

## Bord na Móna: Wind-Hydrogen Scheme Viability

**client:** Bord na Móna, Ireland.

**client brief:** Assess the viability of a wind-hydrogen scheme.

**our solution:** Techno-economic analysis hydrogen generated by electrolysis using renewable electricity from wind.

**description:** Bord na Móna is a leading supplier of products and services based on peat, but with aspirations to increase its energy portfolio including renewable energy and novel energy technologies.

Element Energy were appointed to assess the viability of a scheme for generating hydrogen from wind power using electrolysis. Hydrogen production from renewable electricity offers stability of supply by acting as an energy storage mechanism for the intermittent wind supply, and can be used in a multitude of end-uses including transport, industrial use, combustion, and electricity generation in fuel cells.

A detailed techno-economic study of wind-hydrogen generation was made to identify and size suitable technologies based on an assessment of the potential hydrogen markets.