

Types of natural capital include:

Provisioning services

- the material output from nature
- e.g. fish, timber, fossil fuels

Regulating services

- indirect benefits from the regulation of natural processes
- e.g. carbon sequestration, air pollution removal, noise mitigation

Cultural services

- non-material benefits
- e.g. recreation, aesthetics

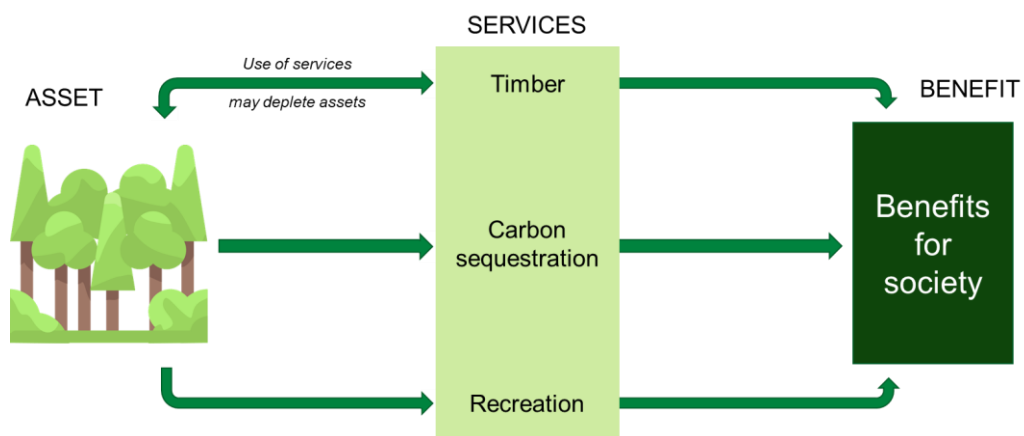
Natural capital accounting values goods and services provided by nature, to estimate the benefits which these natural assets provide to humanity (also known as “eco-system services”). The natural capital accounts are experimental national statistics.

This valuation can be done through

- Market values (where the good is bought and sold)
- Calculated values based on avoided cost
- Values that people place on certain goods

Quantifying benefits provided by nature in the same unit as other accounts (currency), helps decision makers to understand the value of natural capital to society and to take that value into account at the same level as other economic factors.

The diagram below shows how an asset such as woodland provides services which benefit society. It is necessary to invest in the maintenance and restoration of assets such as woodland, and society can earn a return through the services provided by these assets.



How are the natural capital accounts calculated?

Natural Capital accounting begins by measuring the value of the overall ‘**stock**’ of a natural asset. (These are the ecosystem and mineral resources that persist long-term, such as a mountain or a fish population.)

From these assets, people receive ‘**flows**’ of services (such as walks on the mountain and fish captured for consumption). The benefits to society of these ‘**flows**’ can then be valued. Each of these ‘stocks’ and ‘flows’ is valued.

The ‘**asset value**’ (often the headline figure in natural capital accounting) captures all of the future annual flows of services that are expected to take place over the lifetime of each natural asset.

2022 Scottish Natural Capital Accounts

The natural capital accounts for Scotland estimate the quantity and value of thirteen services being supplied by Scottish natural assets. In 2018, Scotland's natural **asset value** stood at **£206 billion**, 17% of the UK total.

The accounts also give a value to the annual benefits to society that Scotland's natural capital assets provide – the **annual flows**. In 2018, the **annual flow** from Scotland's natural capital stood at **£15.6 billion**.

There are two important caveats to this publication.

First, natural capital estimates do not cover all services. Therefore, the monetary accounts should be interpreted as a partial or minimum value of Scottish natural capital.

Second, the asset values are not an absolute "value" of the price we would accept to sell the entire natural world. The natural world supports all life on earth, and its collapse would precipitate our own, implying [infinite value](#).

Some key results from the accounts include:

- Scotland's asset value was £206 billion in 2018, 17% of the UK asset value.
- Regulating and cultural services accounted for 55% of Scotland's total asset value in 2018, while provisioning services accounted for 45%.
- Outdoor recreation accounted for the largest portion of the asset value at 30%, followed by fossil fuels at 25%, and carbon sequestration at 18%.
- **Key long-term trends** - Renewable electricity generation increased by 784% between 2003 and 2020, coinciding with a 66% reduction in the contribution on non-renewable sources.
- **Regulating services** – In 2019, the avoided health costs attributable to air pollutant removal by vegetation were estimated to be £84.4 million.
- **Provisioning services** - Scotland's contribution to the UK asset value is particularly large for fish capture (88%), fossil fuels (86%), timber (61%) and renewable energy (58%)
- **Cultural services** – There were an estimated 510 million visits made to Scotland's natural environment in 2019, a 39% increase since 2011.

Summary of total asset values:

