

Be the
source

Energy Flow Chart 2010

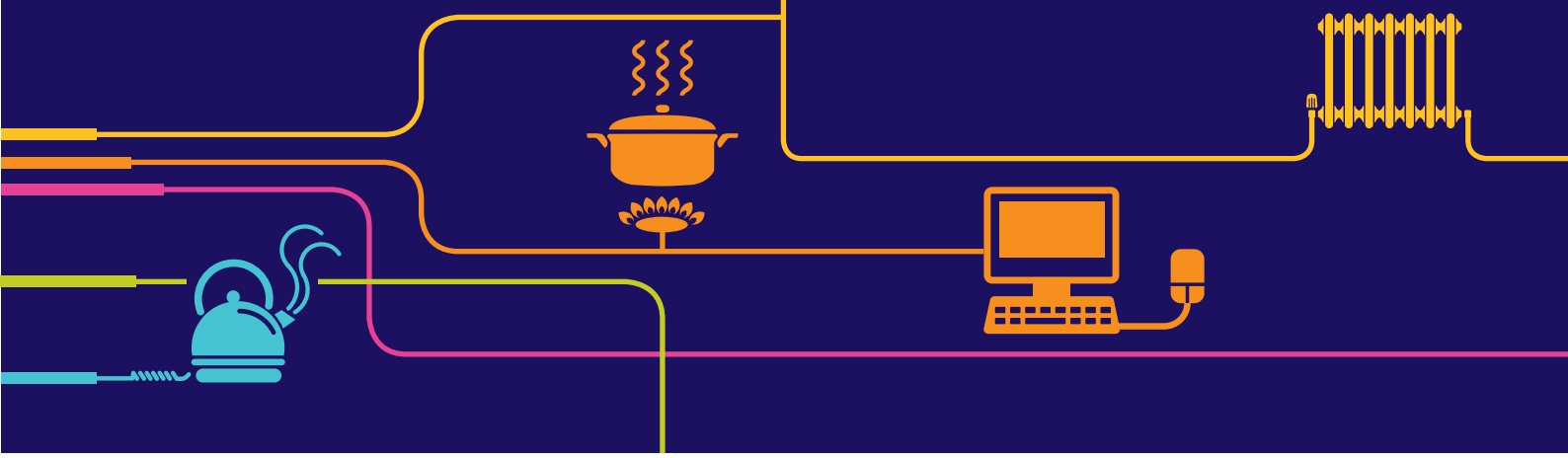
Sankey Diagrams

Sankey diagrams are named after Captain Matthew Henry Phineas Riall Sankey.

Sankey diagrams are named after him, because he was the first to use them in a publication: In an annex to the minutes for the Institution of Mechanical Engineers in 1898 he sketched the energy efficiency of a steam engine in comparison to an ideal steam engine without energy losses.

Sankey diagrams show where material or energy flows with arrows with a width proportional to the flow quantity and where the flows can be combined, split and traced through a series of events or stages.

Learn more about Sankey diagrams at www.sankey-diagrams.com and needtoknow.nas.edu/energy/interactive/energy-system.php

