Contents

Scenarios for England's Natural Environment in 2060 (November 2009)

Natural England | **SAMI Consulting**

A scenarios project accompanied by a scenarios compendium [inventory and analysis of related scenarios].

The following describes the project using the template Natural England and Infinite Futures developed to annotate scenario projects for the Scenarios Compendium inventory. Go here for ScENE 2060: personal lessons learned.

Overview

Method chosen: ?axes of uncertainty? deductive matrix *plus* (augmented by the Ethnographic Futures Framework and the ?Three-Horizons? Timeline Framework).

Aim The scenarios depict what England?s natural environment might look like and how it might function in 2060. Natural England will use them to identify critical long-term challenges to the natural environment, as well as possible opportunities. In addition to underpinning the creation of a clear integrated vision for the natural environment to 2060, the scenarios will be used to inform and test strategies and policies.

Focus Covering the full span of Natural England?s remit, the scenarios depict four paths along which terrestrial

and marine environments could develop, including implications for how we might live in 2060. The focal question was ?What could influence the English natural environment by 2060?? How people and society interact with the environment, and how the environment affects people and society, formed a core theme.

Methodology

Natural England created Scenarios for England?s Natural Environment in 2060 (ScENE) over six months using in-house expertise complemented by specialist consultancy input from SAMI Consulting (St Andrews Management Institute) and the Centre for Urban and Regional Ecology (CURE) at Manchester University.

Research and interviews identified fourteen global drivers of change to 2060. Over a series of three workshops, participants including staff and key stakeholders prioritised the drivers, identified defining uncertainties, and elaborated possible future outcomes. First, participants mapped those changes having the greatest impact on the environment over the past century. They then discussed how the fourteen change drivers might evolve over the next 50 years. After prioritising the change drivers most likely to affect England?s natural environment, three defining uncertainties emerged:

- Will the world have found a way to live sustainably?
- Will technology have provided a ?get out of jail free? card or will lifestyle changes still be necessary?
- What will be the world order? Will it be dominated by free market globalisation?

Workshop discussions explored how these questions might combine to create risks and opportunities. Participants created basic storylines for four scenarios framed by these three questions. The resulting scenarios consequently explore a range of distinctive options facing society: the role of technology, the levers that could move the world towards sustainability, and the nature of society in England by 2060. Natural England deliberately avoided a quantitative, modelling or forecasting approach, given the immense complexity and long time scales involved.

The project team tested and refined the draft scenarios by engaging both Natural England staff and external stakeholders, including members of the public. Engagement included a series of workshops as well as peer reviews from outside the UK. In addition to critiquing the scenarios, these activities also helped to develop timelines for the scenarios up to 2060, and to explore how a range of natural environments would fare across the four scenarios.

Consistent ?narrative threads? frame the scenario stories. Each story starts out grounded in the present, describing current strategic concerns, and also pointing out where emerging trends or issues are ignored or downplayed. The stories unfold from current concerns until emerging events challenge dominant policies, opening new pathways for action. Each scenario then follows a pathway to possible outcomes in 2060.

Natural England wanted to emphasise the relationship between people and the environment, and to explore how people?s values, culture, and behaviours shape the future. With this in mind, the project team adopted the Ethnographic Futures Framework (EFF) as the central unifying structure not only to explore long-term impacts of the change drivers, but also to develop and structure the scenarios. The EFF complements the 2060 timeframe of the scenarios, as people?s values and behaviours shift over generations (50 years encompasses almost two generations). The EFF asks where the impacts of change will fall most heavily in the future: this includes impacts on mental models, worldviews, value sets; on how people relate to their environment and each other; and on how they communicate, create goods, and consume resources. This approach supports Natural England?s purpose: to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future

generations. People are at the heart of our purpose.

A ?three-horizons? timeline analysis was also utilised that considered how emerging innovations and paradigms might compete for societal dominance over time. Hodgson and Curry summarise the three horizons as,

- "?'1st Horizon': the current prevailing system as it continues into the future, which loses "fit" over time as its external environment changes;
- '3rd Horizon' ideas or arguments about the future of the system which are, at best, marginal in the present, but which over time may have the potential to displace the world of the first horizon, because they represent a more effective response to the changes in the external environment. ?
- 2nd Horizon; an intermediate space in which the first and third horizons collide. This is a space of transition which is typically unstable. It is characterised by clashes of values in which competing alternative paths to the future are proposed by actors.?

