dashboard.
- b) Collaborate with universities and tech partners on climate-health predictive modelling.
- c) Invest in citizen science projects to collect granular local data.
- d) Encourage innovation challenges and pilot projects focused on intersectional climate-health solutions.
- e) Start the process to prepare and update the data profile in year 4.
- f) Start the process to prepare and update the economic evaluation in year 4.
- g) Start the process to prepare and update the literature search and review in year 4.
- h) Consider evidence-base in relation to key interactions between a changing climate impacts and updates (or an additional layer) to recommended considerations, opportunities and action steps (building on cumulative interactions between a changing climate impacts mapped in Appendix H).

8. Pursue Funding and Investment:

- a) Maximise access to national climate adaptation and health funds.
- b) Access funding where possible and explore opportunities to develop a local Systemwide Climate-Health Investment Fund to seed cross-sector projects.
- c) Ensure transparent and participatory budgeting with equity focus.

9. Raise the profile and improvement of Warning Systems:

- a) Raise awareness of warning systems including heat-health warning systems.
- b) Seek efficiencies across warning systems and integration where possible.

10. Evaluate as you go, progress and report on the HIA Evaluation

Understanding Health Impact Assessment (HIA)

This section provides an overview of Health Impact Assessment (HIA). Further methodological detail is available in the accompanying Methods Statement (Appendix B).

What is a Health Impact Assessment?

Health Impact Assessment (HIA) is a structured, evidence-based process used to identify and assess the potential positive and negative effects of a policy, programme, plan or project on population health and health inequalities. It supports decision-making by identifying opportunities to improve health, minimise harm and enhance equity across different population groups.

For this assessment, HIA has been selected as the most appropriate methodology to understand how East Sussex can respond to the health impacts of climate change while strengthening resilience, protecting health and care systems, and supporting sustainable development. The assessment adopts a broad definition of health, recognising the influence of social, environmental and economic determinants alongside physical and mental health.

This HIA is guided by established national and international guidance, including that produced by the Institute of Public Health¹, the Wales Health Impact Assessment Support Unit², and international best practice. A quality assurance review and competency assessment are included in Appendix B.

At its core, HIA is a decision-support process that:

- Identifies potential health impacts, both intended and unintended
- Considers how impacts are distributed across different population groups
- Recommends actions to maximise health benefits and reduce risks
- Promotes health equity by focusing on vulnerable and disadvantaged communities
- Supports monitoring, evaluation and accountability.

HIA is founded on the wider determinants of health, recognising that most influences on health arise outside healthcare services. Consequently, it helps sectors beyond health understand how their policies and decisions affect population health and encourages greater cross-sector collaboration.

For this assessment, the Institute of Public Health Guidance¹ and the Wales Health and Wellbeing Determinants Checklist² informed both the literature review and appraisal framework.

A central feature of HIA is identifying population groups that may experience disproportionate impacts. The Wales Health Impact Assessment Support Unit Population Groups Checklist² was used to identify vulnerable groups most likely to be affected by climate change and existing health inequalities.

Benefits of HIA

HIA facilitates and makes space to ‘have the conversation’ around complex health related circumstances and issues in a structured, systematic, transparent, democratic and holistic way.

HIA identifies pre-existing and future anticipated inequalities, the unequal distribution of health, social, economic and environmental risks with specific attention to vulnerable and marginalised groups.

Through using HIA, public health is placed on the agenda of sectors, services, agencies, institutions, and individuals outside the health sector. This helps the **risks to human health**, including related social, cultural, economic, and environmental determinants, to be anticipated and mitigated.

HIA identifies opportunities for promoting human health, including that potential **health co-benefits** are identified and strengthened. Public participation in decision-making is facilitated through stakeholder engagement during HIA. Where HIA promotes intersectoral action for health and addressing cross-cutting health issues, the **burden on health services is reduced**.

HIA contributes to **healthier, sustainable, and resilient communities**, which is essential for healthy and sustainable development.

HIA provides a transparent and systematic framework for considering health within decision-making. It:

- Identifies potential health impacts and inequalities
- Highlights risks and opportunities across the wider determinants of health
- Promotes collaboration between sectors
- Supports meaningful stakeholder and community participation
- Strengthens health equity by focusing on vulnerable populations

- Contributes to healthier, more resilient and sustainable communities
- Helps reduce future pressures on health and care services by embedding health considerations early in policy and planning.

Further Benefits of Health Impact Assessment

- **Supports cost savings:** By promoting and protecting population health, HIAs can help reduce costs for governments and society through the prevention of ill health and associated impacts.
- **Contributes to the public good:** Improving population health has intrinsic value and supports the responsibility of public bodies to consider the wellbeing of communities.
- **Leads to better policies and decisions:** HIA provides policymakers with a clearer understanding of the potential health implications of their decisions, enabling more informed and effective policy development.
- **Improves understanding of health impacts:** The process uses evidence to identify how proposals may affect health and wellbeing, helping stakeholders understand complex health pathways, interactions, and trade-offs.
- **Provides clarity and actionable recommendations:** HIAs generate clear conclusions and practical recommendations to enhance positive health impacts and mitigate negative effects.
- **Benefits stakeholders across sectors:** Health outcomes influence the objectives of many sectors. HIA helps stakeholders achieve wider goals by identifying opportunities to improve population health through their policies, plans, or projects.
- **Helps address complex challenges:** HIA can be used to tackle cross-cutting issues that span multiple sectors, such as climate change adaptation, sustainable development, transport, housing, and environmental planning.

Most importantly, HIA as a **participatory process** whereby population health is a shared responsibility across the public, private and voluntary sectors, with all forming part of the wider ‘public health family and community’. Therefore, this HIA emphasises the role and responsibility of all sections of society—from the most privileged to the most disadvantaged—in anticipating, adapting and mitigating risks to human health arising from social, cultural, economic and environmental determinants.

Whole Systems Thinking as the Foundation for this Systemwide Health Impact Assessment (HIA)

Whole-system working recognises that complex public health challenges cannot be solved by a single organisation or intervention acting alone. Instead, it brings together stakeholders, including communities, to develop a shared understanding of issues, identify opportunities for change, and work collaboratively to achieve sustainable, long-term improvements. By taking a flexible and integrated approach, it focuses on how different parts of a system interact and how collective action can deliver better outcomes than organisations working independently. As Public Health England (2019) describes:

"A local whole systems approach responds to complexity through an ongoing, dynamic and flexible way of working. It enables local stakeholders, including communities, to come together, share an understanding of the reality of the challenge, consider how the local system is operating and where there are the greatest opportunities for change. Stakeholders agree actions and decide as a network how to work together in an integrated way to bring about sustainable, long-term systems change."

A system comprises interconnected elements that collectively produce outcomes greater than the sum of their individual parts. Within the context of climate and health, these include **people and communities; organisations and institutions; policies, strategies and regulations; infrastructure and physical assets; funding and resources; governance arrangements; organisational cultures and behaviours; power and decision-making structures; and environmental, social and economic conditions.**

The methodological foundation of the **Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment for East Sussex (ECH-HIA)** is **systems working, systems thinking and systems dynamics**. These approaches recognise that the health impacts of a changing climate cannot be understood or addressed through simple, linear cause-and-effect relationships, but require consideration of the complex interactions, interdependencies and patterns that exist within and between systems.

The health effects of a changing climate exemplify a complex systems challenge. Climate risks interact with housing, transport, food and energy systems, environmental quality, economic conditions, demographic change and health inequalities. Actions in one part of the system can therefore create intended and unintended consequences elsewhere, while opportunities to improve health, reduce inequalities and strengthen resilience frequently depend upon coordinated action across multiple sectors.

For this reason, the ECH-HIA adopts a **systems-based approach rather than an isolated policy, programme or project approach**. This reflects the complexity and uncertainty of climate and health; the interconnected nature of risks and outcomes; the diversity of stakeholders, responsibilities and perspectives; competing priorities, tensions and trade-offs; the need to identify co-benefits and avoid unintended consequences; and the importance of long-term, sustainable and adaptive solutions.

Drawing on systems thinking principles and tools developed by the **UK Government Office for Science (2023)**, the HIA has used participatory engagement, systems mapping, stakeholder workshops and collaborative analysis to explore how climate and health issues interact across East Sussex and identify opportunities for collective action.

System Dynamics

Systems dynamics complements systems thinking. While systems thinking identifies the components of a system and the relationships and interdependencies between them, systems dynamics examines **how these relationships interact and change over time**, producing patterns, trends, behaviours and outcomes.

Climate and health systems are not static. They continually evolve through environmental, social, economic, political and health-related influences. Actions taken today may take years or decades to produce their full effects, while inaction can reinforce cycles of vulnerability, inequality and increasing costs. A systems dynamics perspective therefore considers **feedback loops, delays, interdependencies, unintended consequences, leverage points and emergent behaviours and patterns**.

For example, increasing temperatures may increase demand on health and social care services, placing additional pressure on constrained resources and reducing capacity for prevention and adaptation. This can reinforce vulnerability and increase future demand. Conversely, early investment in **housing adaptation, green infrastructure and community resilience** can generate positive reinforcing effects by improving health, reducing inequalities and service demand, and strengthening resilience over time.

The ECH-HIA therefore seeks not only to identify climate-related risks and opportunities, but to understand **how and why they emerge, interact, and evolve** through relationships between climate hazards, the wider determinants of health, service delivery, governance, funding, behaviours and community resilience.

Applying systems thinking and dynamics enables decision-making to move beyond reactive responses towards **proactive, preventative and adaptive action**. It helps identify where

interventions may have the greatest long-term impact, where unintended consequences could arise, and where coordinated action can generate multiple health, environmental, social and economic co-benefits.

Ultimately, climate resilience cannot be achieved through isolated interventions. **Systems thinking** enables understanding of the components, relationships and interdependencies across East Sussex, while **systems dynamics** explores how these relationships generate feedback loops, vulnerabilities, opportunities and outcomes over time. Together, they provide the foundation for identifying effective **leverage and intervention points**, avoiding unintended consequences and supporting sustainable, system-wide adaptation and transformation towards a **healthier, fairer and more resilient East Sussex**.

The East Sussex Approach

The East Sussex Systemwide HIA - A New Health Impact Assessment (HIA) Typology

The ‘Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment for East Sussex (ECH-HIA)’ represents an evolution of traditional Health Impact Assessment practice. It is also a new HIA Typology. Whilst conventional HIAs typically assess the health implications of an individual policy, programme, project or development, this assessment adopts a whole-system, place-based perspective, examining the collective and cumulative influence of policies, services, organisations, infrastructure, programmes and communities across East Sussex.

The development of the East Sussex Systemwide HIA has been shaped by:

- The evolving evidence, learning and insights generated throughout the HIA process;
- The application of systems thinking, stakeholder co-production and the Golden Interactions Methodology;
- The unique governance arrangements, organisational landscape and culture of East Sussex; and
- The need to respond to complex, interconnected challenges, particularly a changing climate, health inequalities and the wider determinants of health.

The resulting methodology reflects the long-established principle that HIA is a flexible, adaptive and context-sensitive process. Rather than applying a fixed methodology, the East Sussex approach has evolved to reflect local circumstances, emerging evidence, and increasing system complexity. The Systemwide HIA therefore represents both an extension and an evolution of

traditional HIA practice, providing a practical framework for understanding, influencing and improving complex place-based systems.

Rather than considering interventions in isolation, the Systemwide HIA explores how different parts of the system interact, influence one another and collectively affect population health, health inequalities and climate resilience. This broader perspective enables the identification of system interdependencies, synergies, cumulative impacts, gaps, barriers, tensions and opportunities that would often remain hidden through standalone assessments. It also recognises that many of the greatest opportunities for improving health lie not within individual organisations, but through stronger collaboration and alignment across the wider system.

Unlike conventional HIAs, a Systemwide HIA examines the relationships and interdependencies between organisations, sectors, services, communities, and the wider determinants of health. By bringing together quantitative evidence, qualitative insight, stakeholder expertise and local intelligence through a structured process of evidence review, triangulation and synthesis. In this HIA, for example, it develops a shared understanding of how a changing climate influences health across the entire East Sussex system. This broader perspective reveals system interdependencies, cumulative effects, synergies and unintended consequences that are often overlooked when projects or policies are considered independently across housing, planning, transport, healthcare, education, environmental management, economic development and the other wider determinants of health for example. The systemwide HIA enables a more comprehensive understanding of risks, opportunities and co-benefits. This helps organisations to anticipate unintended consequences whilst maximising health, environmental, social, and economic co-benefits.

Our Systemwide HIA provides significant advantages over traditional assessment approaches by enabling decision-makers to understand how interconnected policies, services, organisations and communities collectively influence health outcomes. Rather than assessing individual interventions in isolation, it adopts a strategic, place-based approach to understand how policies, programmes, sectors, services, organisations and the wider determinants of health interact across an interconnected system.

