Making our footprint sustainable

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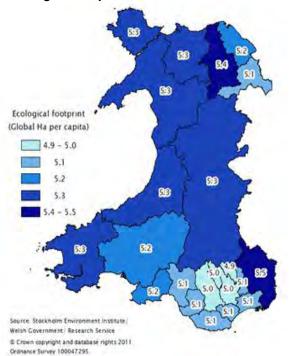
By measuring and understanding our ecological footprint, can Wales become more sustainable?

At 4.4 global hectares (gha) per person Wales' current ecological footprint is unsustainable. The world's ecological footprint works much like a bank statement setting out whether or not we are living within our ecological budget.

Simply put, if Wales and other developed countries continue to consume the same amount of natural resources as they do at present, the global bank of natural resources upon which all human societies depend will go bust. This will lead to significant problems such as water, food and energy shortages.

Although the ecological footprint of Wales is significantly higher than what is globally sustainable it is lower than the footprint of both Scotland and England. Globally Wales' ecological footprint is smaller than the United Arab Emirates (UAE), the US, Switzerland and Ireland but bigger than China, Peru and Indonesia.

Ecological footprint of local authorities in Wales



What is ecological footprinting?

An ecological footprint compares the amount of resources we use to the amount of resources available globally to assess whether what we use is sustainable. It calculates the area of global land needed to provide the raw materials, energy and food necessary to match society's consumption levels and the land needed to absorb the pollution or waste generated by the production of goods.

It is usually measured in global hectares of productive land (gha) per person.

On a micro level it is possible to calculate the ecological footprint of a single product and on a larger scale by looking at all the goods consumed by populations of different sizes we can discover the footprint of a community or a nation.

Traditional methods and indicators tend to focus on environmental impacts directly affecting a single country but do not calculate how the lifestyles lived in one country affect the lives of the people on the rest of the planet.

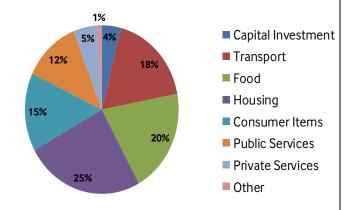
In 2007, Wales' ecological footprint was 4.4 gha per person when in order to be sustainable it would need to be 1.8. The map of Wales illustrates the ecological footprints of the different local authorities in Wales. As the footprints for local authorities in Wales was last calculated in 2003 they are higher than the all Wales 2007 figure.

Addressing the problem

The Stockholm Environment Institute (SEI) calculated that unchecked Wales' footprint in 2020 will be 20 per cent bigger than in 2007. However, it suggested that with the right policies in place for housing, food and transport – the sectors that contribute most to the national footprint - Wales could reduce its footprint by 10 per cent by 2020.

Welsh Government policies will be needed to encourage people to consume far less energy than at present, change their travel patterns making greater use of trains and public transport and significantly reduce the amount of food they waste each year.

Footprint of Wales by theme (2003)



Source: SEI

Using the ecological footprint in policy: Benefits and pitfalls

Recent studies show that the ecological footprint can be used as a tool to explore where reductions in the footprint can be made through practical policies.

Proponents of the method state that such an indicator has the ability to communicate complex data about global resource use in a simple way.

However, others have expressed caution about over-selling the method as a comprehensive indicator of sustainability as it does not take into account the social and economic issues associated with sustainable development.

Future use

A number of countries, regions and cities around the globe are using the footprint as an indicator for policy making. This includes places as diverse as Switzerland, UAE, Peru, Indonesia, the Community of Andean Nations, Milan, Calgary and Cardiff.

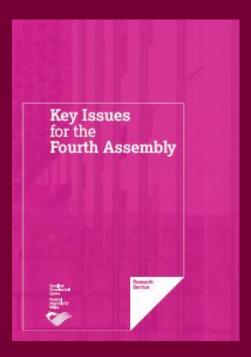
In these places ecological footprinting is being used for a variety of policy purposes including:

- as the basis for environmental and sustainable development policies;
- as the basis for making infrastructure and planning decisions; and
- for communicating environmental issues to citizens.

The previous Welsh Government adopted the footprint as a key indicator of sustainable development in Wales and commissioned the SEI to assess the footprint of Wales and make recommendations on how it could be reduced.

Whether or not Wales continues to use the ecological footprint as a measure of its sustainable resource use and whether policies are developed to address the environmental issues which it highlights will be a matter for the Welsh Government and Assembly to decide.

Article taken from Research Service publication



Key Issues for the **Fourth Assembly**

This document has been specially prepared for Assembly Members by the Research Service. It sets out some of the key issues likely to matter to Members during the Fourth Assembly.

Key Issues for the Fourth Assembly

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