The three-horizons analysis helps map the varying rates of change in a complex system over an extended time horizon. This underpins scenario logic and plausibility. To download a short powerpoint deck that briefly explains the three horizons approach and EFF, and suggests two exercises in using them to elaborate and add details to scenarios, click here:

Brief description of future worlds

Four possible worlds:

CONNECT for Life

Life in 2060: People now connect through vast global networks. Decisions and economies are based locally, but through billions of worldwide connections they create a bigger and more effective system ? a global super-brain. Social and environmental values have strengthened a lot over the years ? loyalty lies with communities connected for common purposes across the globe; national government has relatively little influence.

How this scenario emerged: In the early decades of the 21st century there was a major focus on using information and communication technologies (ICT) to improve productivity. At the same time, however, less focus was given to the potential of social networking and internet-enabled democratic decision-making to improve social and environmental outcomes. As social networks became sufficiently large and self-supporting, ?traditional? beliefs and ways of doing things became outdated and unproductive. These then faded as hyper-connected communities became the main focus.

GO for Growth

Life in 2060: Making money is a priority and economic growth continues to be driven by consumption and new technology. Few people worry about the environment and almost everyone continues to consume at will. The country has reacted to devastating events by spending money on food from abroad and developing technology. There is growing concern this may not always solve the problems facing Britain.

How this scenario emerged: Trends dominant in the first part of the 21st century continued. Society remained focused on consumption-based growth through a market economy enabled through accelerating innovation.

KEEP it Local

Life in 2060: Society now revolves around nations feeding and providing for themselves. England?s land is largely used either for food production or for housing. Critical decisions (for example, around security and infrastructure) are made nationally, with other decisions made regionally and locally. People are very protective of their local area and belongings, but have a strong sense of national identity. Resources are limited and are tightly controlled, but consumption remains high.

How this scenario emerged: In the early 21st century, society emphasised consumption while paying little attention to working within environmental and resource limits. However, in the 2020s and 2030s, those limits were breached and a series of social and environmental crises emerged. This forced nations to adopt more protectionist positions, slowing and unravelling globalisation.

SUCCEED through Science

Life in 2060: The global economy continues to be driven by innovation and everyone relies on business to keep the country growing. London and the South East are important, but the rest of the country is also booming as both cities and their surroundings produce so much. People trust technology to enable growth within environmental and resource limits, but some worry it may not always have the answer.

How this scenario emerged: The early 21st century emphasised improving productivity in the global market economy. However, this served only to focus attention on driving innovation to achieve short-term economic gains. Long-range consequences for society and the environment received little serious attention. However, new entrants in the global economy recognised that their own long term competitive advantage required a more forward-looking approach that would safeguard social and human capital in the longer term.

Implications and application

Natural England have undertaken an initial synthesis of the key issues and implications emerging from the scenarios in terms of how the future could unfold, against how society might live and the implications for the natural environment (see Natural England Research Report NERR031 ?England?s Natural Environment in 2060 - issues, implications and scenarios?). Natural England have highlighted key similarities and differences between the scenarios and major strategic implications arising for the natural environment over the period to 2060. Neither the likelihood nor the desirability of those futures has been considered. The report reveals two critical issues central to how society can better manage the natural environment: 1) recognizing that the natural environment has value in some form, and 2) understanding that people?s choices largely determine the future state of the natural environment. Ultimately, the scenarios highlight that the future of the natural environment is largely determined by the ability and willingness of society to articulate its values for the natural environment clearly and to make choices that consciously reflect those values.