By bringing together quantitative evidence, qualitative insight, local intelligence and stakeholder expertise through evidence review, triangulation and synthesis, the Systemwide HIA develops a shared understanding of how a changing climate influences health across East Sussex. This broader perspective reveals system interdependencies, cumulative impacts, synergies and unintended consequences that are often overlooked when policies or projects are considered independently.

A Systemwide HIA is both an assessment and a catalyst for change. By establishing a shared evidence base and common understanding of system priorities, it helps align organisations

around shared outcomes, supports collaborative decision-making and directs collective effort towards areas where the greatest system-wide benefits can be achieved. This enables partners to coordinate resources more effectively, strengthen accountability and accelerate action to improve population health, reduce inequalities and build long-term climate resilience.

It also enables decision-makers to assess cumulative impacts, identify opportunities for collective action and align priorities to improve population health, advance health equity, strengthen resilience and support long-term system transformation.

As part of the development of the 'Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment for East Sussex (ECH-HIA)', a refined operational definition and methodological framework for a **Systemwide Health Impact Assessment (Systemwide HIA)** has been developed. This reflects the evolving understanding generated through the East Sussex assessment process, the methodological approaches applied, and the practical experience of implementing a whole-system approach within the East Sussex context.

A **Systemwide HIA** is a systematic, evidence-informed and collaborative process that brings together intelligence, data, research, professional expertise and stakeholder insight to investigate, understand, assess and communicate the positive, negative, cumulative, uncertain and unintended impacts on health and wellbeing arising from the collective operation of policies, plans, programmes, projects, services, organisational activities and decision-making across an interconnected system.

Unlike traditional HIAs, which focus on individual interventions, a Systemwide HIA seeks to understand how sectors, services, organisations and the wider determinants of health interact to collectively (if at all) influence population health, health inequalities, climate resilience and system performance. Operating and operationalising within and across policy areas and environments characterised by multiple sectors, services, stakeholders, complex interdependencies and dynamic feedback loops, it applies systems-working and thinking principles to identify relationships, cumulative impacts, barriers, opportunities and co-benefits that may otherwise remain hidden. It aims to provide a means to identify, understand, influence and improve how a whole system is navigating, contributing and or delivering population health and wellbeing and to what extent. It works to respond collectively to complex challenges through facilitating opportunities for system transformation.

Developed by **Madigasekera-Elliott, 2026** it is defined as:

"A 'Systemwide' Health Impact Assessment (Systemwide HIA) is a systematic, collaborative and iterative 'whole-system HIA approach/process' for developing collective understanding, coordination and action(s) across all sectors and services in a place. It works to capture, investigate and shape how all of the policies, programmes, activities and decisions of a whole system(s) work (if at all) to simultaneously influence health, wellbeing, health equity and sustainability.

It examines the actions/inactions, the cumulative, interconnected and potentially unintended impacts arising across systemwide policies, strategies, plans, programmes, services, investments, activities and projects, rather than assessing individual interventions in isolation. Importantly, it recognises that actions or decisions that may appear beneficial, neutral or manageable when considered separately can, through their combined, repeated and interacting effects (across a system), generate significant positive or negative impacts across the wider system and over time.

A Systemwide HIA therefore considers not only individual impacts, but how impacts accumulate, interact, reinforce, amplify or offset one another across sectors, services, populations, places and time. Through analysis of 'whole-system dynamics', it brings together evidence, data, policy analysis, lived experience and stakeholder experiences and knowledge to understand how impacts are generated, transmitted and distributed across a system, its people, populations and place(s). Importantly, it considers how the structures, relationships, policies and ways in which a system(s) operate can themselves act as part of the 'causes of the causes' of health inequalities, with particular attention to communities and population groups experiencing greater vulnerability or disadvantage.

By identifying interdependencies, synergies, co-benefits, cumulative impacts, gaps, tensions, barriers and opportunities across sectors, services, communities and organisational boundaries, a Systemwide HIA develops a shared system voice, intelligence and set of co-designed recommendations to create and deliver a shared vision. It provides the blueprint for collective coordination whereby systems within the system are able to pull in the same direction. This develops and supports collective understanding and coordinated action - systemwide action. It enables partners to collectively strengthen policy and decision-making, maximise positive impacts and co-benefits, prevent or mitigate adverse and cumulative impacts, address gaps and unintended consequences, and develop system-generated solutions that embed health, wellbeing and health equity across the whole system.

The ultimate purpose of a systemwide HIA is to move beyond assessing individual impacts to understanding how the whole system collectively produces and distributes health outcomes—and to translate that understanding into coordinated action and positive system transformation, creating healthier, fairer and more resilient people, communities and places."

Comparing the three forms of Health Impact Assessment

PROJECT HIA	STRATEGIC HIA	SYSTEMWIDE HIA
LEVEL Individual project, scheme or development	LEVEL Policy area, strategy, programme or plan	LEVEL Most or all policies, projects, services, sectors and systems
TIMING When a project is defined; ideally in early design	TIMING Early in policy development	TIMING Before anticipated shocks or crises, or during them
SCOPE Localised and site-specific	SCOPE Broad, systemic, population- wide long term determinants	SCOPE Broad and systemic; uses a 'golden interactions' methodology; integrates population-wide and site-specific impacts
PURPOSE Identifies and manages health impacts of specific project	PURPOSE Shapes strategic direction and policy choices	PURPOSE Assess individual and cumulative systemwide impacts; co-develops whole system action
EXAMPLE Housing estate, new road, waste facility, industrial site	EXAMPLE Climate change strategy, transport plan, housing policy	EXAMPLE East Sussex Systemwide Climate Change Health Impact Assessment
DETERMINANTS Focuses on direct environmental and community impacts	DETERMINANTS Influences structural determinants such as transport, placemaking and energy systems	DETERMINANTS Builds a full picture of the system; integrates multiple perspectives
SCALE Local or site-specific	SCALE Regional or national	SCALE Systemwide; local, regional, national or international
BEST USE Best for a defined project or development	BEST USE Best for shaping upstream policy and strategic direction	BEST USE Best for complex cross-sector issues such as climate change and health

The primary purpose of this Systemwide HIA is to advance the integration of health, wellbeing, equity, climate and sustainability considerations across a whole system. It provides a structured framework for understanding how complex interactions between organisations, sectors, services and policy domains influence population health outcomes, health inequalities and system resilience.

A defining feature of the Systemwide HIA is its ability to operate within environments characterised by high complexity, multiple stakeholders, interdependencies and dynamic feedback loops. Through the application of systems-thinking principles, it enables a deeper understanding of the relationships between social, economic, environmental and health determinants, helping to reveal how cumulative and interconnected impacts emerge across a system.

By intentionally bringing together diverse perspectives, evidence sources and forms of expertise, the Systemwide HIA creates opportunities to develop a shared understanding of system challenges and opportunities. In doing so, it raises awareness of the synergies, interconnections and pressures affecting the wider determinants of health and facilitates more coordinated, transparent and evidence-informed decision-making.

The Systemwide HIA also serves as a mechanism for identifying and co-producing system-generated solutions. It supports the alignment of intersectoral action, encourages collaboration across organisational boundaries and enables stakeholders to collectively identify opportunities for prevention, adaptation, mitigation, transformation and resilience-building. At the same time, it provides a framework for identifying and addressing tensions, gaps, barriers, unintended consequences and cumulative impacts that may otherwise remain hidden within fragmented or siloed approaches.

Importantly, the Systemwide HIA seeks to maximise opportunities for health improvement and health equity by embedding health considerations across all aspects of system activity. In doing so, it advances the East Sussex 'Population and Planetary Health in all of Our Approaches' model that extends beyond traditional policy-focused interventions to encompass services, programmes, operational delivery, governance arrangements and wider system functions.

The Systemwide HIA provides a structured framework for:

- Integrating health, wellbeing, equity, climate resilience and sustainability across a whole system.
- Understanding how organisations, services and policies collectively influence health outcomes.

- Identifying cumulative impacts, system pressures, gaps, barriers and opportunities
- Supporting prevention, adaptation, mitigation, resilience-building and long-term transformation.
- Aligning action across organisations, sectors and policy areas.
- Embedding a Health, Environment and Climate in All of Our Approaches ethos throughout governance, planning and service delivery.

Benefits Beyond the Systemwide HIA Assessment

The value of a Systemwide HIA extends far beyond the production of a report. The process itself has strengthened the East Sussex system's collective capacity to respond to a changing climate by acting as a catalyst for learning, collaboration, innovation and organisational development. This HIA has specifically:

- Built knowledge, capability and capacity, improving understanding of a changing climate, health inequalities, public health and the wider determinants of health.
- Strengthened systems thinking, dynamics and shared learning through the creation of a common evidence base, shared language and improved understanding of system interdependencies.
- Influenced policy and strategic decision-making by embedding health, climate and environmental considerations into emerging policies, programmes, investment decisions and long-term planning.
- Strengthened partnership working and Public Health leadership, demonstrating the value of 'leading without authority' to convene partners and facilitate coordinated action.
- Encouraged innovation, co-production and continuous improvement, creating opportunities to develop practical, evidence-informed solutions across organisational boundaries.
- Supported long-term resilience and system transformation, shifting the emphasis from reactive responses towards prevention, adaptation and resilience-building.
- Raised the profile of health within climate action, advancing simultaneously 'health in all climate policies', 'climate in all health policies', 'Environment, Climate and Health in All Policies' as well as 'Population and Planetary Health in All Approaches' across the East Sussex system.

Collectively, these benefits demonstrate that the value of a Systemwide HIA lies not only in the evidence and opportunities it generates, but also in its ability to convene organisations, strengthen relationships, build shared ownership and create the conditions for sustained system-wide improvement. In doing so, it provides East Sussex with a practical framework for improving population health, reducing inequalities, strengthening climate resilience and supporting a healthier, fairer and more sustainable future.



Health Impact Assessment and ‘Health in All Policies’

Awareness of the links between health and wider policy decisions is a key outcome of Health Impact Assessment (HIA). HIA is one of the principal mechanisms through which a **Health in All Policies (HiAP)** approach can be advanced in practice.

The Helsinki Statement on Health in All Policies defines HiAP as:

"An approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts in order to improve population health and health equity"

(WHO, 2014).

Health in All Policies recognises that population health is not solely determined by healthcare services or health sector programmes. Rather, health and health inequalities are largely shaped by the social, economic, environmental and commercial conditions in which people are born, grow, live, work and age. Consequently, policies and decisions across all sectors—including transport, housing, planning, education, agriculture, environment, finance and economic development—have the potential to influence health outcomes and health equity.

HiAP is a recognised multisectoral approach that seeks to improve population health and wellbeing by embedding health considerations into policymaking across government and partner organisations. At its core, it is an approach to integrated governance that promotes health and equity objectives whilst simultaneously supporting the priorities of partner sectors. Through identifying synergies and co-benefits, HiAP aims to create policies that contribute to healthier populations while also advancing wider social, economic and environmental goals.

A healthier population generates benefits far beyond the health sector. Improved health and wellbeing can contribute to reduced sickness absence, increased productivity, reduced demand on high-cost services and infrastructure, greater participation in active travel, increased volunteering and stronger community resilience. As such, considering health within policymaking is not solely beneficial for health services but can also support the core objectives of other sectors.

The importance of HiAP has grown as governments increasingly face interconnected social, economic, environmental and political challenges, including a changing climate, widening inequalities, demographic change and pressures on public services. These challenges are

complex, intersecting and cannot be effectively addressed through isolated sectoral action. The Geneva Charter for Well-being highlights that fairer societies are healthier societies (WHO, 2021), reinforcing the need for greater collaboration across policy domains.

The growing emphasis on a "**just transition**" to a low-carbon economy further illustrates the importance of integrated policymaking. Policy objectives do not naturally align, and climate-related policies can generate unintended consequences if health and equity considerations are not incorporated from the outset. For example, decisions relating to housing insulation, energy pricing or environmental interventions may produce adverse health or health equity impacts if not carefully designed and implemented (WHO, 2023b).

Whilst siloed institutions can be effective in delivering focused services and policies, they are often less effective at addressing complex societal challenges that span multiple sectors. Evidence demonstrates that many issues—including nutrition, climate resilience, health inequalities and sustainable development—require coordinated action across policy areas and organisations. Effective responses therefore depend upon collaboration, shared ownership and integrated approaches to decision-making (Haselow et al., 2016).

Failure to collaborate has significant human and economic consequences. Health inequalities arise through complex interactions between policies, institutions and systems, and addressing them requires coordinated action across sectors. The European Parliament has estimated that health inequalities cost approximately 1.4% of GDP across the European Union through lost productivity, reduced tax revenues and increased healthcare expenditure (Mackenbach et al., 2011).

Although all sectors contribute to creating healthy and equitable societies, many organisations have limited awareness of the health implications of their decisions. Equally, some sectors may be reluctant to engage with health stakeholders due to concerns that health objectives could conflict with their own priorities. HiAP seeks to overcome these barriers by creating opportunities for shared understanding, collaborative problem-solving and mutually beneficial policy development.

