

**Report to:** Scrutiny Committee for Communities, Economy and Transport

**Date of meeting:** 15 March 2017

**By:** Director of Communities, Economy and Transport

**Title:** Climate Change Adaptation

**Purpose:** To review whether the County Council is adapting well to the risks from climate change

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**RECOMMENDATION:** It is recommended that Scrutiny Committee requests a 5-yearly review of the County Council's climate change adaptation plans, to ensure the plans remain up-to-date and proportionate to the risks.

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## **1 Background Information**

1.1 The most recent report from the United Nations Intergovernmental Panel on Climate Change, in 2014, re-confirmed that human influence on the climate system is clear, and that the atmosphere and oceans have warmed, the amounts of snow and ice have reduced, sea level has risen, the oceans have become more acidic and some extreme weather events have intensified. Surveys of the scientific literature show about a 97% consensus amongst climate change scientists that humans are driving global warming.

1.2 Without substantial efforts to curb greenhouse gas emissions, global temperatures by the end of the 21st century could be more than 4 °C above what they were before the industrial revolution. The scientific consensus is that a change of that size would very likely lead to severe, widespread, and irreversible impacts on societies.

1.3 The risk of climate change is addressed by a combination of seeking to limit the extent of future change, by reducing carbon emissions, and adapting to the climate change to come that is already locked in for the foreseeable future due to past emissions of greenhouse gases. The purpose of adapting is to help minimise the effect of impacts that cannot be avoided, as this will ensure greater capacity to cope with, and recover from, these impacts.

1.4 In East Sussex, climate change may bring some benefits in the short and medium term. For example, warmer winters will lead to fewer cold weather deaths and a decreasing need to grit the highway network. However, it's considered that the negative impacts, notably an increasing risk of flooding and coastal erosion due to sea level rise and storm surges and an increase in excess summer deaths and water scarcity from heatwaves, will significantly outweigh the benefits.

1.5 The main legal mechanisms to address climate change are:

- 1) The UK Government's Climate Change Act of 2008, which requires the Government to cut carbon emissions by 80% of 1990 levels by 2050 and develop a climate change adaptation plan, to be reviewed on a 5-yearly cycle. The climate change risk assessment was updated by government in January 2017.

2) The United Nation's Paris Agreement of 2015, which sets out the framework for multilateral cooperation to prevent more than a 1.5°C increase in global temperatures above pre-industrial levels and to provide assistance to adapt to climate change.

## **2 Supporting Information**

2.1 There is no legal requirement for the County Council to develop a climate change adaptation plan. However, the effects of climate change will impose additional pressures on the County Council, namely:

- 1) It will disrupt the County Council's ability to deliver some of its services, for example, flooding, erosion and higher summer temperatures will increase damage to highway assets;
- 2) It will increase the demand for, and therefore the cost of, some services. For example, extreme weather events such as heat waves have a higher impact on vulnerable groups, as evidenced by the increase in summer deaths during 2003.

2.2 Most of these risks are already recognised and are being addressed by the County Council, for example through its statutory functions for Emergency Planning and Public Health and as the Lead Local Flood Authority for East Sussex (please see appendix A for further examples). In addition, a number of partner organisations also have policies and plans in place that contribute to ensuring that East Sussex is likely to be reasonably resilient to the effects of climate change in the short term (e.g. the National Health Service's national Heatwave Plan and the Environment Agency's Shoreline Management Plans). Examples of practical measures to manage risks include the flood management bunds being constructed by the Environment Agency in Newhaven, through to back-up generators installed at County Hall.

2.3 Climate change is a complex and long term challenge, characterised by great uncertainty. Consequently, it may be tempting to wait for changes to occur and then respond as they happen. However, there is a cost to under-adapting, as retrofitting actions are usually more expensive (e.g. alterations to buildings), as much as there is a cost to over-adapting (e.g. by preparing for events that may not happen). In view of this uncertainty, it's recommended that the County Council reviews its adaptation plans on the same 5-yearly cycle adopted by the government, to benefit from new evidence and recommendations as they arise. This will ensure that the County Council's approach to risk management remains proportionate to the risks.

## **3 Conclusion and Reasons for Recommendations**

3.1 It is recommended that Scrutiny requests a 5-yearly review of the County Council's climate change adaptation plans, to ensure the plans remain up-to-date and proportionate to the risks, with the next review to take place in 2022.

**RUPERT CLUBB**

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LOCAL MEMBERS

All

BACKGROUND DOCUMENTS

None

## **Appendix A – Examples of Measures Taken by the County Council to Adapt to Climate Change**

- 1) The Corporate Plan: the objective to 'help people to help themselves' enables residents and businesses to become more resilient to the effects of climate change. For example, the East Sussex Better Together (ESBT) programme includes a workstream looking at community resilience.
- 2) Emergency Planning:
  - a. the County Council is a member of the Sussex Resilience Forum, which prepares for emergencies such as the effects of extremes of weather, including storms, flooding, heatwaves and droughts.
  - b. Practical adaptation measures include:
    - i. Cascading early warnings from the Met Office and the Environment Agency about extreme weather events before they occur to enable appropriate action to be taken (e.g. the Heat Wave Plan requires contractors providing meals in the community to ensure extra water is accessible by service users).
    - ii. Alerts to service users about disruption to County Council services (e.g. closure of schools, adult social care centres or household waste recycling centres).
- 3) Business Continuity Planning: every County Council Department has a Business Continuity Plan, to ensure the rapid and co-ordinated re-establishment of priority services after events that cause service disruption.
- 4) Corporate buildings: the Corporate Sustainable Buildings Policy specifies a number of adaptation measures (e.g. installation of sustainable urban draining systems; orientation of buildings to minimise solar gain).
- 5) Highway infrastructure: the County Council, together with the Highways service provider Costain CH2M, is working towards implementing the new national Code of Practice on taking a risk based approach to managing highway infrastructure assets ('Well Managed Highway Infrastructure: A Code of Practice'). This includes using the local Flood Risk Management Plans, produced by the County Council as the Lead Local Flood Authority, to take a targeted, risk-based approach to maintenance of drainage assets to reduce the risk of flooding.