ScENE 2060: personal lessons learned

Scenarios Compendium (November 2009 / April 2010)

Natural England | Infinite Futures

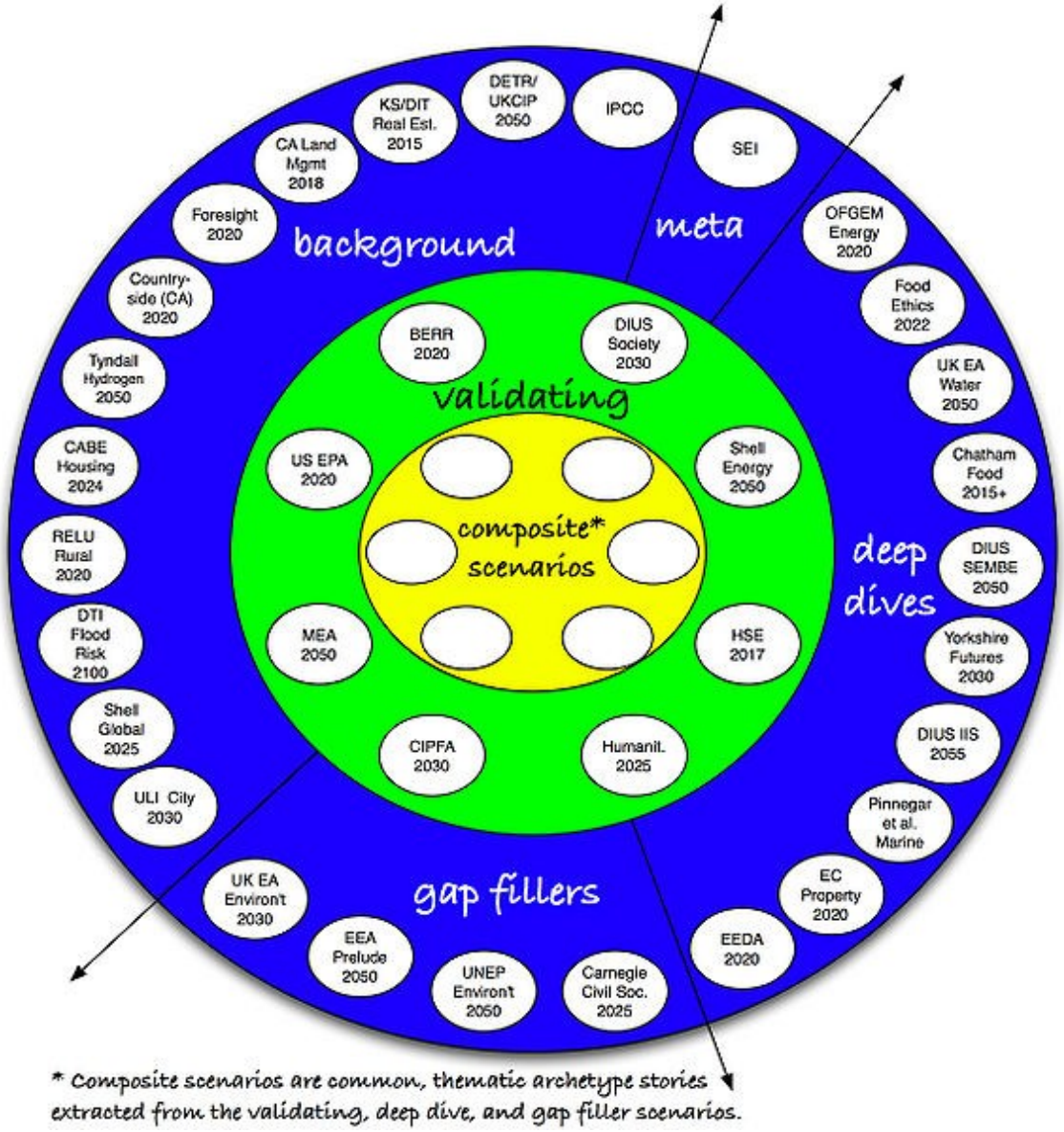
This scenarios compendium offers an inventory and analysis of other scenario projects relevant to ScENE 2060. It provides a context for the issues and ideas raised in ScENE by describing the ongoing foresight policy dialogue in the UK and elsewhere regarding the natural environment. Go here for ScENE 2060 Scenarios Compendium: personal lessons learned.