Whilst HiAP can be applied to specific health issues or disease areas, its broader purpose is to sustain collaboration across sectors on the wider determinants of health and the societal challenges that influence multiple health outcomes simultaneously. Through deliberate consideration of health and health equity impacts, HiAP promotes transparency in policy trade-offs and supports more informed and balanced decision-making.

Several characteristics distinguish HiAP from other forms of intersectoral action:

- Formal governance structures and mechanisms capable of responding to emerging challenges and incomplete evidence.
- Collaboration between health and non-health sectors to jointly identify problems and develop solutions.
- A focus on achieving co-benefits for health, wellbeing, sustainability and development whilst recognising potential conflicts of interest.
- Investment in long-term, trusting relationships that support collaboration across issues and over time.
- An emphasis on upstream action, sustainable development and reducing inequalities in power, resources and opportunity.

HiAP seeks to improve accountability for the health and wellbeing impacts of policy decisions whilst supporting sustainable development through the mutual reinforcement of policies and strategies across sectors. It provides a practical framework for ensuring that health, equity and wellbeing are considered alongside wider social, economic and environmental objectives.

Evolving and progressing use of ‘Health in All Policies’ in East Sussex

Health in All Policies (HiAP), alongside a range of complementary approaches, has informed the East Sussex Climate and Health Toolkit and the development of this Systemwide Health Impact Assessment (HIA). The HIA methodology draws upon World Health Organization (WHO) guidance, international HiAP frameworks and evidence-based practice identified within the scientific literature.

However, despite widespread international adoption, there is no single prescribed methodology for implementing HiAP. In practice, HiAP is delivered through different mechanisms, governance arrangements and levels of maturity depending upon the political, organisational, financial and cultural context of a place.

The WHO report **Working Together for Equity and Healthier Populations: Sustainable Multisectoral Collaboration Based on Health in All Policies (2023)** highlights that successfully embedding HiAP requires active collaboration across sectors, joint exploration of policy solutions and the development of governance structures that facilitate long-term partnership working. The report emphasises that health organisations must be outward-looking, open to

the priorities of other sectors and committed to building collaborative relationships. It also highlights the need to avoid perceptions of "health imperialism" whereby health is viewed as seeking to dominate the agendas of other sectors.

This presents an important challenge. Whilst the intention of HiAP is collaborative, the terminology itself can unintentionally reinforce perceptions that health is the primary or dominant policy objective. This can create barriers to engagement and ownership amongst sectors whose primary responsibilities may relate to environment, transport, planning, economic development, education or community services.

Yet the role of public health is not to direct other sectors. Rather, it is to:

- Understand the priorities, drivers and decision-making processes of other sectors.
- Facilitate co-design and co-production of policies that generate mutual benefits.
- Build and share evidence to support informed decision-making.
- Foster dialogue, collaboration and partnership working.
- Identify opportunities to improve health, wellbeing and equity.
- Assess the effectiveness of actions and the costs of inaction.
- Promote synergies and negotiate trade-offs between competing priorities.
- Advocate for action on the wider determinants of health.

Similarly, successful HiAP requires public policy actors outside the health sector to:

- Participate in co-design and co-production processes.
- Share policy priorities and identify connections to health and wellbeing.
- Build trusting and transparent relationships.
- Support collaborative decision-making across organisational boundaries.
- Engage constructively in addressing tensions and competing priorities.
- Champion collaborative approaches within their own organisations and sectors.

If public health is expected to lead through influence rather than authority, there is a strong case for evolving both the language and application of HiAP to better reflect shared ownership, equal partnership and contemporary policy challenges.

From Health in All Policies to Population and Planetary Health in all of Our Policies and Approaches (PaP-HiAPA)

East Sussex has identified a need to evolve both the language and practical application of 'Health in All Policies' as part of a broader effort to create a more inclusive, collaborative and system-wide approach to improving health, wellbeing and sustainability.

Whilst HiAP remains a highly valuable and internationally recognised framework, the term itself can sometimes be misunderstood and interpreted as implying that health should take precedence over other policy priorities. In some circumstances, this can create perceptions of public health "ownership" or "take-over" of wider policy agendas and may unintentionally reinforce concerns about "health imperialism."

Yet improving health outcomes is not solely the responsibility of the health sector. The majority of factors influencing health occur long before individuals come into contact with healthcare services and are shaped by the places where people live, work, learn, travel and spend their lives. As a result, all sectors contribute to creating healthy, equitable and sustainable societies.

Health is intrinsically linked to wider social, economic and environmental objectives, including employment, education, transport, housing, climate resilience, environmental protection, community safety and economic prosperity. The whole-system and cross-sector collaboration promoted through HiAP therefore remains essential for addressing the wider determinants of health and reducing health inequalities.

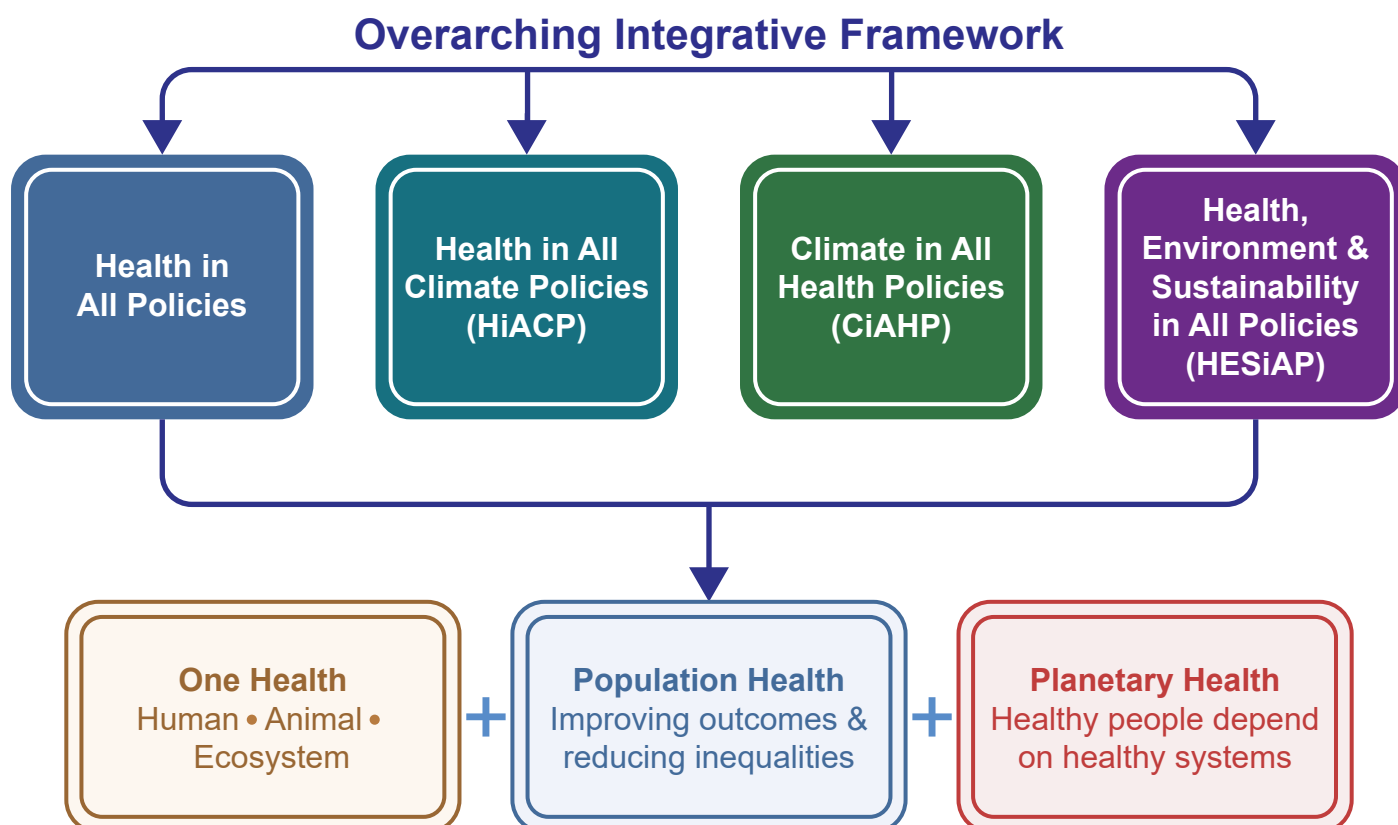
However, East Sussex recognises that placing equal emphasis on environmental sustainability and planetary health can create a more inclusive framework that encourages all sectors to participate as equal partners from the outset.

For these reasons, East Sussex has sought to evolve HiAP towards a broader and more inclusive framework that simultaneously encompasses:

1. Health in All Policies (HiAP).
2. Health in All Climate Policies (HiACP) and Climate in All Health Policies (CiAHP), recognising the need for a whole-government and whole-society response to the climate-health nexus.
3. Health, Environment and Sustainability in All Policies (HESiAP).
4. Population and Planetary Health in all of Our Policies and Approaches (PaP-HiAPA).

Together, these approaches provide a comprehensive framework for improving health, reducing inequalities, strengthening resilience, protecting the environment and supporting sustainable development for current and future generations.

Population & Planetary Health in All Policies & Approaches (PAP-HiAPA)



Health in All Policies (HiAP): A public policy approach that systematically considers the health implications of decisions across all sectors to improve population health and health equity.

Health in All Climate Policies (HiACP): Ensure climate mitigation and adaptation policies explicitly consider health impacts and maximise health co-benefits.

Climate in All Health Policies (CiAHP): Ensure health policies and systems explicitly consider climate risks and resilience.

Health, Environment & Sustainability in All Policies (HESiAP): Integrate environmental sustainability, social wellbeing and economic resilience into all policies.

East Sussex has therefore sought to evolve the HiAP concept into a broader and more inclusive framework.

This evolution reflects several important realities:

- Most determinants of health lie outside the healthcare system.
- Human health is fundamentally dependent upon environmental health.

- A changing climate is increasingly recognised as a major public health challenge.
- Social, economic and environmental objectives are interconnected.
- All sectors contribute to creating healthy, sustainable and resilient communities.

The intention is not to replace HiAP, but to broaden and strengthen it by placing population health and planetary health on an equal footing. This helps address perceptions of health exceptionalism whilst recognising that improving population health requires simultaneous action on environmental sustainability, climate resilience, social equity and economic wellbeing.

Strategic Ambition: The ambition is to move beyond simply ‘Health in All Policies’ towards ‘Population and Planetary Health in all of Our Approaches’ (which includes ‘in all policies’). The intention is to work towards making health, wellbeing, sustainability and resilience everybody’s business.



Madigasekera-Elliott 2026

Definitions and Evolving on from the Health in All Policies Approach

Health in All Policies (HiAP) (1986; term formalised internationally from 2006): Health in All Policies (HiAP) is a public policy approach that systematically considers the health implications of decisions across all sectors. It seeks to identify synergies, avoid harmful health impacts and improve population health and health equity through collaborative policymaking and integrated governance.

The approach recognises that population health is largely shaped by the wider determinants of health and that policies across transport, housing, planning, education, environment, economic development and other sectors all influence health outcomes.

Health in All Climate Policies (HiACP) (2023): Health in All Climate Policies (HiACP) is an approach that ensures health considerations are explicitly integrated into climate change mitigation and adaptation policies. It requires governments and organisations to consider the health implications of climate-related decisions in areas such as energy, transport, housing, agriculture, land use and urban planning.

Purpose:

- To ensure climate action does not inadvertently harm health or widen inequalities.
- To maximise health co-benefits from climate action.
- To strengthen the contribution of climate policy towards improved population health and wellbeing.

Examples include reducing air pollution, increasing active travel, improving housing quality and creating healthier environments whilst simultaneously reducing carbon emissions.

Climate in All Health Policies (CiAHP) (2023): Climate in All Health Policies (CiAHP) is an approach that ensures health systems, public health programmes and healthcare policy explicitly consider climate change impacts, adaptation and resilience.

Purpose:

- To prepare for and respond to climate-related health risks.
- To strengthen the resilience of health and care systems.
- To reduce the environmental and carbon footprint of healthcare services.
- To support the transition towards climate-smart health systems.

Examples include preparing for heatwaves, flooding, vector-borne diseases, air pollution events and other climate-sensitive health risks.

Health, Environment and Sustainability in All Policies (HESiAP): Health, Environment and Sustainability in All Policies (HESiAP) extends HiAP by recognising the interdependence of population health, environmental sustainability and economic resilience.

It promotes policy and decision-making processes that protect and enhance the wellbeing of current and future generations by integrating:

- Environmental sustainability
- Social sustainability
- Economic sustainability

- Health equity
- Environmental justice
- Resource stewardship

The approach seeks to balance human wellbeing, economic prosperity and environmental protection whilst safeguarding natural systems and reducing pollution and environmental degradation.

