Here’s our guide to unlocking the evolving hydrogen colour code based on the different types of production technology.

**White** – Hydrogen occurring in its (rare) natural form. It may also refer to hydrogen produced as a by-product of various industrial processes.

**Grey** – Hydrogen produced from natural gas by way of methane reforming. Currently the most common form of hydrogen production.

**Brown** – Hydrogen produced from coal gasification. This method has been around for more than 200 years and is currently the second most common form of hydrogen production.

**Blue** – Hydrogen produced from fossil fuels where CO2 from the production process is captured and either stored or repurposed.

**Green** – Hydrogen produced from water electrolysis using electricity from renewable sources with zero CO2 emissions.

**Yellow** – Hydrogen produced from water electrolysis using electricity from mixed sources (i.e. renewables and fossil fuels). Confusingly, it may also refer to hydrogen produced from water electrolysis using only solar power or nuclear power.

**Turquoise** – Hydrogen produced as a by-product of methane pyrolysis together with solid carbon. Such processes may be considered less carbon intensive where renewable electricity is used to generate the heat necessary for pyrolysis. The technology is not yet commercially deployable at scale.

**Pink** – Hydrogen produced from water electrolysis using nuclear power.

**Red** – Hydrogen produced from biomass gasification. Considered to be less carbon intensive than production methods using fossil fuels when paired with carbon capture and storage technologies.

**Clearing up the colours**

The hydrogen colour spectrum

For more information visit our Hydrogen Hub