



ZERO WASTE SCOTLAND

COP26

**INTRODUCING  
SCOTLAND'S  
MATERIAL FLOW  
ACCOUNTS**

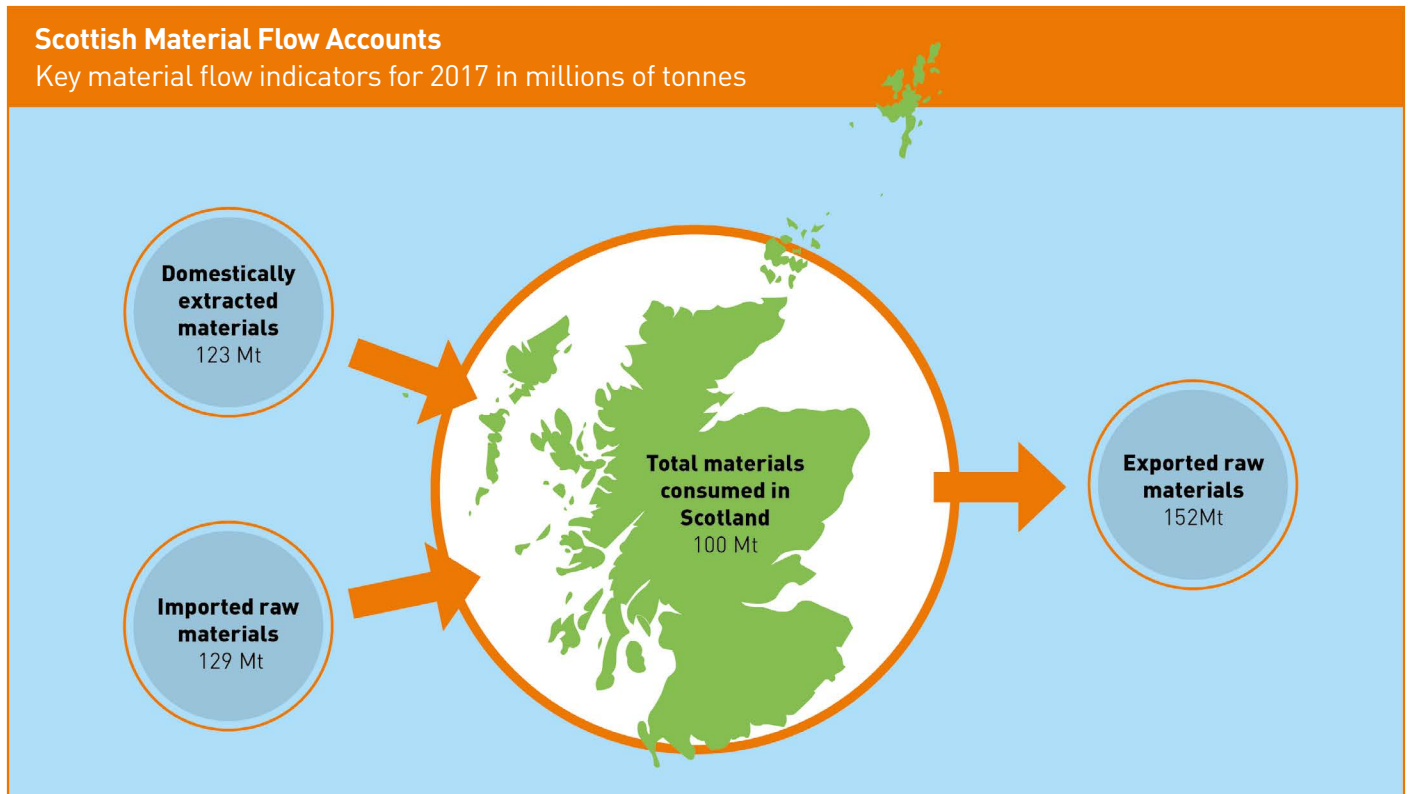


**EUROPE & SCOTLAND**  
European Regional Development Fund  
Investing in a Smart, Sustainable and Inclusive Future



# Scottish Material Flow Accounts

Zero Waste Scotland has produced the first ever Material Flow Accounts for Scotland. It shows how materials move in and out of Scotland, giving us a picture of how much 'stuff' we use in our economy.



**Scotland has a material-intensive economy. Put simply, we use far too much 'stuff' and that is contributing to the climate crisis.** The more materials we extract and use, the more damage we do to the climate and to nature. Scotland's prosperity cannot come at an unsustainable cost.

If Scotland wants to end its role in the climate emergency, it needs to dramatically reduce the amount of materials used in its economy.