One Health (2003): One Health is an integrated and unifying approach that seeks to sustainably balance and optimise the health of people, animals and ecosystems.

It recognises that the health of humans, domestic and wild animals, plants and the wider environment are fundamentally interconnected and interdependent. Consequently, many contemporary challenges—including emerging infectious diseases, antimicrobial resistance, food security, biodiversity loss and climate change—require coordinated action across human, animal and environmental systems.

Population Health: Population Health focuses on improving health outcomes for entire populations by addressing the wider determinants of health and reducing inequalities between groups.

Rather than focusing solely on healthcare services or individual behaviours, Population Health seeks to influence the social, economic, environmental and commercial conditions that shape health outcomes across communities and places.

Planetary Health: Planetary Health is based on the understanding that human health and civilisation depend upon flourishing natural systems and the responsible stewardship of those systems.

The concept recognises that environmental degradation, climate change, biodiversity loss, resource depletion and pollution increasingly threaten human health and wellbeing. Planetary Health therefore seeks to identify and promote solutions that simultaneously protect ecological systems and improve human health outcomes.

As described by Whitmee et al. (2015), Planetary Health is concerned with safeguarding human health in the Anthropocene by ensuring that humanity operates within the environmental limits of the Earth's natural systems.

Added to these definitions is the emerging definition of '**Health Net Gain**': Health Net Gain is the measurable improvement in the health, wellbeing and health equity of a population

resulting from a policy, plan, programme or development, ensuring that people and communities are healthier after implementation than they would have been without it.

It is an **emerging concept in planning, public health and place-making** that seeks to ensure that new development leaves the health and wellbeing of people **better than before**—in much the same way that Biodiversity Net Gain (BNG) aims to leave nature in a measurably improved state.

Although there is currently **no statutory definition** of Health Net Gain in England, it is increasingly being developed through planning policy, Health Impact Assessments (HIAs), Healthy Places approaches and Health in All Policies (HiAP).

For East Sussex Health Net Gain is the demonstrable improvement in population health, wellbeing, resilience and health equity resulting from a policy, plan, programme or development. It is achieved by avoiding and mitigating adverse health impacts while maximising opportunities to create healthier, more sustainable and climate-resilient places where people can live well, thrive and flourish.

The Art of the Possible - The Art and Science of Public Health

A changing climate is one of the greatest public health challenges of the twenty-first century. It is a transboundary issue that crosses geographical, organisational and political boundaries, affecting the environmental, social and economic determinants of health. The Royal Society for Public Health (2024) recognises climate change as a core public health issue because of its complex, interconnected and far-reaching consequences across virtually every sector of society.

These impacts cannot be addressed by the health sector alone. Health is shaped by decisions across housing, planning, transport, energy, education, employment, agriculture, environmental protection and economic development. Responding to a changing climate therefore requires a whole-system approach that extends beyond traditional healthcare and mobilises collective action across sectors, services and communities.

Public Health has a crucial role in identifying challenges and supporting the development, implementation and enforcement of effective solutions. Its focus on prevention, protection and the wider determinants of health places it in a unique position to help create the conditions in which people can live healthy, safe and fulfilling lives. This is achieved through three interconnected functions:

- Health Improvement - enabling healthier lives through action on the wider determinants of health, including housing, employment, education, transport, environment and community wellbeing.

- Health Protection - protecting populations from environmental hazards, infectious diseases and emergencies that threaten health and wellbeing.
- Health Promotion - empowering individuals, communities and organisations to improve health outcomes and reduce preventable harm.

This preventative focus is particularly important in the context of a changing climate. Investment in adaptation, resilience and prevention today can avoid substantially greater health, social and economic costs in the future through avoided illness, reduced pressure on health and care services, improved productivity and stronger community resilience.

The COVID-19 pandemic demonstrated the importance of public health in responding to emerging threats and maintaining health security. A changing climate presents a similar but larger and longer-term challenge, with the potential for simultaneous environmental, health and infrastructure shocks—for example, heatwaves coinciding with infectious disease outbreaks, flooding or disruption to essential services. Preparing for these interconnected risks requires long-term planning, preparedness and coordinated system-wide action.

Public Health has the skills and knowledge to anticipate and help prevent many of these impacts, but it must also have sufficient capacity, resources and support. Underinvestment risks overwhelming public health and wider services, increasing avoidable harm and creating greater long-term costs (Jacques and Noel, 2022).

A distinctive strength of public health is its ability to work across organisational boundaries. The Faculty of Public Health (2016) describes this as “**leading without authority**”: influencing and inspiring others towards common goals without relying on formal hierarchy or statutory control. This involves building trust, sharing evidence, fostering collaboration, facilitating partnerships and creating a shared vision for change.

Such leadership is particularly important for environmental, climate and health challenges because responsibility and influence are distributed across the system. Many necessary actions sit outside the direct control of Public Health and require collaboration between local government, the NHS, emergency planners, housing providers, transport authorities, businesses, educational institutions, environmental organisations, community groups and residents.

Public Health is therefore well placed to act as a **system convenor**, connecting partners around shared priorities, identifying interdependencies and co-benefits, facilitating collaboration and embedding **Population and Planetary Health in all of Our Approaches**. This can simultaneously advance health equity, reduce inequalities and ensure that climate adaptation generates wider benefits. However, achieving this requires investment and capacity. Public Health must be enabled to “**make health everybody’s business**”, facilitating action and **leading both with and without authority**.

The **Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment for East Sussex (ECH-HIA)** demonstrates what can be achieved through this approach. It represents the “**art of the possible**”: moving beyond organisational boundaries, competing priorities and traditional ways of working to establish a shared understanding of a complex challenge and collective commitment to action.

The art of the possible is not about perfection or certainty. It is about recognising opportunities, building partnerships and alignment, and identifying practical actions that can be taken now to shape a better future. A changing climate can therefore be understood not only as a threat, but also as an opportunity to improve health, reduce inequalities, strengthen communities, protect the environment and increase system resilience.

Although East Sussex Public Health enabled and facilitated the HIA, it is not a Public Health document; it is a system document, developed by and for the East Sussex system. This distinction is fundamental. Addressing the health impacts of a changing climate requires collective ownership, shared accountability and collaborative action.

Accordingly, the HIA deliberately avoids “health imperialism”, whereby climate change is approached solely through a public health lens. Instead, it recognises and respects the expertise, authority, responsibilities, perspectives and contributions of different sectors and stakeholders. Through participation, co-production and collaboration, it provides a shared platform for partners to pursue common outcomes while maintaining their distinct roles and priorities.

The considerations, opportunities and action steps within the ECH-HIA therefore amount to more than individual recommendations. Together, they articulate a collective vision in which health, environment, climate resilience and sustainable development are interconnected goals, providing a practical framework for translating ambition into action and creating healthier people, healthier places and a more resilient future.

Ultimately, the art and science lies in combining public health evidence, knowledge and preventative practice with the ability to convene, influence and mobilise a complex system: turning complexity into coordination, ambition into action, and shared responsibility into shared success. No single organisation can address the health effects of a changing climate alone; collectively, however, the East Sussex system has the opportunity to lead, innovate and create a healthier, fairer and more resilient future for current and future generations.

The Voice, Views and Experiences of Residents in East Sussex with a Changing Climate and Health

For full details please see Part 1 - The Voice, Views and Experiences of Residents in East Sussex with a Changing Climate and Health within the HIA Technical Report

Public consultation is a core component of Health Impact Assessment (HIA) and the Environment, Climate and Health Systemwide Health Impact Assessment for East Sussex. It ensures that the assessment is informed not only by scientific evidence and professional expertise, but also by the experiences, priorities and concerns of the people most affected by environmental change and climate-related health impacts. Engaging residents strengthens transparency, improves the relevance of considerations, opportunities and actions steps as well as providing important insights into how a changing climate is already affecting health, wellbeing and everyday life across East Sussex.

Results and Implications for East Sussex

The public consultation provided an opportunity to understand public perceptions of environmental, climate-related health risks, identify issues of greatest concern, and explore where future communication, engagement and adaptation efforts should be prioritised. It highlighted that the changing climate is already affecting the lives of residents across East Sussex, with 593 responses demonstrating both lived experience of climate-related hazards and concern about future impacts. Some of the quotes received from the consultation are as follows:

Storm damage, flooding, anxiety and chronic illness flare-ups

“Extreme winds bring down trees causing road blocks and power cuts. I do not feel safe when out walking and travelling in very strong winds... excessive rainfall meant that last year our conservatory and kitchen flooded on several occasions. These things all impact my mental health and... stress can bring on flare ups of my Crohn’s disease.”

Housing, flooding, transport disruption and health impacts

“I have no control over the maintenance of the property I live in; when we have extreme heat it is unbearably hot. Impacts include reduced breathing, inability to focus and a lack of energy to do anything... Flooding can limit normal life activities such as shopping, getting to and from work, and being able to see family members.”

Storm damage, flooding, anxiety and chronic illness flare-ups

"Extreme winds bring down trees causing road blocks and power cuts. I do not feel safe when out walking and travelling in very strong winds... excessive rainfall meant that last year our conservatory and kitchen flooded on several occasions. These things all impact my mental health and... stress can bring on flare ups of my Crohn's disease."

Severe eco-anxiety and concern for future generations

"I am weary with feelings of depression and powerlessness... I worry all the time about all the children being born now and what their lives will be like, unable to breathe the air or drink the water. I worry about biodiversity loss, our oceans, rivers, soil and air... I notice the decline in wildlife... At a time when I should be enjoying retirement, all I do is cry, and I am not alone."

Combined impacts on housing, food, family life and future generations

"Mental health - we live in a very worrying time... Lifestyle changes - outdoor activities affected by storms, especially extremely high winds. Housing - fence and tree damage, roof tiles blown off, rain coming in through the roof. Food - some foods not readily available as harvests abroad have been impacted by climate-related extreme weather events."

Flooding and prolonged mental health consequences

"I was flooded in 2000 which resulted in 8 months out of my house and a mental breakdown. Every year since I fear it happening again, which affects my sense of security and wellbeing. It is increasingly difficult to get flood insurance and also difficult to sell because lenders will not lend on properties that have been flooded."

From the responses, **extreme wind** (a new and unexpected finding) emerged as the most experienced climate issue, followed by flooding, extreme temperatures and drought. Respondents reported that these issues are affecting multiple aspects of daily life, with lifestyle impacts most frequently identified, followed by impacts on mental health and physical health. Additionally, around 70% of respondents expressed concern about future climate related health impacts.

The consultation findings also reinforce the importance of taking a whole-system approach to climate adaptation. While respondents identified a range of current challenges, evidence suggests there is strong public support for climate action that delivers tangible co-benefits, including warmer/cooler and more affordable homes, improved air quality, greater energy security, reduced inequality, enhanced biodiversity, lower risks from flooding and extreme heat, stronger communities and local job creation. These outcomes align closely with the wider objectives of this HIA and demonstrate opportunities to improve population health while responding to climate change.

Several important implications emerge from the consultation.

- First, residents are already experiencing the impacts of a changing climate, indicating that adaptation is not solely about preparing for future risks but responding to current health and wellbeing impacts.
- Second, the prominence of extreme wind demonstrates the importance of tailoring climate adaptation to East Sussex's local geography and risk profile. This is not identified as a specific health effect in other reports such as UKHSA's Health Effects of Climate Change³ report but reflects unique aspects of the county due to its geography. Coastal exposure, severe storms and associated infrastructure disruption should receive greater emphasis within local resilience planning alongside heat, flooding and air quality.
- Third, the prominence of mental wellbeing reinforces the need for climate adaptation to include psychological resilience, community cohesion and effective climate-health communication, rather than focusing exclusively on physical health.
- Finally, the high level of public concern presents an opportunity. Residents recognise a changing climate as a health issue and are likely to support practical, locally relevant actions that improve health, strengthen resilience and protect communities. Future engagement should therefore emphasise achievable solutions and the health, social, environmental and economic co-benefits of climate action, helping to build confidence, maintain public trust and encourage community participation in creating a healthier, more resilient and climate-ready East Sussex.

Overall, the consultation provides valuable insight into public experiences, concerns and priorities. It demonstrates a clear need for coordinated action across sectors to both reduce climate-related health risks and maximise the health, social, environmental and economic benefits that can be achieved through climate action in East Sussex.

The detailed results of the survey, as well as more information about how it was designed can be found in Part 1.



