

# Multi-sectoral assessments

## Introduction

A changing climate will affect virtually all areas of life -our environment, society and the economy.

It is increasingly important that the impacts of climate change are recognised and adaptation strategies are employed. Atkins works with a range of clients to identify the threats and opportunities presented by climate change and how best these impacts can be managed through adaptation. We help answer questions such as:

- How will climate change affect my organisation?
- Where are the biggest risks?
- Who is particularly vulnerable?
- When should I act?
- What will it cost?
- How can I manage uncertainties?

For the last decade we have provided high quality multi-sectoral climate change impact and adaptation assessments to clients including:

- Business in the Community Yorkshire & Humber
- East of England Climate Change Partnership
- East Midlands Development Agency
- Scotland and Northern Ireland Forum for Environmental Research
- South East Climate Change Partnership
- UK Climate Impacts Programme



## Outputs we deliver

Atkins provides a portfolio of approaches and outputs to match client requirements. Our services include reviewing climate scenarios, impact assessment, the development of adaptation strategies and the provision of interpretation, assessment and communication tools. Our analyses consider the combination of strategies in mitigation with impacts and adaptation to ensure a long-term sustainable response to development within a changing climate.

### Climate and scenario review

We provide clear, evidence-based assessments of current and future climate from the local to international scale, including:

- assessment of current climate, weather-related risks and sensitivity of sectors/activities
- independent interpretation of climate change scenarios
- development and review of socio-economic scenarios

### Climate change impact assessment

Our assessments of the threats and opportunities of climate change are based on:

- review of research literature
- stakeholder and expert consultation, including facilitation
- data analysis and modelling

- qualitative and quantitative risk assessment
- economic evaluation

We also verify whether climate change impacts have been adequately assessed through audit and gap analysis.

### Adaptation advice

Atkins provides evidence-based advice on the practicality, affordability and delivery of adaptation at policy, programme and project/operational level, including:

- methods to increase adaptive capacity
- solutions for realising adaptation
- prioritisation and optimisation of responses
- advice on the management of uncertainties

### Climate change tools

We develop a range of tools to help businesses and stakeholders understand, manage and monitor climate change, impacts and adaptation, including:

- databases
- indicator development
- GIS (geographical information systems)

## Our approach

Atkins helps our clients manage risks presented by climate change. We provide practical services and solutions to often complex problems and deliver clear, evidence-based outputs to technical and non-technical audiences. We do this by listening to our clients and answering their questions, calling upon our in-depth understanding of the latest science and regulations on climate change.

Our staff are at the cutting-edge of applied climate change assessment. As well as being formally trained in climate change, they are continually updating their expertise through training and involvement in initiatives from the local to international level. All of our services are underpinned by our independently approved project and environmental management systems.

### Review of climate and socio-economic scenarios

In addition to providing an independent review of:

- climate change scenarios
- projected impacts
- key uncertainties

We can also provide complimentary assessments of the effect of socio-economic scenarios in the context of climate change and adaptive capacity. We have established relationships with climate change centres of excellence including the UK Met Office and the Climatic Research Unit at the University of East Anglia.

### Scoping of impacts

Atkins provides clients with a first view of climate change impacts through scoping studies. These typically draw on an understanding of current weather-related impacts, literature review and consultation and highlight gaps and priorities for adaptation. We have undertaken several scoping studies and provided a review of all UK scoping studies for the UK Climate Impacts Programme.

### Risk assessment

Risk assessments go beyond scoping studies by evaluating the significance of impacts based on their probability and consequence. Atkins' recent work in Northern Ireland provided risk assessments for a range of socio-economic and environmental sectors and then prioritised and characterised adaptation responses based on the significance of each impact identified.

### Economic evaluation

Economic evaluations build on quantitative assessments of risk and assist in decision making. Our work for the East Midlands Development Agency, with Metroeconomica, is providing an economic assessment of climate change impacts and adaptation measures and of regulatory risks associated with mitigation.

### Adaptation

We develop and appraise potential adaptation strategies -practical actions that ensure we are able to cope with and benefit from our changing climate.

We provide strategies that are robust to a wide range of possible futures, enabling clients to manage the inherently large uncertainties. We prioritise adaptation strategies and help clients to overcome barriers to their implementation.



### **Outcomes we deliver to our clients**

Clients value our work because we successfully integrate expertise in climate change with a detailed understanding of other sectors, thanks to the support of specialists drawn from across the Atkins Group and beyond.

Our work has helped stimulate the formation and action plans of regional climate change partnerships, provided clients with an understanding of climate change and its potential impacts and has contributed to the successful implementation of robust adaptation actions.