## What 'stuff' is in Scotland's economy?

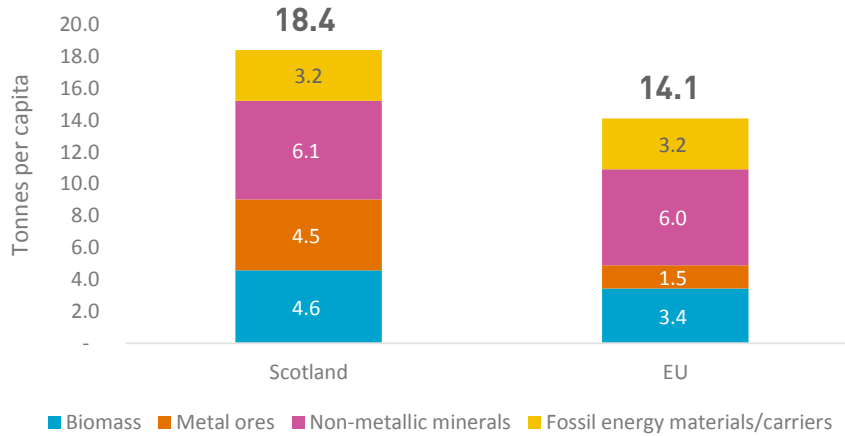
There are three main flows of materials through Scotland's economy:

- Domestically extracted materials: natural resources, like oil and gas, wood, and crops, that we extract or produce right here in Scotland
- Imports: raw materials and products that we import from abroad, from steel to laptops to fruit and veg
- Exports: raw materials and products that we ship overseas, from oil and gas to whisky and clothes

Understanding these flows of materials is key to reducing them effectively.



### Material footprint of Scotland and the EU average in 2017



### Scotland's resource problem

When we talk about the economy, we often do so in terms of GDP – how much economic activity there is per person. For Scotland, that figure is around £30,000 per year. GDP gives us a rough idea of the size of the economy. If GDP is increasing, our economy is said to be growing.

But what if we looked at the amount of stuff used per person to generate that economic activity? Scotland's raw material consumption per capita, also known as a material footprint, was 18.4 tonnes in 2017. That's equivalent to each person in Scotland using their body weight in material every 1.4 days. Many experts agree that a material footprint of around 8 tonnes per capita is sustainable and achievable without compromising well-being.

### The hidden impacts of imports

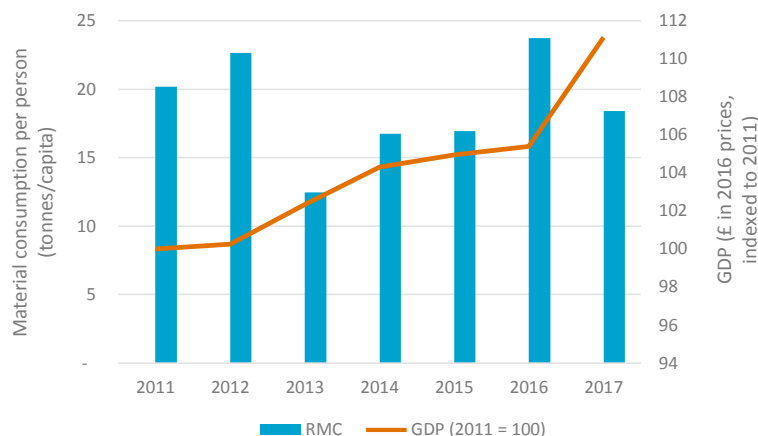
Scotland has set the strongest net-zero targets in the UK. Those targets are an important step and in line with international practice and climate change committee advice, but they only address half of Scotland's total carbon footprint. That's because they only require us to reduce our territorial emissions – the emissions created within our borders. Much of what we consume in Scotland is made overseas or using raw materials extracted abroad. Those emissions are not part of net-zero, but we still need to tackle them if we are to end our part in the climate crisis.

An example of our import impacts comes from the metal we consume. Scotland does not extract any metal domestically. All the metal we need must be mined abroad which means the associated environmental burdens occur in other countries too. The MFA shows us that one tonne of iron requires twenty five tonnes of raw materials. We can't reduce these extraction impacts if we don't first understand what we are consuming.

### We can use less resources without shrinking our economy

Between 2011 and 2017, our economy grew by 11%, whilst our resource use shows signs of declining. This shows we can 'decouple' economic growth from resource growth. But we need to do it much faster. It's not enough to recycle more, without large reductions in the amounts of materials we consume, we can't end Scotland's contribution to the climate crisis.

### Trends in GDP and Raw Material Consumption in Scotland 2011-17





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# Making it happen

## Grow our circular economy

We can't run an economy without resources, so we need to find ways of making better use of them. The key to this is the circular economy. We can reduce our material consumption, minimize our environmental and social impacts without affecting our standard of living.

## Reducing Consumption

Although Scotland is known as climate leader, our material footprint is unsustainably high. We need policies and commitments that go beyond our net-zero targets, to make sure we're reducing emissions caused abroad by Scotland's consumption. The Climate Change Commission, which advises the UK and Scottish governments on policy, states that we "can and should aim to reduce our overseas consumption emissions".

## Understanding material consumption is key to fighting climate change

Our material consumption is the single-greatest driver of climate change, and nearly all other environmental problems. By showing us what we consume, the Scottish Material Flow Accounts is a powerful tool which can guide us towards a more sustainable future.

Read the full report [here](#).

## For more information please contact:

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