

Renewable generation powering zero emission hydrogen transport



Energia Group – Positive Energy Solutions



Wind



Solar



Bioenergy



Battery
Storage



Hydrogen

Developing renewable energy strategies for electricity, transport and heat is integral to achieving climate action targets.

Energia Group has been investing in **Renewable Energy Source Electricity (RES-E)** solutions for over twenty years with an existing portfolio of c300MW of operational windfarms. Our five year Positive Energy programme includes a growing number of new renewable projects and assets including onshore and offshore wind, solar, bioenergy, battery storage and **RES-T (Renewable Energy Source Transport)** solutions.

Zero Emission RES-T Solutions

Two **RES-T** technologies offer zero-emission mobility: **Battery Electric Vehicles (BEVs)** and **Fuel Cell Electric Vehicles (FCEVs)**. These solutions will improve air quality, helping to protect public health in line with WHO guidelines.

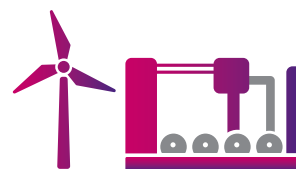
FCEV - Electrolysis - How does it work?

Electrolysis is used to convert water into hydrogen and oxygen. If **renewable energy** such as wind is used in the electrolysis process, then renewable hydrogen fuel is produced. As the only emission from hydrogen fuel cells is water vapour, there are no air pollutants, thereby enabling zero-emission transport. Renewable hydrogen could be a sustainable transport solution for the road, rail, maritime and aerospace sectors.

Northern Ireland Leading the Way

Northern Ireland is already a global leader in the hydrogen economy with Wrightbus manufacturing fuel cell buses. NI has the potential to become a global centre of excellence in the hydrogen economy.

Renewable Hydrogen fuelling transport



Renewable
Hydrogen Production



Energia Group will commission the first electrolyser connected to a wind farm on the island of Ireland to produce renewable hydrogen (the 500kW electrolyser is supplied by Areva and partly funded by the Interreg)



Hydrogen
transportation trailers



Three hydrogen transportation trailers, supplied by Logan, have been partly funded by the Interreg GenComm project along with the electrolyser.



Hydrogen
Fuelling Station



Energia Group will own and operate the first hydrogen fuelling station on the island of Ireland. It will be supplied by Logan and located at a Translink depot in Belfast.



Double
Decker Bus



Energia Group is partnering with Translink to fuel three double decker fuel cell buses, built by Wrightbus and powered by renewable hydrogen. The fuelling station and buses have been partly funded by OLEV (Office for Low Emission Vehicles).

enÉrgia group

Energia Group is a modern customer-centric utility focusing on renewable technology.

We are committed to our customers and trusted by thousands of homes and businesses throughout the island of Ireland to meet their needs in an evolving energy environment.

Our Customer Solutions business supplies electricity and gas to over 750,000 customer sites across the island of Ireland through our two retail brands, Energia and Power NI.

We have invested over €1 billion in the energy market in Ireland through our core segments: Renewables, Flexible Generation and Customer Solutions.

Our growing renewable energy portfolio across the island of Ireland consists of 15 onshore wind farms, which generate over 300MW of renewable electricity, and an additional 900MW through Power Purchase Agreements. In addition, our Renewables business is currently in the advanced stages of constructing a 4.0MW bioenergy plant in Dublin.

For further information please see our website

www.energiagroup.com