

Developing the indicator framework for the 25 Year Environment Plan NBN Conference 2018



UK Government launch the Plan - A Green Future: Our 25 Year Plan to Improve the Environment



"The environment is something personal to each of us, but it is also something which collectively we hold in trust for the next generation. And we have a responsibility to protect and enhance it"

Theresa May, 11 January 2018

Our vision



It is this Government's ambition to leave our environment in a better state than we found it.

The Plan will deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first.

The journey here



- The National Ecosystem Assessment (2011)
- The Natural Environment White Paper (2011)
- The Natural Capital Committee's third State of Natural Capital report (2015)
- "...we pledge to be the first generation to leave the environment in a better state than we inherited it. That is why we shall produce a comprehensive 25 Year Environment Plan" (2017)
- The 25 Year Environment Plan (2018)

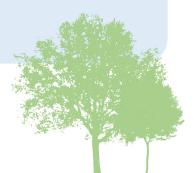
Our 25-year goals

We will achieve:

- Clean air
- Clean and plentiful water
- · Thriving plants and wildlife
- Reduced risk of harm from environmental hazards such as flooding and drought
- Using resources from nature more sustainably and efficiently
- Enhanced beauty, heritage and engagement with the natural environment

We will manage pressures on the environment by:

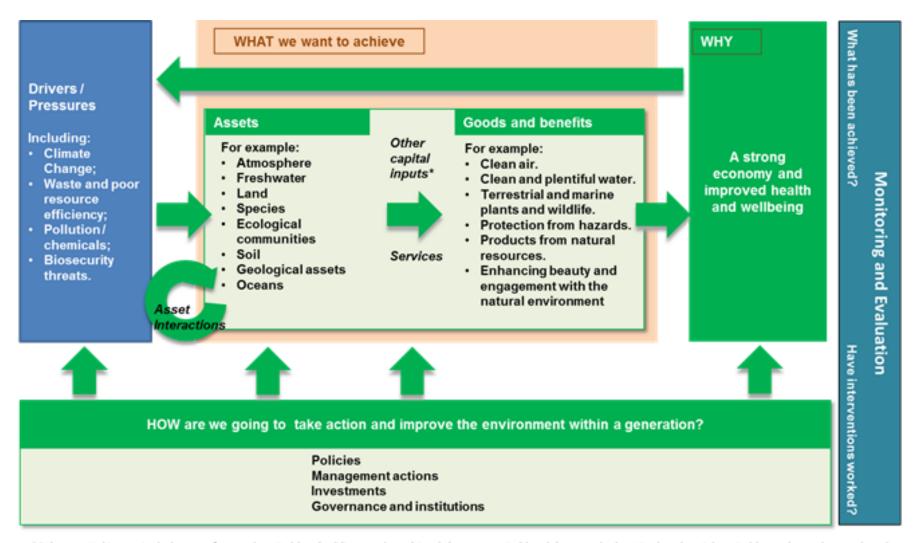
- Mitigating and adapting to climate change
- Minimising waste
- Managing exposure to chemicals
- Enhancing biosecurity



Our policies will focus on:

- Using and managing land sustainably
- Recovering nature and enhancing the beauty of landscapes
- Connecting people with the environment to improve health and wellbeing
- Increasing resource efficiency, and reducing pollution and waste
- Securing clean, productive and biologically diverse seas and oceans
- Protecting and improving the global environment

Managing the environment through the concept of 'natural capital'



^{*}Other capital inputs include manufactured capital (eg. buildings and machines), human capital (eg. labour and education) and social capital (eg. rules and procedures)

Evaluation of the plan - indicators

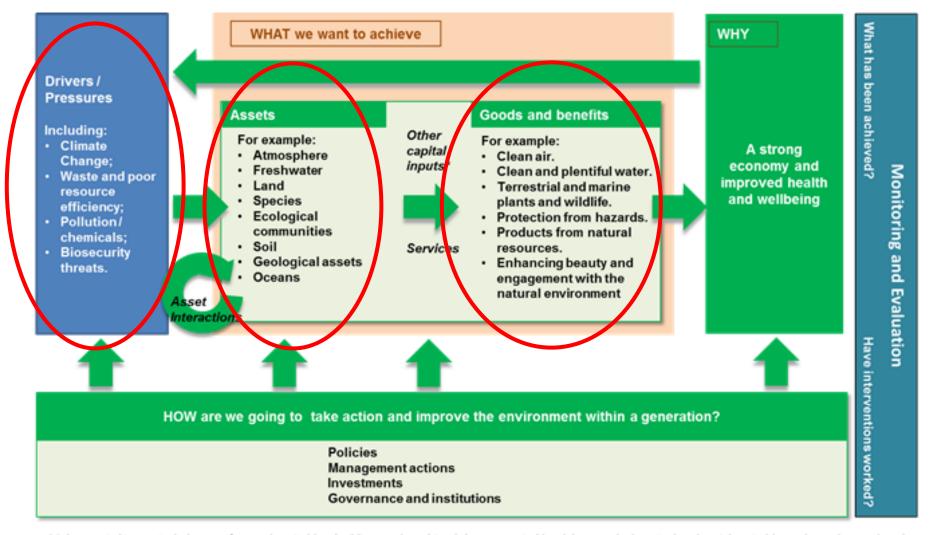
Environmental indicators or metrics are a critical part of the 25 Year Environment Plan. They enable us to comprehend the complexity of the environment and allow us to:

- understand how the environment as a whole is changing – the pressures, the state of assets and the flow of benefits;
- assess the effectiveness of our policies and show how we are delivering our domestic and international commitments; and,
- inform decisions and promote action within and outside government, locally and nationally.