Uckfield Library

Evidence from the Climate Hazards and Data Profile

For full details please see Part 2 - East Sussex Climate Hazards and Data Profile within the HIA Technical Report

Overview of East Sussex - Geographic and Demographic

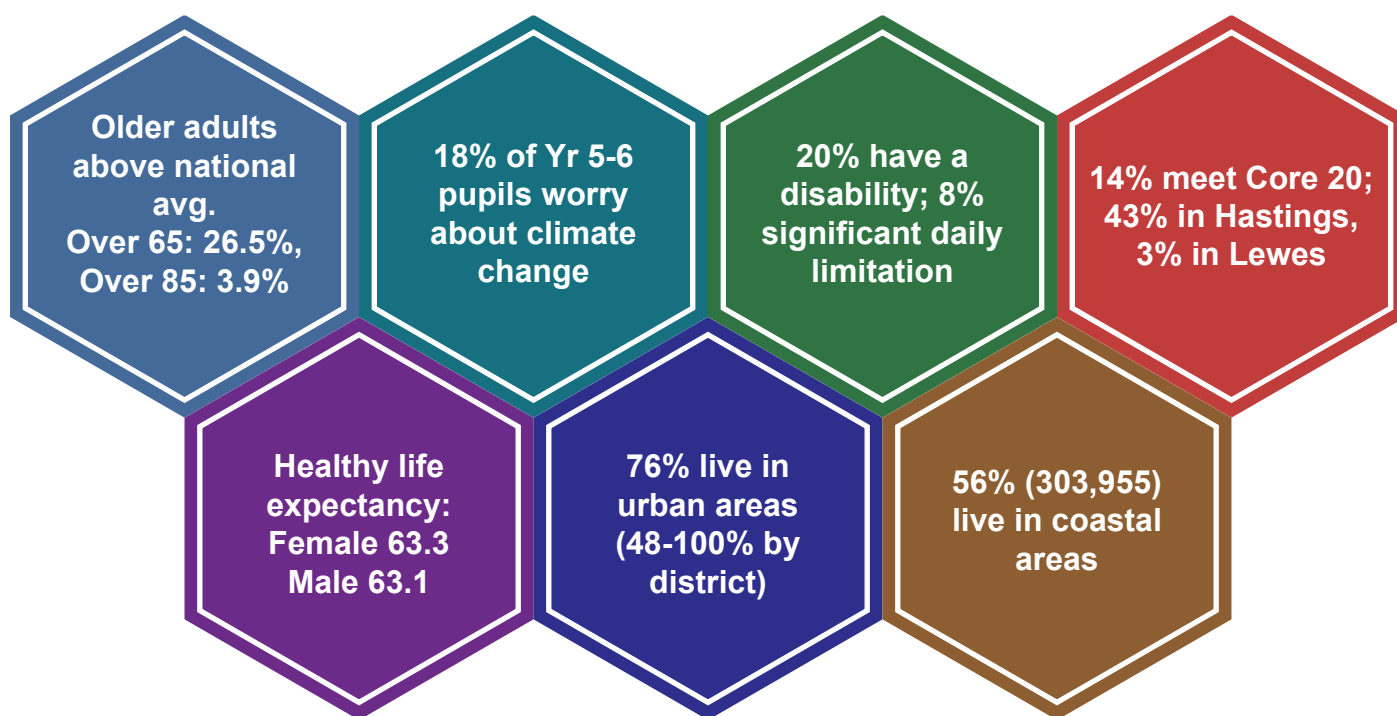
East Sussex features a diverse geography with distinct rural and coastal areas. The coastline includes urbanized seaside towns like Hastings and Eastbourne, where tourism, fishing, and service industries dominate, leading to denser populations and developed infrastructure. In contrast, the rural inland areas consist mainly of South Downs hills, farmland, and smaller villages, characterised by low population density, agricultural activity, and a focus on conservation. This rural-coastal split influences local economies, housing patterns, and transport, with coastal towns often facing challenges like seasonal population changes and infrastructure strain, and higher deprivation.

Highlighted by the 2021 Chief Medical Officer report⁴, coastal areas suffer from more ill health than inland neighbours due to higher concentrations of older, retired citizens and people of higher deprivation. There is also a difficulty in attracting healthcare staff to more rural locations and public transport is often limited, impacting not only healthcare delivery but also job opportunities⁵.

Many of the known demographic variables that affect health status will continue to create health inequalities due to climate change³; this data profile will highlight some of the key groups or characteristics disproportionately affected by climate health hazards.

The county has an aging population, with 26.5% of its population over 65 years compared to only 18.7% nationally⁶. Our population of frailer older adults over the age of 85 is also higher than nationally, 3.9% compared to 2.5% respectively⁶. East Sussex has 10% under 10s, of which we know from the recent My Health My School Survey that 18% of year 5 and 6 pupils worry about climate change⁷.

As well as being a more vulnerable to health effects of climate change, the young and old may also put greater pressure on the healthcare system, affecting its ability to respond to all ages health needs.



For more information:

[My Health My School survey 2023-2024](#)

Another vulnerable group are those with a disability. Locally we know that 20% of residents have a disability with 8% reporting a significant day to day limitation⁸. This will likely affect their ability to adapt to rising temperatures or react to extreme events such as wildfires and flooding.

The [Core20PLUS5](#) (for adults and now adapted to apply to children and young people) initiative is a national workstream formulated as part of the NHSE strategy to tackle health inequalities. It describes the most deprived 20% and five locally chosen priority clinical areas specific to adults and children⁹. Locally we can see a very uneven distribution of the Core20 group, with 43% of Hastings population part of Core20 compared to only 3% of Lewes.

Healthy life expectancy is an estimate of the average number of years babies born today would live in good health. In East Sussex, on average, this is better than England (Females 62.2 vs 61.9; Males 61.8 vs 61.5), but there is a 20-year gap between the most and least deprived areas of the county, again highlighting the huge disparity in health across East Sussex which could manifest in worsening inequality if climate change actions are not considered¹⁰.

Rural and urban populations are affected differently in the face of climate hazards. The unique geography of the county see that some districts are entirely urban, while others are over 50% rural⁶, highlighting the need for local solutions for climate hazards. This is also true of coastal

communities, over half the population (56%) live in coastal areas but rising sea levels will cause greater erosion to the East Sussex coastline putting this particular group at risk compared to others⁶.

Warmer Weather and Health Impacts in East Sussex

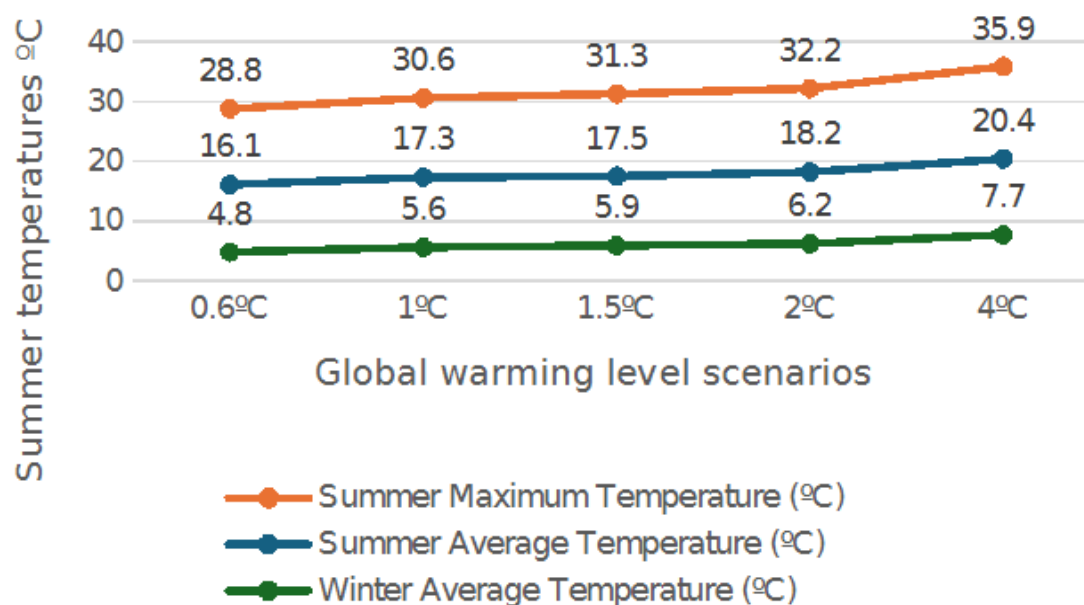
Warmer weather is the most consistent predicted trend in climate change weather predictions. With the 1.5 °C warming scenario inevitable, warmer weather will occur in the UK by mid-century. The table below outlines the possible global warming scenarios predicted by the Met Office¹¹. 1.2 °C describes the current level of warming, for each further scenario (1.5 °C, 2 °C, 4 °C) the Met Office predicts when this may occur, for example we may reach 2 °C warming in 2030 if we are on a more aggressive global warming trajectory. Both the central and high global warming levels are consistent with current global emissions but show the possible variation in predicting future impacts.

Table 1: Global warming scenarios and predicted timelines

	+0.6 °C	+1 °C	+1.2 °C	+1.5 °C Paris Agreement	+2 °C Prepare for	+4 °C Risk assess for
Central Global Warming Level	Baseline compared to pre- industrial levels	2001 - 2020	Current	2030s	2080s	After 2080
High Global Warming Level				Before 2030	2030s	2080s

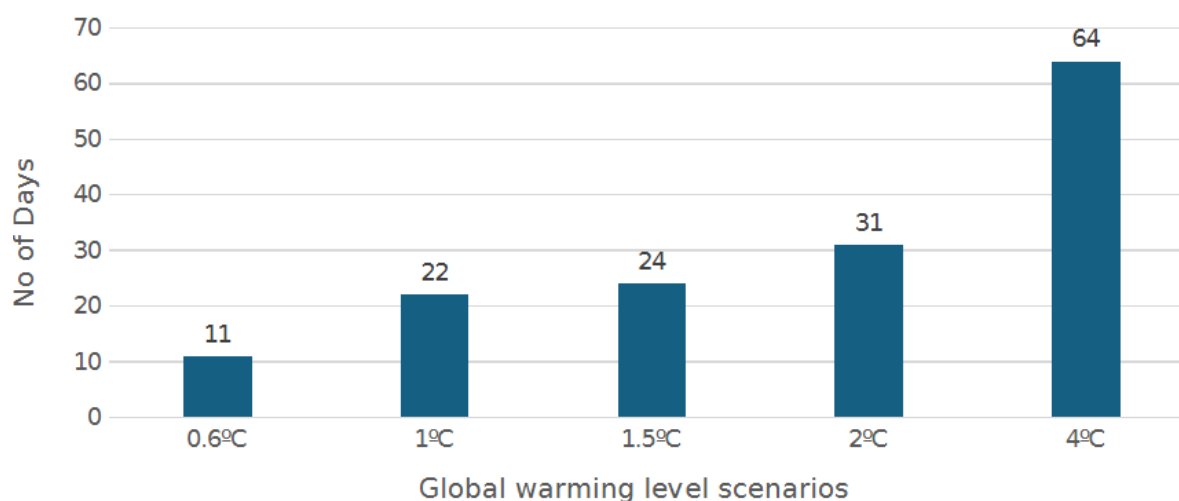
In all the climate scenarios, East Sussex can expect to see warmer weather all year round with winter averages going from 4.8°C up to a possible 7.7°C in the most extreme global warming predictions. The graph below shows the predicted temperature changes from the pre-industrial baseline, current climate and across the three Met office climate change prediction scenarios. We can see that by mid-century when global warming reaches 1.5 °C the summer high temperature will be up to 31.3 °C, compared to 28.8 °C in pre-industrial times, this is predicted to increase to 35.9 °C if global warming continues.

Graph 1: Predicted average temperatures at each Met Office Global Warming Scenario



Currently the Met Office threshold for a heatwave in East Sussex is 27 °C¹², which is already warmer than regions outside of the South East where a heatwave is anything above 25 °C, showing the increased risk East Sussex has to extreme temperatures.

Graph 2: Predicted number of days that will reach over 25 °C at each Met Office Global Warming Scenario

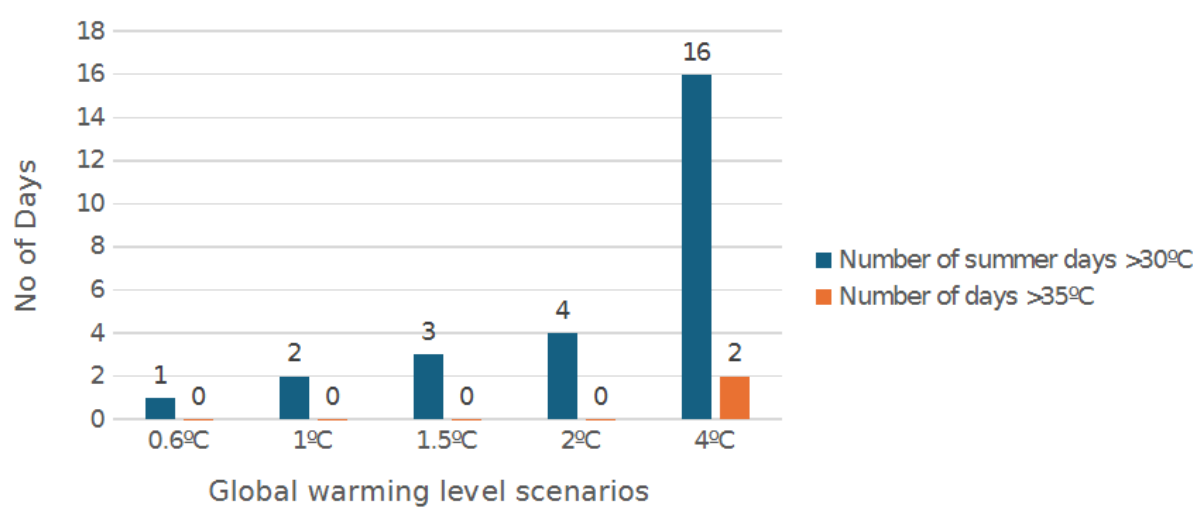


The Met Office predicts to see an increase in summer days of 25 °C or warmer. Graph 2 shows that at the current warming level of around 1 °C, East Sussex experiences 22 days of weather over 25 °C, this could increase up to 64 days at the most extreme predicted Global Warming Scenario of 4 °C. This may have some positive health benefits including more outdoor activities and active travel which have been linked to positive physical and mental health.