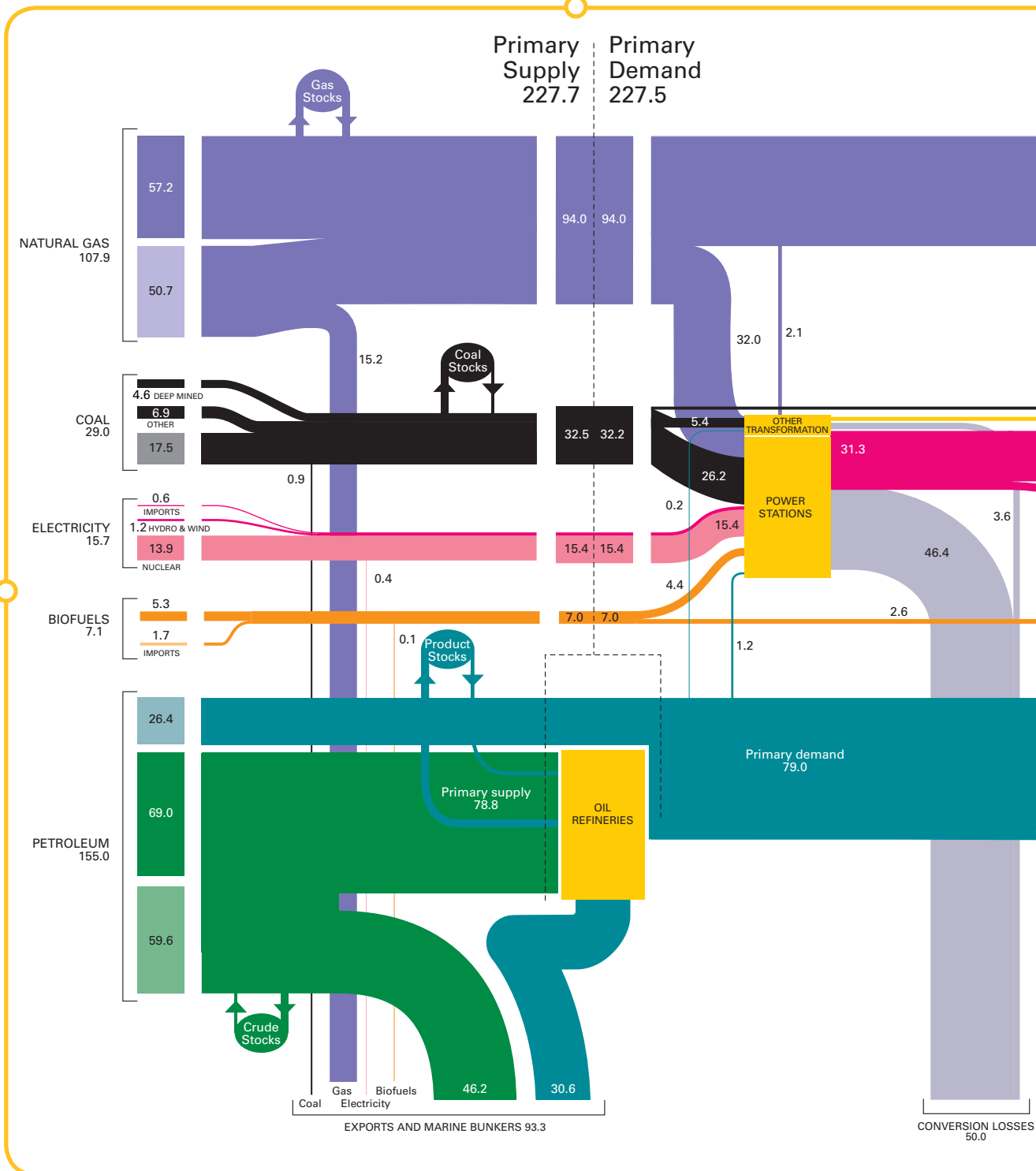


Energy Flow Chart 2010

(million tonnes of oil equivalent)