"We will engage widely as we develop a comprehensive set of metrics that we can use to measure progress"

Using expertise to look at parts of the system



^{*}Other capital inputs include manufactured capital (eg. buildings and machines), human capital (eg. labour and education) and social capital (eg. rules and procedures)

Thematic workshops

Goals and themes

- (1) Clean air
- (2) Thriving wildlife, biosecurity
- (3) Enhanced landscapes, heritage and engagement
- (4) Clean water, natural hazards, chemicals
- (5) Resource efficiency (incl timber, food, fish, soils), waste

Climate change (no workshop)

- (6) International
- (7) Marine

What the thematic workshops were asked to do

Simple

definition

pressure the

creating and

impacting the

environment

how this is

What we're doing

Inputs

Simple definition

Performance measures that summarise our inputs to address a specific environmental issue

Not included in this project

What's changing

Assets

Simple definition

Indicators that Indicators that summarise the can be used to summarise the specific issue is current condition of the environment in relation to the specific issue

Simple definition

> Indicators that summarises the amount or economic value of the benefit provided by the specific issue

Services /

Benefits

Are we achieving our goals

Headline Indicators

headline currently available

Simple definition

The best available indicators that could be used as an interim until the preferred ultimate indicator is

developed

Ultimate desired indicator

Simple definition

Ultimate indicator that could be developed over 2-3 years

Indicator working definition:- Type of metrics that show measurable and repeatable trends in policy relevant variables

Generic criteria used for selecting indicators

Relevance

- The degree to which the indicator meets user needs.
- Focused on ultimate outcomes (see specific criteria for 25 YEP)

<u>Sensitivity</u>

 The degree to which the indicator varies according to changes in the phenomenon.

Availability & timeliness

- Acceptable lag between availability of data and time period to which indicator refers.
- Available for use by others, collect once – use many times.

Comparability & Scalability

 Degree to which indicators can be compared over time and domain, scalable.

Accessibility & Clarity

- Ease with which users access and understand the indicator.
- Available metadata, illustration & accompanying advice.

Coherence

 Degree to which indicators from different sources/methods, referring to the same phenomenon, are similar.

Statistical & methodological quality

- Statistically sound/robust methodology, understood bias & uncertainty.
- Efficient, affordable, secure data collection.

Schematic representation of the draft indicator framework

Natural Capital Assets

A subset of indicators can assess change to Natural Capital Assets

System Indicators

Measuring change in:

Pressures on natural capital

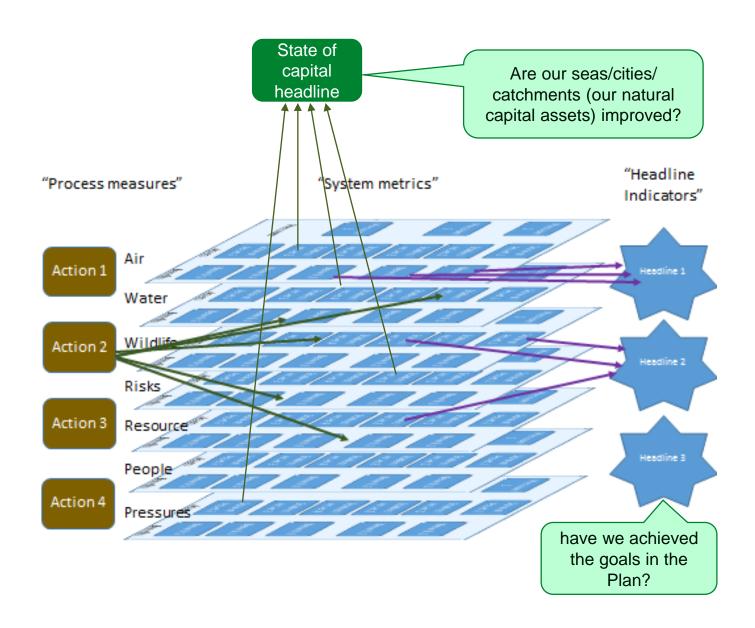
The state of natural capital assets

Services and benefits flowing from natural capital

A subset of indicators gives an overview of progress

Headline Indicators

For communicating environmental change and progress towards the goals of the 25 Year Environment Plan



Stakeholder Engagement

Informal engagement has included groups such as:

- Agriculture and Horticulture Development Board (AHDB)
- Air Quality Expert Group
- National Farmers' Union (NFU)
- Wildlife and Countryside Link
- Local Nature Partnerships webinar
- National Parks England
- Water leaders group

And thematic meetings around:

- Landscape
- Soils

Next steps

- Currently reviewing the feedback received from informal discussions with stakeholders
- Commitment to publish the indicator framework in early 2019
- Some indicators that have been identified require some further development.
 - ➤ We would appreciate further input from NBN and others as we take this development work forward following publication.
- And finally recognition that the indicators will need to be kept under review so that we can take account of new information, issues and take advantage of new technologies to improve monitoring in the longer term.

Contacts