- 72% of adults (19+ yrs) in East Sussex are physically active (150+ minutes/week) (Department of Health and Social Care, 2025).
- 15% of adults in East Sussex walk for travel at least 3 days per week. 1% of adults in East Sussex cycle for travel at least 3 days per week (Department for Transport, 2024).

However, temperatures rising also means higher likelihood of extreme hot summer days. Climate projections suggest the number of days warmer than 30 °C will increase dramatically from 2 days per year on average at the current warming level of around 1 °C, up to 16 days a year for the most extreme Global Warming Scenario of 4 °C, with the additional likelihood of days over 35 °C¹¹.

Graph 3: Predicted number of days that will reach over 30 °C and 35 °C at each Met Office Global Warming Scenario



East Sussex suffered significant excess mortality during the 2022 heatwaves where temperatures ranged between 30-40 °C¹³. The table below highlights the difference in excess mortality between East Sussex and England during some recent heatwaves. The excess mortality in East Sussex in 2022 was 24% compared to only 6% for the rest of England.

Table 2: Excess mortality (%) during heatwaves 2016-2022 (2020,2021 excluding due to COVID 19)

Year	East Sussex	England
2016	17%	9%
2017	18%	12%
2018	-2%	5%
2019	15%	6%
2022	24%	6%

Data also showed that the use of 111 and emergency departments were more common in heatwaves compared to winter, suggesting local emergency services will be under pressure as temperatures rise.

The most vulnerable population are older adults, and national research suggests the years of life lost in the care home population due to heat waves could be up to 2.5 years as care home residents are most at risk of overheating¹⁴.

East Sussex has an ageing population, in particular East Sussex has a 1.1% prevalence of dementia, compared to 0.8% for England. Currently there are 282 care homes serving approximately 8,000 residents. The county has 3,869 nursing home beds, with these residents particularly at risk of heat related mortality as research has found that bedbound residents are at highest risk of overheating.

For further information, data and insights:

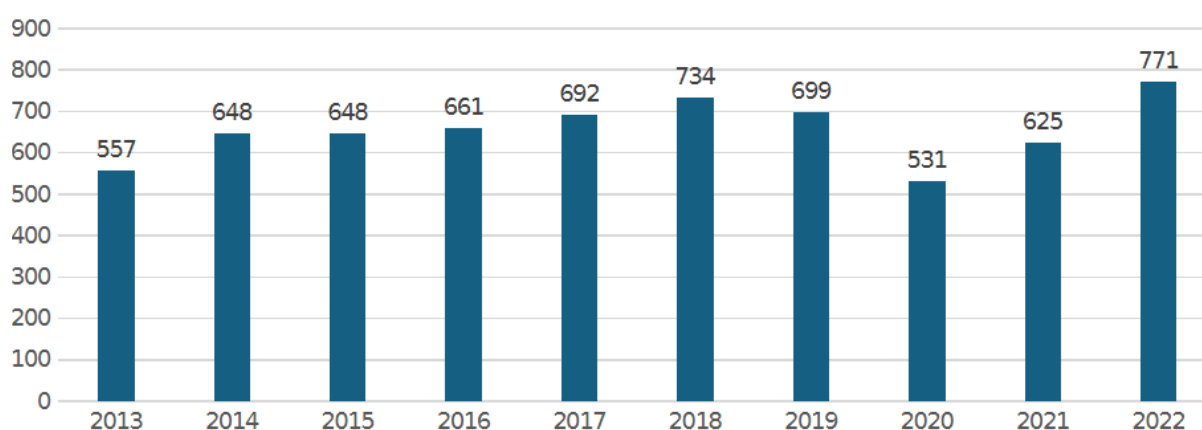
[Extreme temperatures and health](#)

[Impact of hot weather on health](#)

Health Impacts from Sun and Ultraviolet Rays

National trends show an increase in melanoma skin cancer diagnoses, which remains among the most common cancers in England. Within the NHS Sussex Integrated Care Board area, the East Sussex sub-region has seen a notable rise in new cases of malignant melanoma over the past decade. Annual diagnoses increased from 557 cases in 2013 to 771 cases in 2022, despite a temporary dip in 2020 likely linked to the COVID-19 pandemic and reduced screening activity.

Graph 4: Annual new diagnoses of malignant melanoma within NHS Sussex Integrated Care Board (East Sussex sub-region), 2013-2022.



The Met Office data shows that the south east is already the region most exposed to **Sun and UV rays**, experiencing over 1,600 hours of sunlight annually (over 11 weeks), compared to parts of Northern Ireland, Wales and Scotland which will experience less than 1,000 hours (less than 6 weeks)¹⁵. Almost 95% of the local population identify as white (British, Irish or other), compared to 88% nationally¹⁶, which puts a large proportion of the population at higher risk of skin cancer due to their skin tone. Those with darker skin tones will likely benefit from the greater UV exposure though higher conversion of active vitamin D through the skin.

For further information, data and insights:

[Cancer registration statistics - NDRS](#)

[Shade Map - Simulate sun shadows for any time and place on Earth](#)

Rainfall Patterns, Implications and Health Impacts (Drought, Wildfires and Flooding)

Alongside the warmer weather and increasing hot days described in the temperature section, **the Met Office predicts wetter winters and drier summers** as well as predicting that the South East region will likely be the worst affected region from drought¹⁷. The table below described the potential change in rainfall at the three key warming scenarios. By mid-century, when 1.5 °C warming is predicted, we may see a 5% decrease in summer rainfall, with progressively drier summers as global warming continues¹¹.

Table 3: Met Office predicted summer precipitation by Global Warming Scenarios

	+0.6 °C	+1 °C	+1.2 °C	+1.5 °C Paris Agreement	+2 °C Prepare for	+4 °C Risk assess for
	mm/day	mm/day	-	%change	%change	%change
Summer precipitation	1.71	1.65	-	-5%	-12%	-34%

Drought will affect East Sussex residents in a number of ways; through the health impacts of extreme heat, affect to the water supply, which may impact sanitation, and possible affect to local food supply through poor crop yields, and wildfires as wildfires are generally more common in hot, dry conditions.

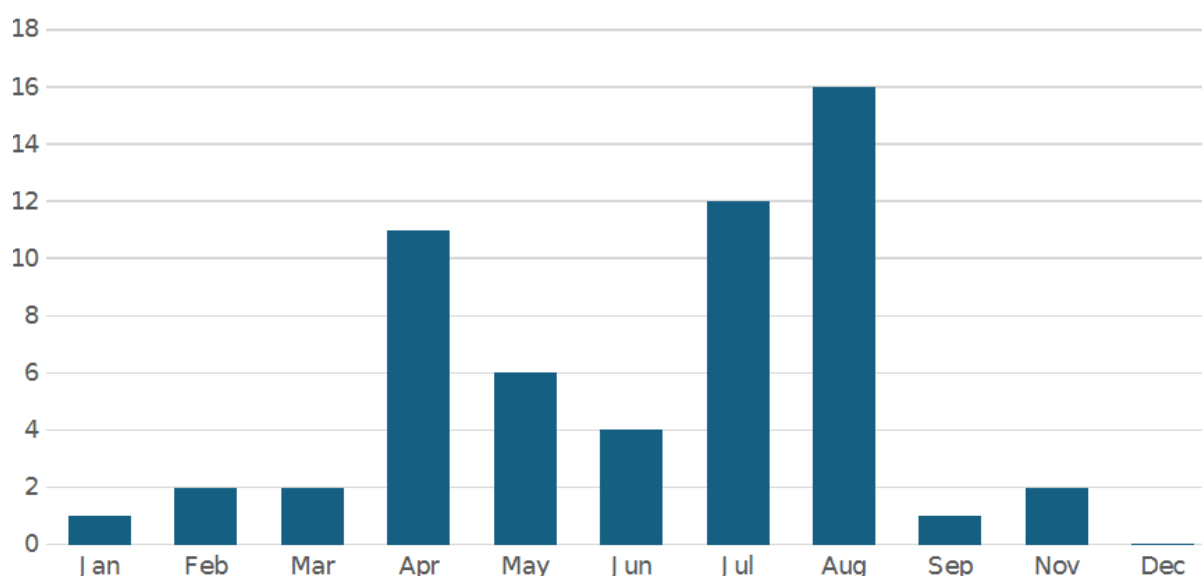
For further information, data and insights:

[UK Water Resources Portal](#)

Wildfires are generally more common in hot, dry conditions. As noted in the data already mentioned, East Sussex will see increasing temperatures due to a changing climate.

East Sussex Fire and Rescue service data shows that the number of wildfires in East Sussex¹ is historically higher during summer months, particularly in July and August¹⁸. Additionally, over the last 8 years one fifth of wildfires occurred in August 2022 (11/57) which was noted by UKHSA to be the hottest summer on record¹⁹.

Graph 5: Cumulative number of wildfires by month in East Sussex, 2017-2024.



Wealden is the most affected district, based on its rural landscape. Around two-thirds of wildfires have occurred in Wealden, suggesting East Sussex rural residents are more at risk of the health effects of wildfires. Two of the most common land types affected are heathland and woodland, which are areas that offer green space which is directly linked to positive health and wellbeing effects. Wildfires do not only affect the natural landscape but may also affect local food supply as the second most common land type affected is grassland for pasture or grazing. Overall, the risk of wildfires is likely to increase during the summer months due to increasing hot summer days, heatwaves and drier weather. This will affect the landscape, areas for outdoor activities and possibly local food supply.

For further information, data and insights:

[Home | East Sussex Fire & Rescue Service](#)

Flooding can be caused by multiple sources, however the main three are: rivers, the sea and surface water (rain that flows over the ground).

- Flooding from the sea is caused predominantly by sea level and wave height, with the type of coastline also playing a part.
- The factors impacting surface water and river flood risk are more complex. Whilst rainfall volumes have an impact on the risk of surface water or river flooding there are several significant factors which can impact how an area responds to increased water including geology, topography and the nature of ground cover (urban, rural, wooded etc).

The Met office predicts an increase in winter rainfall up to 20% in their Global Warming scenario predictions, and with 1.5 °C warming inevitable we will see at least 5% more rainfall each winter by mid-century¹¹.

Table 4: Met Office predicted winter precipitation by Global Warming Scenarios

	+0.6 °C	+1 °C	+1.2 °C	+1.5 °C Paris Agreement	+2 °C Prepare for	+4 °C Risk assess for
	mm/day	mm/day	-	%change	%change	%change
Winter precipitation	2.56	2.66	-	+5%	+9%	+20%

The Environment Agency is responsible for modelling flood risk across England and determining the anticipated changes to flood risk overtime due to climate change. Due to the influencing factors differing across England the Environment Agency have analysed and set climate change allowances for both river and surface water flood risk based on the characteristics of individual river catchments in England.

The Cuckmere River is one of three river catchments in East Sussex; but the only one entirely within county boundaries. The Environment agency predict that the flood risk could increase significantly due to climate change.

- For rivers the current risk is between 18-35%, but this could increase to between 32-76% by 2125 depending on the level of global warming that occurs²⁰.

- For surface water flooding the risk will rise to 20-40% by 2125 depending on the global warming level reached²¹.

The Cuckmere River is a flood plain; it's not only a local recreational asset providing a water sports and walking area, it is also a location that can be flooded to try to prevent local infrastructure being affected.

For more information:

[Climate change allowances for peak rainfall](#)

[Climate change allowances for peak river flow](#)

A review of the local major incident flood reports shows that in five recent flood events in Eastbourne, Hailsham, Seaford and Hastings heavy rainfall was the root cause of the disruption²².

It was also noted that during these events there can be a disruption to water supply and sanitation, water damage in homes can lead to mould growth, as well as increase the risk of chemical spills or contamination from industry, highlighting that increased rainfall can also increase the risk of waterborne infectious diseases, and spread chemicals onto the landscape.