INDIGENOUS PRODUCTION AND IMPORTS

314.7

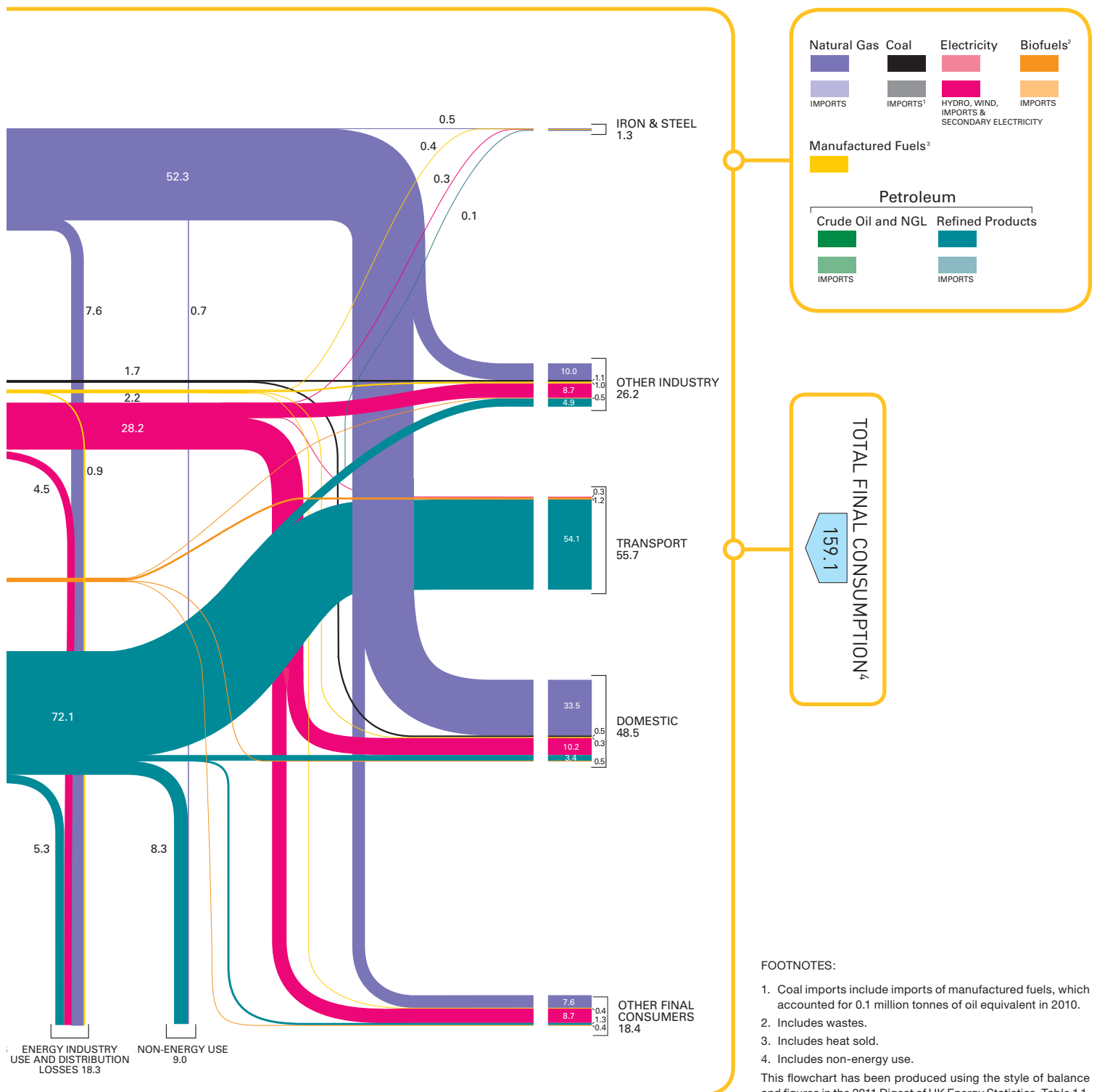


This Sankey diagram updates the last energy flow chart which showed data for 2009. It is based on statistics taken from the Digest of United Kingdom Energy Statistics 2011, Table 1.1 – Energy Balance 2010. The flow chart is a simplification of these figures, illustrating the flow of primary fuels from the point at which they become available from home production or imports (on the left) to their eventual final uses (on the right).

They are shown in their original state and after being converted into different kinds of energy by the secondary fuel producers. The flows are measured in million tonnes of oil equivalent, with the widths of the bands approximately proportional to the size of the flow they represent.

In 2010 indigenous production and imports totalled 314.7 million tonnes

of oil equivalent. Just under 30 per cent of this energy was exported or used in marine bunkers. A further 16 per cent was lost in converting primary energy into electricity and other energy products, with 6 per cent taken up by energy industry own use and through distribution losses. Final consumption of energy, including non-energy use, accounted for 159.1 million tonnes of oil equivalent.



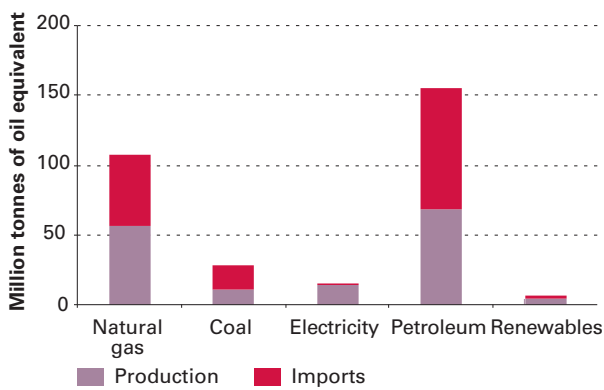
FOOTNOTES:

- Coal imports include imports of manufactured fuels, which accounted for 0.1 million tonnes of oil equivalent in 2010.
- Includes wastes.
- Includes heat sold.
- Includes non-energy use.

This flowchart has been produced using the style of balance and figures in the 2011 Digest of UK Energy Statistics, Table 1.1.

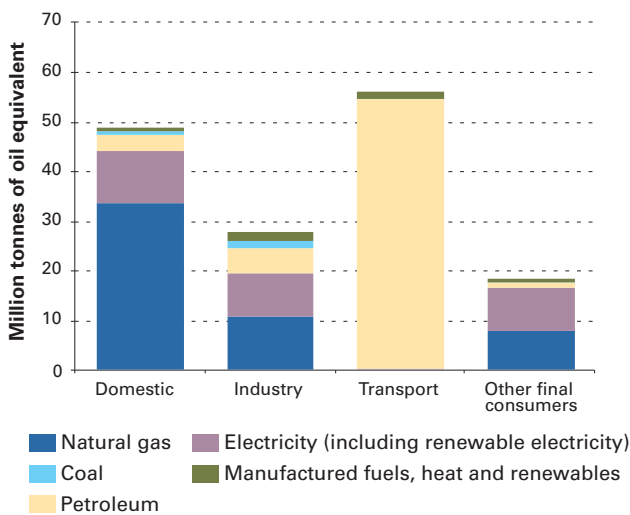
Energy Consumption

Indigenous production and imports in 2010



Final consumption, including non-energy use, at 159.1 million tonnes of oil equivalent in 2010 was 6.8 million tonnes higher than in 2009. The transport sector consumed 35 per cent of all of the energy consumed in the UK while the domestic and industrial sectors accounted for 30.5 per cent and 17.5 per cent respectively.

Final energy consumption in 2010



Education & Skills
 National Grid
 National Grid House
 Warwick Technology Park
 Gallows Hill
 Warwick
 CV34 6DA
www.nationalgrideducation.com

**Securing our energy supply
 for future generations**