

Environmental Accounts

Developing accounts and indicators for regulation and policy departments.

James Evans



Workstreams

- Strengthening UK Environmental Accounts
- Measuring the Green Economy
- Measuring Natural Capital

UK Environmental Accounts

Physical Flows Accounts

- Energy Consumption
- Atmospheric Emissions
- Material Flows
- Water Accounts
- Waste Accounts

Environmental Activity Accounts

- Environmental Taxes
- Environmental Protection Expenditures
- Environmental Goods and Services

Natural Capital Accounts

- Oil and Gas Reserves (Physical and Monetary)
- Land use and land cover (Physical)
- Timber (Physical and Monetary).
- Initial natural capital estimates (top-down)
- Freshwater Ecosystem Asset and Services Account (Physical and Monetary)
- Woodland Ecosystem Account (Physical) and Monetary).

Physical Flow Accounts

Account	Source data provided by:	Account Produced by:
Energy Consumption	Energy Ministry Consultants	ONS
Atmospheric Emissions	Energy Ministry Consultants	ONS
Material Flow Account	Environment Ministry Taxation Ministry Geological Ministry.	ONS
Water Accounts	Environment Ministry	Environment Ministry
Waste Accounts	Environment Ministry	Environment Ministry

Environmental Activity Accounts

Account	Source data provided by:	Account produced by:
Environmental Taxes	ONS	ONS
Environmental Protection Expenditure	ONS Environment Ministry	ONS
Environmental Goods and Services (EGSS)	Energy Ministry Environment Ministry Transport Ministry International Trade Ministry. ONS	ONS

Measuring the Green Economy, Example 1: Low Carbon & Renewable Energy Survey

- EGSS detail proved insufficient for domestic policy requirements.
- An EU Grant funded survey feasibility study (our thanks).
- England, Scotland, Wales and Northern Ireland governments funded the resulting statutory survey.
- 41500 questionnaires were despatched in February 2015.
- Current response rate is 84%,.
- Results will be published on the 25 November 2015.

Example 1 - Continued

17 Sectors - Examples	Variables Requested
<ul style="list-style-type: none">• Offshore Wind• Onshore Wind• Solar photovoltaic• Hydropower• Bioenergy• Low carbon financial and advisory services• Low emission vehicles• Nuclear power	<ul style="list-style-type: none">• Turnover• Subsidies• Imports• Exports• Employment• Acquisitions of capital assets• Disposals of capital assets• Regional breakdown

Measuring the Green Economy, Example 2: Climate Change Survey Feasibility

- Environment Ministry funded ONS to develop a survey into the impact of climate change on the Economy.
- We are consulting on resulting questionnaire and feasibility report
- A positive consultation may lead to a pilot survey of 2000 respondents.
- Please respond to our consultation at:
<https://www.gov.uk/government/consultations/climate-change-survey-consultation>

We value your input.

Example 2 - Continued

Sections	Weather events
<ul style="list-style-type: none">• Impact from current weather events.• Risks and opportunities relating to future changes in climate.• Income from adaptation goods and services related to changes in climate.	<ul style="list-style-type: none">• Flooding• High temperatures• Low temperatures• Wind• Low water availability• Heavy rain• Ice, hail or snow.• Electrical storms

Natural Capital Accounts

Account	Source data provided by	Account produced by
Oil and Gas Reserves	Energy Ministry	ONS
Land Use/Cover Account	Environment Ministry	ONS
Timber Account	Forestry Ministry ONS	ONS
UK Natural Capital Initial Estimates	Environment Ministry Energy Ministry Forestry Ministry British Geological Survey ONS	ONS
Woodland ecosystem accounts	Forestry Ministry	Environment Ministry
Freshwater ecosystem accounts	ONS Environment Ministry European Environment Agency	ONS

Example 3: Natural capital accounts

- Following components were valued:
 - Oil & gas reserves
 - Mineral reserves
 - Timber
 - Agricultural land
 - Fisheries
 - Public water supply
 - Outdoor recreation
 - GHG sequestration
- More than 2000 visits in 6 months

International Co-ordination

- Within UK Office for National Statistics there is an International Relations Team.
- The UK is well represented internationally, for example Eurostat, OECD and UN.
- Environmental experts across ministries brief UK representatives at these meetings.
- When considering regulation, UK experts liaises across Government Statistical Service, European Statistical Service, Members of European Parliament and Her Majesty Treasury.
- The UK National Statistician receives quarterly updates regarding regulation compliance.
- Government Statistical Service Committee and ONS Affairs Committee build international strategy and monitor UK involvement in international matters.

Future plans

Our future activities are obviously dependant on sufficient resources. Our intention is to:

- Progress the Low Carbon Survey into a second year.
- Progress the Climate Change Survey through consultation to pilot stage.
- Initiate a cost based approach natural capital pilot (EU grant required).
- Develop the Environmental Protection Expenditure account.
- Develop imports and exports for the Environmental Goods and Services Account.

Thank you!!