In Hastings, the flooding event led to sewage being released from the sewage system, significantly increasing the infection risk, such as from coliform bacteria. Overfilled water systems can also lead to discharge of sewage into seas, which is an important issue in East Sussex as a coastal county.

Across the UK there has been evidence of significant accidents and death due to fast flowing water, or water concealing hazards such as displaced manhole covers.

For more information:

[Sewage in water: a growing public health problem - GOV.UK](#)

The total number of people at risk from surface water flooding in the county is 74,885, with the majority of these in the more deprived areas of Hastings (29.7%) and Eastbourne (12.8%). In Hastings, 16.8% of people are in the high-risk flood event category²³.

This is alongside rising sea levels, which impacts the risk of flooding from the sea; over the last 30 years sea levels have risen between 3mm and 5 mm annually. Climate scenarios suggest that

by 2080 sea levels could have risen between 47cm-90cm, potentially having a significant impact on coastal communities¹¹.

At present the number of people at risk¹ from flooding by rivers or seas in the county are 72,445. The majority of people have a less than 1 in 100 chance of being flooded by rivers or seas and are located in Eastbourne (36%). However, in Hastings and Rother 2.5% of residents are at high risk of experiencing flooding from rivers and seas, meaning there is a 1 in 30 chance of being flooded annually²³.

Considering local infrastructure, an analysis of where flooding may occur in the county has shown that 9 care homes, and 17 schools are at risk of flooding from rivers and seas; one care home is in an area which has high-risk of flooding.

Local case study- Eastbourne district general hospital (EDGH)

Flood mapping suggests that EDGH is unlikely (less than 1 in 1000) to be affected by flooding from river and seas between now and 2069, but it is located very close to modelled flooding to the east of the A2280, Cross Levels Way.

Surface water flood mapping shows EDGH located within an area impacted by flooding both now and in 2060, taking into account climate change. At present the building is shown to largely be at risk of flooding during the low chance (1 in 1,000) event, however by 2060 that has increased to a medium chance (1:100).

This case study is one example of the possible changes to flooding risk with a changing climate; however, many other areas of East Sussex are at risk of flooding today, which may change in the future. Much of Eastbourne and the surrounding area, southeast of EDGH, including the Pevensey Bay and Pevensey Levels are at risk of flooding from rivers and seas at varying levels from 1 in 1000 to 1 in 30. Additionally, parts of Newhaven, Lewes and Rye are affected by high risk of flooding from rivers and seas.

For more information:

[Technical map - Check your long-term flood risk - GOV.UK](#)

Other than damage to local infrastructure, the health harms of damage to healthcare settings, and risk of water contamination and accidents, flooding has been shown in a large national study to cause significant harms to mental health. This has been shown in both peoples whose lives have been disrupted through flooding and those who have lost their homes, and this worsening of mental health can persist for 3 years²⁴. Not only are people directly at risk from increasing flood risk due to climate change, but significant infrastructure leads to long lasting social effects.

Air Quality and Health Impacts

In reviewing the effect of poor air quality on health outcomes the Health Foundation found that neighbourhoods with the lowest air pollution have better life expectancy by 2.5 years for women and 3.5 years for men compared to area with the highest air pollution²⁵. Local data on avoidable deaths show that respiratory illness is the third most common avoidable death local, causing up to 14% of deaths in Hastings²⁶.

Local analysis has also found that in the areas most vulnerable to PM2.5 air pollution there is an increased rate of emergency admissions due to respiratory illness. This shows a direct local effect of air pollution on our most deprived communities, highlighting the inequity of climate change across populations.

For more information:

[East Sussex JSNA Respiratory Disease Briefing Respiratory Disease Briefing](#)

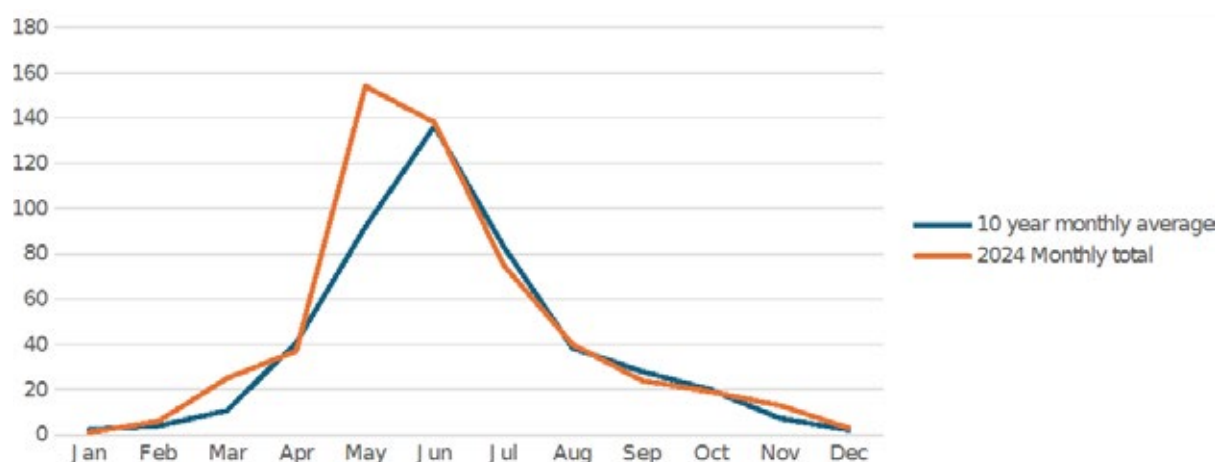
[East Sussex JSNA Air Quality Briefing Air Quality in East Sussex](#)

Effects on the Spread of Diseases (Infectious Diseases and Vector-borne Diseases)

Under a 2°C global warming scenario, annual average temperatures could increase by +1.7°C, with warmer winters and milder springs creating more favourable environments for vectors like mosquitoes and ticks¹¹. Increased outdoor activity due to improved weather also raises the likelihood of human exposure to these vectors, especially in rural areas, coastal paths, and forested zones – all of which are prevalent in East Sussex.

National data shows the tick activity is highest during warmer months. In 2024, tick activity begins to diverge from the mean as early as March-April, suggesting an earlier start to the tick season than typical over the last decade (See Graph 6: UKHSA data dashboard | ticks). Most commonly in the UK tick transmit Lyme disease, but they can also transmit a range of other tropical diseases.

Graph 6: UKHSA Surveillance 2024-and 10-year average monthly tick numbers



This is particularly relevant for areas of the county which are woodland or home to sheep, cattle or deer, such as the Southdown National Park, Ashdown Forest, or Friston Forest²⁷. East Sussex has many coastal blue spaces such as Camber Sands beach, and Eastbourne and Hastings piers, that allow residents to enjoy the outdoors in times when the risk of being bitten by ticks may be highest.

Although the likely transmission of Lyme will remain low in the UK there are other health detrements of increasing tick populations such as general health anxiety, concern for children and pets, or as a deterrent to outdoor physical activity.

Warmer, wetter conditions are likely to extend transmission seasons for infectious agents, while higher housing density including overcrowding and increased houses in multiple occupation (HMOs) may compound risk by facilitating faster aerosol, respiratory or faecal-oral spread²⁸.

For more information:

[UKHSA data dashboard | ticks](#)

[Mosquito maps](#)

[Vector-borne RADAR | Mosquito-borne viral diseases of wild birds](#)

Implications for the Food Environment

Due to global events, including climate change, the cost of food has increased in recent years; with the most significantly affected households on lower incomes. National data in graph 7 below that people who have the lowest income are spending on average 6% more of their disposable income on food annually²⁹. 11% of older adults in East Sussex are already in poverty,

and climate change will increasingly affect the likelihood of an increasing number of older adults being in food poverty.

The 2025 Broken Plate report found that the most deprived 20% of the population would need to spend 45% of their disposable income on food, 70% for those with children, in order to meet the government recommended healthy diet³⁰.

Graph 7: The average share of household income spent on food and non-alcoholic drinks in the UK



For more information:

[United Kingdom Food Security Report 2024 - GOV.UK](#)

Rising temperatures can cause reduced crop resilience through increasing insects³¹. This, coupled with an increasing need for locally grown food may increase use of chemicals in food production, such as pesticides. Pesticides are almost certainly (99%) made from fossil fuels³², further contributing to the climate crisis in a vicious cycle. Additionally, increased pesticide use could lead to greater air pollution or contaminate the water supply from water run-off from farmland.

Local case study: River Ouse, Lewes. May 2023

Environment agency data on the prevalence of five chemicals toxic to wildlife found that The River Ouse in Lewes is one of the rivers found to contain all five chemicals of concern PFOS, PFOA, PFBS and PFHxS, the pesticide 2,4-D and the commonly used painkiller ibuprofen³³. These have been shown to have detrimental effects on wildlife, although human health effects are not yet clear.

Similarly, all five chemicals were found in the Cuckmere River, and three of five were found at multiple groundwater sites across the county.

For more information:

[Chemical Cocktail Campaign | The Rivers Trust](#)

Despite the challenges farms in East Sussex are embracing new evidence on nature friendly farming. The Sussex wildlife trust described this as farming practices that are sustainable socially, environmentally and economically.

Nature friendly farming encompasses multiple different practices; two key ones include;

- **Regenerative agriculture:** A practice of maximising soil quality by minimising artificial chemical use, minimising soil disturbance and increasing crop diversity, and soil microbiome³⁴.
- **Agroecology:** A scientific, and holistic approach to the whole food system. It includes landscape diversification, crop rotation, and minimising synthetic inputs³⁵. This has been shown to have both adaptive and mitigative effects on climate change and has been nominated by the Green Alliance the best means to balance the climate with food production and the economy³⁶.

The Sussex wildlife trust has worked with the Brighton and Hove food partnership and the Sussex food partnerships to identify local producers who produce sustainable, community friendly food. These include Ashurst organics, a local vegetable producer, Court Lodge Organics farm, a dairy producer in Pevensey and Limden Brook organics in Etchingham.

For more information:

[Nature Friendly Farming | Sussex Wildlife Trust](#)

[Good Food for East Sussex | Celebrating Everything Food](#)

Adaptation and Co-benefits

- **Improving Air Quality:** Prevent thousands of premature deaths annually through cleaner air.
- **Optimising Temperature:** Increase physical activity by supporting walkable, cyclable, car-light environments, which in turn reduces cardiovascular disease, and contributes to improved mental health.
- **Food Supply:** Support healthier sustainable diets with lower environmental impact.
- **Managing Sun and UV Exposure:** Green spaces have been shown to support mental wellbeing, social connection, and lower stress.
- **Warmer Homes:** Fewer cold-related deaths (winter mortality index), especially amongst the elderly, and reduce financial stress by reducing fuel costs. 12.2% of households in East Sussex were in fuel poverty in 2022, higher than the South East regional average of 9.7%. This indicates a significant energy vulnerability in East Sussex, with more than 1 in 8 households unable to afford to keep their homes warm, or cool in warmer months.
- **Local Green Jobs:** Better local employment opportunities as part of building blocks for health.
- **Health Service:** Reduce demand on the NHS, improve life expectancy through prevention-focused interventions.

“Meeting the UK’s climate goals could save 44,000 lives each year—5,700 from cleaner air and 38,000 from a more physically active population.” - NHS Net Zero Strategy³⁷

For more information:

[The public health co-benefits of strategies consistent with net-zero emissions: a systematic review - PubMed](#)

[The Royal Society - A healthy future - tackling climate change mitigation and human health together](#)

[The Health Foundation - Policy levers for a net zero NHS: four priorities](#)

[Office for Health Improvement & Disparities - Climate and health: applying All Our Health](#)

[NHS England - Delivering a net zero NHS](#)

[Department for Energy Security & Net Zero - Powering Up Britain: Net Zero Growth Plan](#)

Key Messages from the East Sussex Changing Climate and Health Economic Evaluation

For full details please see Part 2 - East Sussex Changing Climate and Health Economic Evaluation within the HIA Technical Report

It is established by UK Government and international reviews that in general terms it is not only cost-effective to respond to environmental challenges and the changing climate (i.e. the costs are considered worthwhile in relation to the benefits that will be reaped from that expenditure), but also cost-saving to respond to environmental challenges and the changing climate (meaning that the costs to the economy of not responding would be greater than the costs of responding)³⁸⁻⁴⁶.

The HIA has considered economic calculations of the cost of inaction in relation to climate change related health effects. It is concluded that, for East Sussex, there are multiple health opportunities, and risks, that are associated with the changing climate and with values each ranging from less than £50,000 to multiples of £5 million per year up to 2080.

Accounting for both reducing negatives and achieving positives, between 2050 and 2080 there is estimated to be at least a £71 million to £85 million per year economic value in East Sussex to action on health impacts related to the changing climate (direct and indirect) under a 2°C warming scenario (increasing to £90 million under a 4°C scenario).

This is conservative as the evaluation's highest economic bands are already reached by 2050 on many of the impacts and likely to be much greater by 2080.

