HORIZON NUCLEAR POWER | FUTURES Inspiring a generation

SECONDARY PRESENTATION – NOTES

The below outlines presenter notes to be utilised when sharing the developed Futures secondary presentation. Please note they are provided as a guide with the opportunity to expand upon if needed.

[SLIDE 2] *Q. Can anyone share an example where climate change has had an impact in the UK/Wales?*

[SLIDE 5] *Q. What do you think is happening to the world as a result of climate change?*

[SLIDE 8] *Q. How do you think you can make a difference as an individual - day-to-day?*
Note (optional activity): After each section, take a few moments to gather ideas from the class as to how they can put a plan in action for that area of 'lifestyle change'.

[SLIDE 9] Talk through each energy type in turn. Ask for examples of where your pupils have seen each in action, and expand on how each one works - without going into too much detail.
Tidal Energy – Tidal movement is used to drive turbines, so we can get our energy from the sea...
Wind Energy – Wind turbines turn wind into electricity, so we can get our energy from the air around us...
Solar Energy – Solar panels generate electricity from the sun, so we can get our energy from the sky...
Nuclear Energy – Nuclear fission makes electricity by splitting atoms, so we can get our energy from ultra-tiny particles in special power plants...

[SLIDE 10] *Q. Can you name any advantages of these forms of energy?*
Nuclear power:

- This is the largest source of low carbon that is non-hydro (hydropower comes from using the power of falling flowing water).
- Nuclear power helps to avoid 2.5 billion tonnes of CO2 emissions annually worldwide
- In 2010, 12.96% of global electricity was generated through nuclear power.

Wind power:

- In 2012, wind power generated half of the UK's renewable electricity
- The 4 largest offshore wind farms in the world are in the UK: The London Array, Gwynt y Môr off the North Wales coast, the Greater Gabbard wind farm off the coast of Suffolk and West of Duddon Sands off the coast of Cumbria.
- By 2020, offshore wind farms will supply between 18-20% of UK's electricity every year.

Solar power:

- In 2012, solar power generated nearly 3% of the UK's renewable electricity

Hydropower:

- One of the cheapest forms of electricity
- It is the most widely deployed renewable strategy

Marine / tidal power:

- Highly predictable way to source energy
- A form of hydropower which converts energy of tides into power

[SLIDE 13] *Q. But which source do YOU think is the best… and why?*
Note (optional activity): *Talk through how renewable energy is growing - "Back In 2012, the world relied on renewable sources for around 13.2% of its total primary energy supply. In 2013 we used it for 22% of global*

electricity generation, and in 2015 it was predicted that the figure will be 26% in 2020."
http://www.iea.org/aboutus/faqs/renewableenergy/