

# WELSH BACCALAUREATE

## Key Stage 4

### National/Foundation

## Global Citizenship Challenge

### Tidal Lagoon – Marine Energy Wales



**Available for assessment from**



# Tidal Energy

## PURPOSE

The purpose of the Global Citizenship Challenge is to develop learners' skills, whilst providing opportunities to understand and respond appropriately to global issues. During the Global Citizenship Challenge learners will explicitly develop skills of **Critical Thinking and Problem Solving** and **Creativity and Innovation** and apply them in an appropriate manner.

## BRIEF

There are many problems in the world that we should all help to resolve even if it happens hundreds or thousands of miles away, or where you live in Wales. How do you become a global citizen? You need to make decisions about the issues that matter and the type of world you want to live in. Being a global citizen gives you the power to bring about positive change to make this world a better place. Reducing our dependence on fossil fuel gas and oil reserves is a 21<sup>st</sup> century global aim.

Marine power developers in Wales are striving to make a change in the UK's energy mix by developing infrastructure to harness natural power from the sea. There are different designs which can make use of waves, tidal currents or from the tidal range around the Welsh coast.

**Tidal Lagoon Swansea Bay** is one such developer which is looking to construct the world's first tidal lagoon to be built in Swansea Bay. The lagoon will use the large tidal range of the Severn Estuary to produce clean, renewable energy for 155,000 homes. Both the UK government and the European Union have made commitments to a reduction in carbon emissions and an increase in the use of renewable energy. Tidal Lagoon aims to construct a further 5 lagoons around the UK, which could contribute to 10% of the UK's energy needs.



The Challenge will involve you being able to inform and educate people about the importance of **marine energy**. You will need to understand the local and global effects of **marine energy** using a variety of information to investigate different views of people and identify your own ideas in a personal standpoint. You then have to raise awareness about the need to increase green energy in particular the potential contribution of marine energy to your chosen audience. e.g. primary school pupils, in a creative and innovative way. You should design your raising awareness so that it will appeal to your target audience and make use of effective communication by providing a clear message which is memorable, original and relevant.

By completing this Challenge you will show that you can reason, make judgements and make decisions in order to create an informed personal standpoint on marine energy. The raising awareness allows you to show how creative and innovative you can be in communicating your ideas and presenting your message to other people.

## RESOURCES

<p><b>Tidal Lagoon Swansea Bay</b>  <a href="http://www.tidallagoonpower.com/projects/swansea-bay">http://www.tidallagoonpower.com/projects/swansea-bay</a>          WBQ pack   Geography Resource   Sculpture Booklet   Design and Access Booklet  <a href="mailto:education@tidallagoonpower.com">education@tidallagoonpower.com</a>          01792 274006</p>	<p><b>Marine Energy Wales</b>  <a href="http://www.marineenergywales.co.uk/">http://www.marineenergywales.co.uk/</a>    <a href="mailto:education@marineenergywales.co.uk">education@marineenergywales.co.uk</a>          01646 405694</p>
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