Early action is strongly correlated with substantial long-term gains, with benefit-cost ratios indicating that for every £1 invested in adaptation could result in £2 to £10 in net economic benefits.

Opportunities to Act

There is a strong case for acting now - not later - especially in three key areas⁴¹:

- “Reducing current (and growing) large economic costs from climate extremes. There are large net economic benefits today from reducing large economic costs with low- and no-regret actions which have high benefit to cost ratios.

- Initiating action in situations where, without current action, we commit (lock-in) to large negative future impacts. This is particularly the case in areas that involve decisions or investment that are very difficult to reverse, e.g. new housing and infrastructure.
- Applying extremely low-cost preparatory actions that can be taken to improve future decisions. This involves developing adaptive management plans, especially for decisions that have long lead times or involve major future change in the future that is uncertain.”

Enhancing community resilience by addressing existing inequalities is an example of a no regret climate change action related to health provide by the UKHSA, who state:

“As risks will manifest along existing social gradients in health, addressing current social and health inequities can help build resilience to a range of climate-health risks. This strategy has the benefit of improving resilience to a wider range of health risks and thus has strong evidence as a ‘no-regrets’ intervention approach.”³

Drivers of Economic Impact

Some of the key mechanisms by which economic impacts are likely to arise include via increased food costs, health-related labour productivity reductions and infrastructure damage⁴⁷.

System responses that support adaptation to these and direct climate extreme weather health injury include early warning systems, emergency management plans, health systems strengthening, safer housing, flood protection, vector control and improved surveillance⁴⁸.

Summary of How the Analysis was Conducted

The analysis used the Government UK Climate Change Risk Assessment economic evaluation (CCRA3 report), as well as other national statistics and reliable sources. The analysis was extended to consider the overall potential value of climate change economic impacts that directly and indirectly affect health outcomes. This included both the financial benefits of realising climate change opportunities and the financial benefits of avoiding climate change health risks. Expert judgment by the HIA Programme Management Team and East Sussex County Council key informants was used to estimate if values were likely to be low, medium, high or very high in the East Sussex context on issues where the CCRA3 report identified uncertainty.

Summary of the Policy Review

For full details please see Appendix E - Policy Review which also includes the Policy Analysis Tool

The HIA Strategic Systemwide Policy Review systematically analysed **62 purposively selected policy and strategic documents** from across the East Sussex system to assess **policy coherence, operational readiness, and the integration of climate change and health**. The review examined both **‘climate change in all health policies’** and **‘health in all climate and environmental policies’**, extending this principle beyond climate- or health-specific policies towards **‘all approaches’ across the system**. This responds to the UKHSA Health Effects of Climate Change in the UK: State of the Evidence 2023³ recommendation and establishes a baseline for future assessment of progress.

The review examined whether climate and health were explicitly or implicitly incorporated into policy purpose, language and operational content, including the extent to which **mitigation, adaptation and key climate-health pathways**—such as net zero, air quality, food systems, flooding and temperature-related risks—were embedded in policy. It also assessed whether policies provided sufficiently clear actions, responsibilities and decision-making guidance to translate strategic ambition into delivery.

The overarching finding is of an **evolving but fragmented policy landscape**. There is considerable ambition and engagement with climate change, health, sustainability, wellbeing and resilience, but this is not consistently translated into **coherent, operational and accountable action**. The detailed analysis found **44% of policies met all three internal coherence criteria**, 50% demonstrated partial coherence and 6% met none; 63% were accompanied by an action plan, delivery appendix or monitoring framework.

Integration of **climate and health remains particularly limited**. Only around **one-third of policies explicitly link climate and health**, with just **11% demonstrating strong and consistent integration**. A further 23% make partial links, while 24% mention both but fail to connect them. Health itself is also inconsistently embedded: **34% of policies made no direct connection between their stated aims and health outcomes**. This limits opportunities to use health as an upstream driver of environmental, social and economic benefits and demonstrates the need for stronger systems thinking across policy development.

Consideration of **health inequalities and vulnerability is also uneven**. Policies variously recognise age, income, health status, social disadvantage, geographic isolation, rurality and

coastal communities, but these considerations are frequently confined to contextual sections rather than translated into **targeted actions, responsibilities or resourced commitments**. A further important finding is an **imbalance between climate mitigation and adaptation**. Mitigation and net-zero ambitions are increasingly established within policy, whereas adaptation—and particularly adaptation to protect population health—is less systematically embedded, with fewer measurable actions and dedicated resources. This creates a risk that reducing emissions is pursued without sufficient preparation for the health consequences, transitions and shocks associated with a changing climate.

The review nevertheless identifies a **significant and achievable opportunity for systemwide improvement**. Existing policy refresh cycles provide a practical mechanism for policy owners to introduce concise but specific operative wording that connects climate adaptation, mitigation, health and health equity and triggers joined-up action. Creating greater coherence across **all policies and all approaches—not solely climate- or health-specific documents—could be transformational for East Sussex**, enabling the system to maximise co-benefits and strengthen population health and climate resilience.

The review therefore identifies **three priorities**: policies should balance **climate mitigation and climate-health adaptation**, addressing tensions and barriers; East Sussex should pursue greater **policy coherence across sectors and services**; and policy owners should use existing refresh cycles to incorporate specific operative commitments that enable coordinated climate adaptation and public health action.

Methodologically, the review had three purposes: **to map current climate-health integration; identify policies undergoing revision where greater synergy could be introduced; and establish a baseline for future evaluation**. A bespoke **nine-stage policy analysis tool** was developed to assess policy details, internal coherence, context and scope, climate integration, health integration, climate-health connections, key observations and opportunities, potential policy levers, and areas requiring stakeholder clarification.

Summary of Stakeholder Engagement: Including Climate and Health Conversations, and Three Systemwide Workshops

For full details please see Part 2, Section 4 - Summary of the Evidence Base within the HIA Technical Report

The stakeholder engagement programme - including individual climate and health conversations and three systemwide workshops - demonstrated a strong consensus that climate change is already affecting the health and wellbeing of East Sussex residents and must be addressed as a **whole-system public health issue**, rather than an environmental issue alone. Participants consistently called for climate and health to be embedded across all policies, services and decision-making through a **Population and Planetary Health in All Approaches** model.

Workshop 1 focused on understanding the current system and identifying barriers to action. Analysis revealed that the most significant gaps relate to **knowledge, evidence, communication, evaluation and organisations' ability to work together effectively**. Stakeholders highlighted limited shared understanding, fragmented responsibilities, insufficient collaboration and weak integration between climate and health agendas. While financial pressures were recognised, they were not viewed as the primary challenge. Instead, participants identified **governance, trust, partnership working, leadership, skills and confidence** as the critical enablers for achieving system-wide change.

Across all engagement activities, climate change was recognised as a **threat multiplier**, exacerbating existing inequalities and disproportionately affecting vulnerable populations. Stakeholders identified heat, flooding, mental health, housing, food and water security, and pressures on health and care services as the most significant climate-health risks. At the same time, housing improvements, nature-based solutions, active travel and stronger community resilience were consistently identified as opportunities to deliver significant climate and health co-benefits.

Workshop 2 shifted the focus from identifying challenges to developing solutions, generating ambitious recommendations including stronger governance, a Climate and Health Charter, improved accountability, workforce development, adaptation measures and enhanced public engagement. **Workshop 3** validated these recommendations, reinforcing that the evidence base is now clear and that the priority is implementation through a funded, accountable and measurable delivery framework with clearly defined responsibilities and ongoing monitoring.

To conclude, East Sussex has strong partnerships and assets, but requires stronger leadership, integrated governance, and collaboration to embed climate and health in all decision making.

Final Conclusion

The Addressing Environment, Climate and Health - A Systemwide Health Impact Assessment for East Sussex demonstrates that a changing climate is not simply an environmental challenge, but a **current and escalating population health issue**. Its effects are already being experienced through rising temperatures and heatwaves, flooding, coastal change, poor air quality, biodiversity loss, disruption to food systems and other interconnected pathways. These impacts are neither uniform nor equitable: they fall disproportionately on communities and population groups already experiencing poorer health, deprivation and wider inequalities. East Sussex's ageing population, coastal geography, levels of disability and substantial inequalities in healthy life expectancy further increase its vulnerability to climate-related health impacts.

At the same time, the HIA demonstrates that responding to a changing climate presents a significant opportunity to improve population health and wellbeing. Actions that strengthen climate resilience can simultaneously contribute to warmer and healthier homes, cleaner air, increased active travel, healthier and more sustainable diets, stronger communities, reduced inequalities, enhanced biodiversity and more resilient public services. Climate action should therefore be understood not only as a response to environmental risk, but as an important opportunity for prevention and population health improvement. Early action is likely to be more effective and cost-effective, while delayed action will increase future health, social and economic costs.

A central conclusion of the HIA is that **environment, climate and health can no longer be addressed as separate agendas through isolated policies, organisations or programmes**. East Sussex should progress towards a model of **Population and Planetary Health in all of Our Approaches**, recognising the interdependence of human health, healthy communities and healthy natural systems. This requires health considerations to be embedded within climate and environmental policy, climate and environmental considerations within health policy, and both to be systematically incorporated across planning, housing, transport, economic development, education, health and social care, emergency planning, procurement, investment and wider decision-making.

Achieving this transformation will require stronger governance and accountability, sustained cross-sector leadership, integrated assessment processes, improved local data and intelligence, workforce development, dedicated climate-health capacity and meaningful involvement of communities. **Health equity must remain central**, ensuring that adaptation and mitigation interventions reduce rather than reinforce existing inequalities and that those communities most affected by climate-related risks are meaningfully involved in shaping responses. The relationships developed through the HIA provide an important foundation for this work; the challenge now is to move from strategic assessment and project-based collaboration towards

sustained systems leadership and operational delivery.

A particular strength of the HIA is its **systemwide and multi-method approach**. By bringing together quantitative analysis, local intelligence, policy analysis, economic evaluation, evidence synthesis, stakeholder engagement and community insight, the assessment provides a broad and transparent evidence base to support future decision-making. However, important evidence gaps remain. Several climate-health pathways cannot yet be quantified adequately at a local level, particularly at neighbourhood and community scales. Further work is therefore needed to integrate environmental, health and socioeconomic datasets, strengthen local intelligence, establish routine monitoring of climate-health indicators and improve the evaluation of interventions. Maintaining and periodically updating the East Sussex Climate and Health Data Profile, alongside a shared climate-health intelligence function, will be important for identifying emerging risks, targeting action and measuring progress over time.

East Sussex is well positioned to become a leading example of how climate, environment and public health can be addressed through an integrated local system approach. The county has developed a substantial evidence base, established valuable relationships across organisational and sectoral boundaries and identified practical opportunities to strengthen the resilience of communities, services and places. Translating this foundation into meaningful and sustained change will, however, require continued collaboration, political and organisational leadership, appropriate investment and a long-term commitment to embedding health equity within climate policy and practice. Climate resilience cannot be delivered by any single organisation, profession or sector; it requires **shared leadership, shared accountability and coordinated action across the whole system**.

Phase 2 Delivery and Implementation: Mobilisation (2026-2030) provides the immediate, short-term route from assessment to mobilisation and implementation. Priorities include developing a Climate and Health Charter and associated agreements; establishing a systemwide Climate and Health Partnership; strengthening shared data, intelligence and learning; developing delivery and action plans; building workforce capability; embedding climate-health considerations within existing policies, strategies, plans and budgets; strengthening monitoring and warning systems; pursuing funding and investment; and evaluating progress as implementation develops. The emphasis on **no-regrets interventions, systemwide quick wins, early cost-saving actions and interventions that generate multiple benefits** provides a pragmatic basis for beginning implementation without waiting for perfect evidence, substantial new resources or national solutions.

This HIA therefore establishes both a **baseline for future monitoring and a framework for action**. It provides a clear rationale for bringing climate mitigation, adaptation, environmental sustainability, health improvement and health equity together within a single strategic agenda.

In doing so, it recognises that protecting and restoring the environment and strengthening climate resilience are fundamentally connected to protecting people's health and wellbeing. Using the evidence presented throughout Part 2 of the HIA Technical Report to inform policy, investment, commissioning, service planning and partnership working provides East Sussex with an opportunity to reduce future climate-related risks, improve population health, narrow health inequalities and create healthier, fairer and more resilient places for current and future generations.

Ultimately, this HIA should be regarded **not as the conclusion of a project, but as the foundation for long-term system transformation**. East Sussex already possesses many of the partnerships, assets, expertise and evidence required to act. The priority now is to translate these foundations into sustained implementation, supported by clear leadership, accountability, investment, monitoring and collective action. The evidence presented throughout the HIA makes the direction clear: **the health effects of a changing climate are already here; the costs of inaction are substantial; and the opportunities to create healthier, fairer and more resilient communities are too significant to ignore**. The question is therefore no longer whether East Sussex should act, but how quickly, how boldly and how collectively it chooses to do so.

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