



Our natural capital tool and approach

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nationalgrid

Improving our Natural Capital¹

National Grid are committed to protecting and enhancing the natural environment. Nature provides a wide range of benefits and services that underpin our daily lives communities and economies.

Within the RIIO-T1 regulatory period, we worked with AECOM to develop our Natural Capital tool and approach that draws on external publicly available data to articulate indicative financial value of 12 ecosystem services provided by the Natural Assets owned and managed by National Grid.

Within the T1 regulatory period this tool has been used to inform new approaches to land use and management, catalyzing practical action that can deliver long term benefits to people and biodiversity at a local, national and a global levels.

Our Natural Capital approach

For each National Grid site assessed, an inventory of habitats is created indicating, habitat type, area and an indication of condition where appropriate.

Habitats are mapped and categorized into the 10 broad habitat types as detailed in Table 1. These are aligned with the habitat classifications detailed within the National Ecosystem Assessment (NEA). Details of the site and habitats are entered into the Natural Capital Tool

Table 1

Habitat Type
Green Space
Fresh Water
Marine and coastal margins
Wetlands & Floodplains
Mountains, moorlands and heaths
Semi Natural Grassland
Farmland
Coniferous Woodland
Broadleaved Woodland
Bare Ground

Identifying Ecosystem Services²

Following engagement with local stakeholders and review of known data, ecosystem services provided by the natural features on site are selected within the tool from a list of 12 Ecosystem services detailed within Table 2 – these range across, provisioning, supporting, regulating and cultural services.

When developing sustainability projects in T1 only ecosystem services that were situationally relevant to the specific site were included within the Natural Capital assessment.

¹ “Natural capital refers to the biological, physical and chemical resources/assets, known as ‘Stock’ CIEEM

² “The benefits to people that flow directly from Natural Capital stock are known commonly as ‘ecosystem services’” CIEEM

Table 2

Ecosystem Service	Description of Ecosystem Service
Food	Provisions of land for agricultural services / grazing, Crops etc
Water	Extraction and use of water from site
Timber	Provision of timber a raw materials from site
Energy	Provision of renewable energy Solar / Wind
Carbon	Carbon Capture Storage services by trees vegetation present
Air Quality	Capture of airborne particulates / Local Air quality benefits
Water Quality	Water Quality – prevention of pollution , Local Water quality benefits
Flood Control	Local Flood management benefits from specific habitat types
Pollination	Benefits of pollination to surrounding agricultural beneficiaries that rely on ³ pollinators for crop yield etc
Recreation	Access to nature within National Grid land - footpaths, permitted paths – education
Community	Impacts on local house prices due to proximity to habitat type within 1km of site
Wild Species (Biodiversity)	Proxy values per habitat management via (HSL) Env Stewardship schemes

These 12 Ecosystem service (benefits) were initially included within the tool to provide a range of ecosystems services and could draw on robust external data to underpin and inform the valuation methodologies. *Data sources can be provided on request for specific ecosystem services*

The **realization costs** of delivering actions informed through stakeholder engagement, such as habitat creation or improvement, are not included within the functionality of the tool, or netted off the natural capital valuation. Where applicable, the realization costs are included within the specific business case for investment.

Valuation Methodologies

The valuation methodologies associated with the 12 Ecosystems within the tool are intended to provide indicative broad financial values only, to inform better decisions, highlight potential tradeoffs and opportunities, and to initiate engagement with stakeholders and wider beneficiaries. The specific values within the tool relating to the various ecosystem services, are derived from 3rd party publicly available sources including DEFRA and Natural England.

Natural Capital Value timelines

The Natural Capital Values represented in the tool are estimated over 30 years and reflects the present value and uses a discount rate of 3.5%.

The 30 year valuation timeframe is used to demonstrate that environmental value can increase significantly over the longer term with pro-active land management. There is also a recognition that actions taken today may only reach ‘full value’ over a longer timeframe, for example carbon sequestration.

Values presented in the Business plan proposal represented data extracted from our GeoGrid GIS system and the best and most accurate picture we could provide at the time.

In Autumn of 2019 we commissioned an in-depth study of our land assets, which will involve the categorization and classification of the land and natural assets. This data will underpin the RIOT2 baseline position.