

# Climate change adaptation indicators for Scotland

**Suzanne Martin (Royal Botanic Garden Edinburgh)** and Anna Moss (University of Dundee)

# 1. What is ClimateXChange doing to monitor climate change adaptation?

Working with Scottish Government, its agencies and other experts, ClimateXChange has developed indicators to monitor climate change adaptation in Scotland. It has developed indicators –to cover the natural environment (agriculture, biodiversity and forestry), buildings and infrastructure and society themes represented in the Scottish Climate Change Adaptation Programme (SCCAP).

# 2. Why monitor adaptation?

The monitoring will help policy makers and others to understand how well Scotland is adapting to climate change; highlighting where successful adaptation is occurring and where policy action may be needed to encourage and strengthen adaptation.

#### 3. Who is this work for?

Our key audience is policy makers in Scottish Government who are developing climate change adaptation policies. However, the indicators and trends identified will also be of interest to people who are making decisions about and implementing adaptation actions in a much wider range of organisations and at regional and local levels.

### 4. What indicators have been developed?

To monitor adaptation we are using indicators that track change in adaptation actions and in climate change risks and opportunities and their associated impacts (the things adaptation expects to influence).

#### 5. How were the indicators developed?

The indicators that have been developed are based on an 'indicator framework' that sets out the rationale for the types of indicators we are developing and how we will interpret the changing trends they show.

We identified existing relevant indicators and data and liaised with experts e.g. in scientific research organisations and Scottish Government and its agencies, to build and refine the list of indicators and underpinning data sources to be used. In some cases, additional analysis of existing data provide more targeted adaptation indicators.

6. How do the indicators complement other climate change adaptation activities in Scotland and the UK?

The indicators focus around the risks and opportunities contained in the Climate Change Risk Assessment for Scotland and the SCCAP – monitoring changing levels of risk and opportunity and their felt impacts.

They also monitor on-the-ground adaptation and seek to understand trends in action in the context of the adaptation policies set out in the SCCAP and other important drivers of change.

The indicator framework we are using takes a risk based approach which is compatible with the framework used by the UK's Adaptation Sub-Committee to produce climate change adaptation indicators.

7. How will we communicate information about indicators and trends?

We will use the ClimateXChange website and a series of 'adaptation narratives' to communicate information about the indicators and trends. Individual indicators are also accompanied by contextual information and discussion which sets out: Why is this indicator important? What has happened in the past? What is projected to happen in the future? And aims to identify and interpret any significant patterns or trends in the data.

The indicator information is presented for each SCCAP theme as well as identifying adaptation themes which cut across and between sectors. We hope this will both assist sector based working and encourage joint working between organisations and sectors.

#### 8. Further information

If you could like more information about this work, please contact:

Anna Moss <u>a.z.moss@dundee.ac.uk</u>

or

Ruth Monfries <u>r.monfries@rbge.org.uk</u>

ClimateXChange is Scotland's Centre of Expertise on Climate Change, supporting the Scottish Government's policy development on climate change mitigation, adaptation and the transition to a low carbon economy. The centre delivers objective, independent, integrated and authoritative evidence in response to clearly specified policy questions.