

Development of Renewable Energy in Ireland

| Sample Answer

Examine how the development of renewable energy is crucible for Ireland's environment and economy

(2016 Q8b)

Under the renewable energy directive Ireland has set a target of producing 16% of all energy needs from renewable sources by 2020. Between 2005 and 2014 the percentage of energy from renewable energy sources grew from just 3.1% to 8.1% of total consumption.

By 2020 Ireland has set a target of producing 42.5% of its electricity needs from renewable sources e.g. wind. The country has a large and growing wind power capacity at 2,486 MW by the end of 2015 producing just under 25% of the Islands energy needs.

Wind power has been steadily growing in the republic of Ireland by around 300MW per year. By 2016 it had risen up to 3000MW. The grids of the North and South are integrated, and the combined wind power capacity is 3,916MW.

During the year 2015, wind power provided just under a quarter of the country's electricity demand at just over 23% of the national demand. January 11th, 2016 saw an all time Irish record broken while generating 2,815MW of wind energy at maximum capacity.

This wind was generated within a fifteen minute period and also supplied enough energy for 1.8 million houses out of the 2 million in the republic.

By contrast, Ireland had the second lowest Solar PV power in the EU after Latvia at just 1MW.

This solar installed capacity is amongst the lowest in Europe, it was just over 2MW in 2015 in the same year the UK had a solar PV of 8,915MW. Predictions for future growth installed capacity vary widely from 500MW by 2021 to 3,700MW by 2030 with Government. This may hopefully be the case with the new Green Deal.

Coillte, a commercial state company operating in forestry land based business, renewable energy falls under the remit of the Department of Agriculture. Wood is used by households that rely on solid fuels for home heating. It is used in open fires places, stoves and biomass boilers.

In 2014 the department produced a draft bioenergy strategy. In compiling the strategy, the department worked closely with the department of Agriculture in terms of potential sustainable wood biomass. Solid biomass was used mostly in the heating and cooling sector providing 222ktoe of energy.