

What is REAP Petite?

REAP Petite is a free online footprint calculator developed by the Stockholm Environment Institute in York (SEI) designed to help you, and others in your community, calculate your environmental impact and make pledges to help reduce it.

Everything that we buy, use and consume has some environmental impact associated with it, both in terms of the area of land needed to produce the goods and services used (known as the ecological footprint), and in terms of the emissions of greenhouse gases through the burning of fossil fuels (known as the carbon footprint).

Unlike most other online footprint calculators, REAP Petite measures both the direct and the indirect supply chain impacts that are associated with the things your household consumes.

- Direct impacts on your footprint include things like turning the heating on to keep warm in winter, or driving a car.
- Indirect impacts are often less obvious, but include things like the resources, land required and supply chain emissions incurred in the production of our food, goods and services.

REAP Petite also differs from other calculators because it allows you to make pledges to reduce your footprint and allows you to compare the effectiveness of different pledges.

How to use REAP Petite

To find out your footprint, you complete an online questionnaire, which should take no more than 20 minutes. You are asked a series of questions about your households' expenditure on home energy, food, travel, shopping and activities. The calculator then converts this spend into carbon and ecological footprints, and compares your households to the national average. If you encourage others in your community to calculate their footprint, you can also compare your footprint to theirs.

You can complete the calculator as many times as you wish, and experiment to see which pledge (e.g. increasing the amount of loft insulation, buying a new energy efficient boiler, reducing your meat consumption) would give you the greatest environmental benefits. Many of the pledges will not only help reduce your impacts on the environment but will also save you money, for example, by reducing your heating bills or the total amount you spend on clothes.

As REAP Petite has been designed as a community calculator, why not hold an event with your friends, neighbours or colleagues where you compete to see who has the lowest footprint, or set yourselves a challenge to see if you are able to reduce your footprint over time? You might find that your neighbour has a lower footprint than you, perhaps they have more loft insulation or take part in a car-sharing scheme, so discussing this with them may help you to save money and help the environment.

How is my household footprint calculated?

To calculate the full environmental impact associated with something you buy we combine economic data that tells us about the supply chains of goods and

environmental data about the environmental impact that different sectors of the economy have. This is a widely used methodology called 'environmentally-extended input-output analysis'. If you are interest in finding out more about this technique please see <http://sei-international.org/publications?pid=1916>

The output of these calculations is an environmental impact per pound spent on a product. This is combined with information on expenditure that you enter into REAP Petite to calculate the total impacts associated with all of the things you buy. Take the example of a car. The manufacturing of the car will have emissions associated all the way along the supply chain, from the purchase of energy to run the factory to the fuel burnt in transporting your car to the showroom where you bought it, and there are also the direct emissions associated with you driving your car.

If you would like more detailed information about the calculations and assumptions behind REAP Petite then please download the more detailed information booklet (<http://reap-petite.com/static/downloads/REAP%20Petite%20Document.pdf>)

How can I work with SEI to further develop REAP Petite?

At SEI we have lots of ideas for future projects which could use REAP Petite, as we've already shown how effective it can be in helping communities reduce their footprints (see <http://sei-international.org/publications?pid=1860>).

We are also using it as a tool for monitoring the progress of households and communities over time in the Living at Derwenthorpe project funded by the Joseph Rowntree Foundation and Joseph Rowntree Housing Trust.

If you would like to work with us on a similar project, can offer funding to help develop the tool further, or would like us to personalise the tool for your needs, then please get in touch via info@reap-petite.com or 01904 322897.