

Introduction to the scenarios compendium

As a tool to aid thinking and stimulate new ideas about possible futures, Natural England has developed a set of scenarios for England's natural environment to 2060 (ScENE). To ensure these scenarios are understood alongside knowledge of wider work on scenarios, this compendium was commissioned to bring many scenarios developed and used by others together into a common analysis. This note introduces the work and provides information on relevant published reports.

Background

The world in which we live and work is constantly changing and evolving with abrupt change increasingly being seen. The future is inherently uncertain; surprise is inevitable.

Change presents both risks and opportunities for the natural environment and the benefits it delivers for everyone. To maintain and increase these benefits, Government - notably Defra - and Natural England need to be aware of circumstances that could affect the natural environment and the benefits it provides.

As a tool to aid thinking and stimulate new ideas about possible futures, Natural England has drafted four scenarios that portray plausible long-term futures for England's natural environment.

As part of this work, we have also documented forty two scenario projects from organisations across the world. It analyses their relationship to our project, and clarifies how these new scenarios add value.

It is hoped that the compendium's findings will help others explore and understand the factors that are likely to affect people's lives and businesses over time, and in doing so, support preparations for change.

Natural England scenarios compendium

The findings are available in the following report:

Natural England Commissioned Report NECR031 *Scenarios compendium*. This describes what other scenarios exist and how ours complement/plug gaps that these do not. The report was first published 27 November 2009. The second edition with a broader analysis is published at the same time as this note. This report identifies the following:

A unique perspective

Looking ahead fifty years, these scenarios focus on the entirety of England's natural environment from mountain to seabed. The four ScENE scenarios are unique in this combination of timescale and spatial dimension.

In exploring emerging change, many scenario projects concentrate on shifts in the economy and government. The ScENE scenarios include economic and policy changes, but emphasise potential shifts in worldview. They consider changes in how people relate to, and communicate with each other; the natural environment and the built environment.

Scenarios compendium

An enriched approach to scenario building

People's values, culture, and behaviours shaped how England's environment has changed over time. Their values, culture, and behaviours will likewise shape how England's environment could change over the next fifty years.

Natural England wanted to explore how various drivers might develop in the context of such social and cultural changes. To do so the commonly used "axes of uncertainty" scenario method was augmented with a foresight technique called the "Ethnographic Futures Framework" (EFF) that identifies emerging change from a number of alternative worldviews and paradigms.

The ScENE project also incorporated a 'three-horizons' analysis which considered how emerging innovations and paradigms compete for societal dominance over time. Through the creation of a timeline that mapped the last century, the project also linked how environmental change might evolve to how environmental change had evolved.

Using EFF and 'three-horizons' together the project created vivid scenarios with a robust internal logic and structure. This enabled highly detailed comparison of impacts, outcomes and strategic environments across the scenarios, and between the ScENE project output and other scenario projects.

Complementarity with other projects

Many scenario projects tell similar stories; some of growth, some of collapse, some of transformations. Common themes include:

- the value of the natural environment;
- the locus of decision-making;
- the robustness of the economy; and
- the impact economic vulnerability might have on environmental management and sustainability.

Analysing the compendium scenarios for common themes, drivers and details identified a

set of common 'composite' stories that became five primary 'archetypes' of possible futures:

- 'Business as usual' for government and the economy.
- A 'high-tech' future transformed primarily by technological fixes.
- A 'sustainability' future that prioritises the environment, and may do so via efficiencies of scale in urban settings or by decentralising and focusing on communities and locales.
- A 'paradigm shift' future that overturns current assumptions about governance or the economy, often connected to worldview and value shifts and enabled by new technologies.
- 'Vulnerability' or 'collapse' scenarios, depicting for example, economic difficulties, social schisms or environmental degradation.

Mapping the ScENE scenarios against these archetypes highlights both ScENE's distinctive contributions and where other scenario projects add value.

How other scenarios add value

Several scenario projects explore issues not covered by Natural England's scenarios or covered in less detail. Issues not addressed by ScENE include the potential for extreme social fragmentation; the global future of migrant labour and the impacts that 'dematerialisation' of the economy might have.

Other scenarios depict detailed changes and impacts in a specific economic sector, environmental or geographical area. Examples include energy, food, property, the built and marine environments and specific communities, regions or nations.

These 'gap fillers' raise questions that can be usefully explored within the context of Natural England's scenarios and wider (including broader partnership) futures thinking.

Further information

Natural England technical publications are available to download from the Natural England website: www.naturalengland.org.uk: In addition to this information note see:

Scenarios compendium

- Natural England Commissioned Report NECR031 *Scenarios compendium*.
- Natural England Research Report NERR031 *England's natural environment in 2060 – issues, implications and scenarios*. This describes: how the future could unfold; the factors that might shape the future; how we might live; and the implications for the natural environment.
- Natural England Commissioned Report NECR030 *Global drivers of change to 2060*. This provides a synthesis of fourteen global drivers of change considered to represent the most significant trends, factors and pressures that could affect the natural environment to 2060.

For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail enquiries@naturalengland.org.uk.

Keywords

Scenarios, environmental change, drivers of change, futures, inventory.

This note was written by Nicola George of Natural England's Strategy and Environmental Futures Team, Harbour house, Hythe Quay, Colchester, CO2 8JF, tel: 0300 060 1951. Editor Susie Smith.

You may reproduce as many individual copies of this report as you like, provided this is not for commercial purposes, and such copies stipulate that copyright remains with Natural England, 1 East Parade, Sheffield, S1 2ET.

© **Natural England 2011**