Overview

Components

Establishing ScENE's unique contribution in the context of 42 related scenarios

Inventory of scenario projects

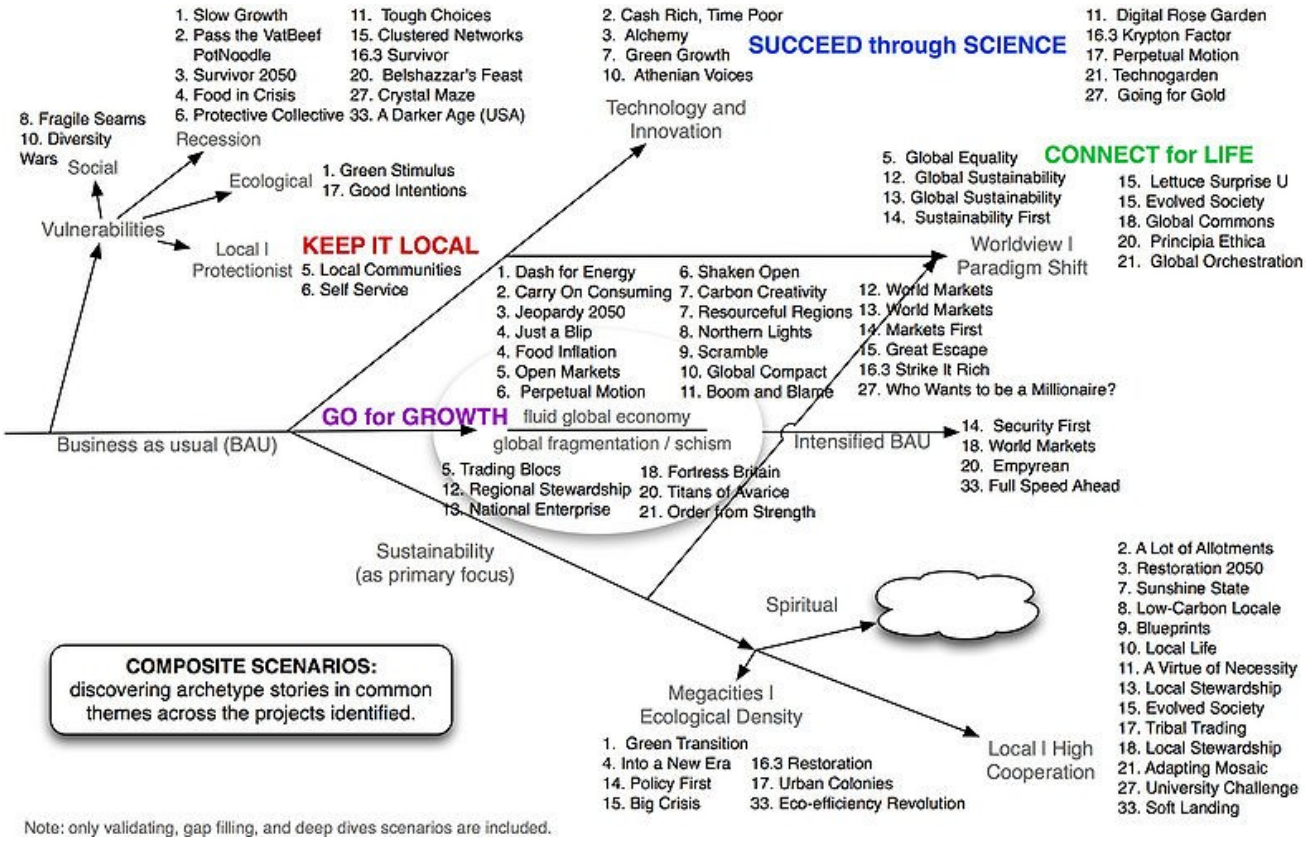


"Lessons learned:" stories from practitioners regarding selected scenario projects

Searching scans for policy leverage: layering scenario timelines on a baseline of emerging issues

Scenario archetypes: patterns in scenario narratives

One core question the compendium answers is "Do similar stories exist across these different scenario projects?" An informal, simple clustering of scenario narratives indicated that some common stories were being told. The diagram below shows these clusters.



Applications

ScENE 2060 Scenarios Compendium: personal lessons learned