

Different perspectives on the Morecambe Bay development

- There are several different **stakeholder** views on the proposed development of tidal barrages across Morecambe Bay and Duddon Estuary, including:
 - Northern Tidal Power Gateways
 - Local people in Barrow in Furness and Morecambe
 - Wildlife Trust
 - RSPB
 - Energy consultants
- Each of these groups may be for or against the development

Northern Tidal Power Gateways

- The **Northern Tidal Power Gateways (NTPG)** supports the development, as they were the organisation to propose it
- They argue that the development will provide:
 - reliable energy supply, enough to supply 2% of the UK's electricity needs
 - improve the infrastructure vastly reduce journey times from Lancashire to South Cumbria

"The North West had played a world-leading role in the nuclear sector and we now have the opportunity to launch a new era of leading the world on tidal power, while at the same time making a major improvement to the infrastructure of Cumbria and North Lancashire."

Chief Executive Northern Tidal Power Gateways

- The NTPG also stated that they will help preserve the wildlife habitats from the potential threats of sea level rise and coastal flooding
- The environmental considerations will be an important part of the development

"We recognise the vital importance and value of the ecology and wildlife in Morecambe Bay and the Duddon Estuary and will do our utmost to protect it when we deliver the tidal range power scheme."

Communications Director, Northern Tidal Power Gateways

Local people in Barrow-in-Furness and Morecambe

- The views of local people vary
- Barrow-in-Furness and Millom are both areas with high levels of **deprivation**, poor health and a decreasing population
- Some people believe that the development will lead to improvements and so are in favour of the barrage

"We would have a decent route out of here for starters. The road is shocking and it's not safe. To go to Barrow at the moment takes 40 minutes and if I went across the water, it would take 10."

Mayor of Millom

"I think it would be an amazing thing for Morecambe and Barrow and it would open up the North West."

Heysham North Ward councillor

- Other local people **oppose** the development
- They believe that people from Barrow and Millom are less likely to use the services there if they can easily travel to Lancaster and Morecambe instead

"If people can go across a bridge and get to Morecambe and Lancaster much quicker, I think that could kill Barrow."

Barrow Council Labour member

"Innumerable fish, eels, salmon and shrimp could be harmed in the turbines and the impact of the construction would be massive, creating greenhouse gas emissions from concrete, quarrying and transport."

Local former science teacher

Wildlife Trust

- The Wildlife Trust oppose the development at Morecambe Bay unless there is significant new habitat creation the barrage will negatively impact the wildlife in the area
- They highlight the international importance of the sites for migrating birds

"Morecambe Bay is an internationally important site for its wintering wildfowl and waders; birds arrive from all over the northern hemisphere to spend the winter here. Anything that

affects the tidal regime of the bay affects the birds using it and these effects are not local; they are international."

Conservation Manager, Cumbria Wildlife Trust

RSPB

- The RSPB have several concerns about the barrage development due to the potential impact on local and migrating birds
- They highlight the importance of the range of habitats in Morecambe Bay and the Duddon Estuary for wildlife but also in combating climate change
- They also recognise the importance of renewable energy

"[Morecambe Bay] provides a safe haven for over a quarter of a million birds. It is hard to think of a place more deserving of protection. "

"... an exciting project with lots of potential in helping tackle the climate crisis. However, it is vital that decision makers do not overlook the damage it may do to wildlife and the intrinsic value of natural habitats such as salt marsh that are also effective in combating the effects of climate change."

Spokeswoman for RSPB England

Energy consultants

- Energy consultants suggest that the Morecambe Bay development has the potential to generate significant amounts of renewable energy
- The supply of energy is predictable, unlike wind and solar
- The energy generated could provide 2% of the UK's energy needs

"The big advantage of tidal power is its predictability."

Hydro-environmental Consultant, Cardiff University

SUMMARY OF THE ARGUMENTS

Background

- Energy consumption overall in the UK has fallen but electricity consumption continues to increase
- The UK is currently a **net importer of energy**, which means it is **energy insecure**
- Energy bills in the UK are increasing due to higher gas prices
- The UK has significant tidal energy potential; estimates suggest it could provide 11% of the country's electricity

For the Morecambe Bay and Duddon Estuary development

- The development of the tidal barrage will:
 - Create over **12,000 jobs** in the region
 - Provide energy for **2 million homes**
 - **Reduce travel time** from the M6 at Lancaster to the A595 in Cumbria from 2 hours to 30 minutes
 - **Save over 750,000 litres** of fuel each year
 - The travel distance between Lancashire and south Cumbria would be reduced by 50%
 - **Reduce traffic congestion** on the M6
- Tidal energy is **renewable** which means that it will not run out
- Once construction is complete there will be **no greenhouse gas emissions**
- The barrage has a predicted **lifespan of 120 years** (a wind turbine has a lifespan of 20 years)
- Fibre optic and power lines could be incorporated into the barrage, **improving infrastructure** in south Cumbria
- Tidal energy is **predictable**; it works well at all times of the year, in the dark and all weather conditions, unlike solar and wind
- It will help **reduce regional inequalities** improving accessibility and infrastructure in the region

- The barrage will help protect against future sea level rise and coastal flooding

Against the Morecambe Bay and Duddon Estuary development

- The tidal barrage will affect natural tidal flow, which could affect the movement of sediment in and out of Morecambe Bay
 - Intertidal mudflats could be affected, which will affect the food supply for local and migrating birds
- There are concerns that marine wildlife may be injured by the turbines
- Construction of the barrage will impact the surrounding habitats
- Shorter travel times from Barrow-in-Furness and Millom to Lancaster could impact businesses in Barrow and Millom reducing the numbers of customers as people go to the larger city

Summary

The issue

- The UK faces increasing energy security issues
- The demand for electricity is predicted to increase over the coming years
- The UK is committed to achieving **net zero carbon emissions** by 2050
- Wind and solar energy play an increasing role in electricity generation but:
 - Rely on specific weather conditions
 - The panels and turbines have short life spans

The energy trilemma

- The '**energy trilemma**' is a framework used to guide energy policy
- It aims to achieve three objectives in any new energy development:
 - **Environmental sustainability** – that the development does not cause long-term damage to the environment
 - **Energy security** – that the population's energy needs are met with an uninterrupted supply
 - **Affordability** – energy production costs are such that the whole population can afford the energy and that they are not in energy poverty

