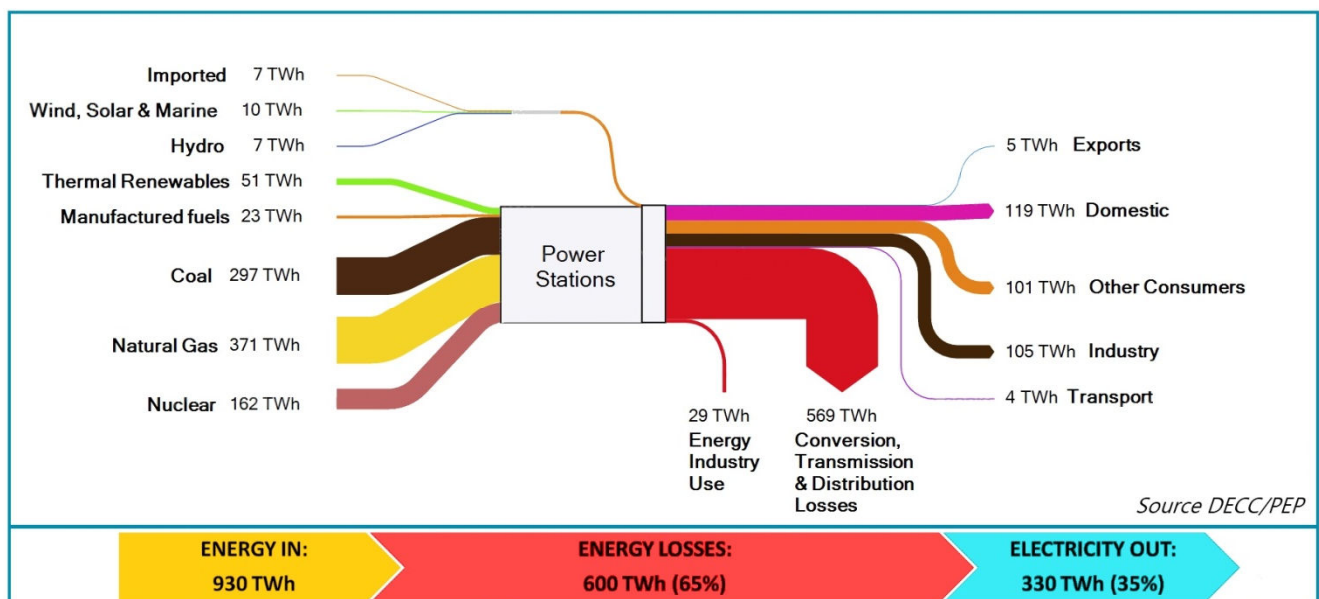


ELECTRICITY GENERATION EFFICIENCY - USING 2010 IN THE UK AS AN EXAMPLE

Through much of Europe generating capacity is ageing and the fossil fuel market on which it largely depends is proving increasingly volatile. Renewable energy sources represent an opportunity to use indigenous, safe and secure forms of energy. By being widely distributed they also give us the chance to stop losing energy through transmission and distribution losses to the extent we are now.

In 2010 around 930 TWh of primary energy (the energy contained in raw fuels, renewable and non-renewable) went into electricity generation in the UK. Due to conversion efficiencies during electricity generation and losses during its transmission, 65% of this energy was lost - primarily as heat. With around 330TWh reaching the end user, this equates to an overall supply efficiency of around 35%, or a loss of two units of energy per one unit consumed. This does not include the considerable amounts of energy used to extract, transport, and store fuels such as coal, gas and uranium prior to use.

The diagram below shows this flow of energy from primary source to end user in the UK electricity system for 2010.



The reality of electricity generated in the UK is that most of it is still created by burning largely imported fossil fuels. These are not only both finite and carbon intensive, but are also wasteful in terms of the proportion of their energy that we are actually able to extract and use.

To find out more about how we are working with businesses to meet this challenge, visit our website at www.peprenewables.com, e-mail us at info@peprenewables.com or call **+44(0)1326 572720**