

# Green Energy for the Wellbeing of Future Generations

Y Pwyllgor Deisebau | 9 Hydref 2018  
Petitions Committee | 9 October 2018

## Research Briefing:

Petition number: P-05-837

Petition title: Green Energy for the Wellbeing of Future Generations in Wales

Text of petition: We call on the National Assembly for Wales to urge the Welsh Government to invest in green renewable energy sources thus reducing the need for fossil fuels and nuclear energy in Wales. More specifically to:

- Support emerging low carbon technologies that could put Wales at the forefront of renewable energies and help to slow – down climate change; and
- Invest in energy sources that do not leave a legacy of radioactive waste, spoil heaps and damage to health and the environment.

We applaud the establishment of the "Wellbeing of Future Generations Act (Wales) 2015", as it offers a huge opportunity to make long-lasting, positive changes for current and future generations particularly around clean energy.

We agree with the Energy Statement by Lesley Griffiths 6/12/2016 when she said the Assembly has 3 priorities. First, we will reduce the amount of energy we use in Wales. Second, we will reduce our reliance on energy generated from fossil fuels. Third, we will actively manage the transition to a low-carbon economy. However a reduction in nuclear should be included as it's not renewable or a low-carbon option.

## Background

In December 2017, the Welsh Government published its report into '[Energy Generation in Wales 2016](#)'. The report provides an overview of the energy generation capacity in Wales. It says that of the estimated 38.8 Terawatt hours (TWh) of electricity that was generated in Wales in 2016, 6.9 TWh was from renewable sources. The remaining 31.9 TWh of generation was from fossil fuels. 'Renewable sources' covers a range of technologies: anaerobic digestion, biomass, heat pumps, hydropower, landfill gas, offshore and onshore wind, sewage gas, solar photovoltaics

and solar thermal. The term ‘low carbon technologies’ is also used in the report to cover renewable technologies plus nuclear.

Since the last operational reactor at Wylfa stopped generating in 2015, Wales currently has no nuclear generation. Planning for a new nuclear power station at Wylfa is in advanced stages. Nuclear power is non-devolved, and as such the Welsh Government does not have direct responsibility for consenting or developing nuclear energy projects. The section below on ‘Welsh Government action’ outlines Welsh Government support for the nuclear sector in Wales.

## Welsh Government action

The Welsh Government has published a number of policies, statements and consultations relating to its ambition to increase renewable generation and decarbonise the energy sector. These are summarised below.

In 2012, the Welsh Government published [Energy Wales: A low carbon transition, and its associated Delivery Plan was published in 2014](#). The policy and Delivery Plan set out the Welsh Government’s ambition for energy in Wales.

In [Taking Wales Forward \(2016–2021\)](#) the Welsh Government sets out its commitment to:

Support the development of more renewable energy projects, including tidal lagoons and community energy schemes.

The Welsh Government’s [Economic Action Plan](#) contains several references to decarbonisation. It briefly outlines the Welsh Government’s expectation of business in support of decarbonisation and energy targets. It says:

... decarbonisation and reducing carbon footprints has a prominent role within the Economic Contract and our Calls to Action.

In December 2016, the then Cabinet Secretary for Environment and Rural Affairs made a [statement in Plenary on energy](#). In it she set out three energy priorities:

- To reduce the amount of energy Wales uses;
- To reduce Wales’ reliance on energy generated from fossil fuels; and
- To actively manage the transition to a low carbon economy.

She said:

To deliver secure and affordable low carbon energy, we need a mix of different technologies and sizes, from community scale to major projects. In the medium term, this means transitioning to low carbon generation, which includes nuclear. We will maximise the role of renewable generation.

In September 2017, the Cabinet Secretary for Energy, Planning and Rural Affairs made a further [statement on energy](#). In it, she set out the Welsh Government’s ambition for Wales to generate 70% of its energy from renewable sources by 2030, for 1GW of renewable energy capacity to

be locally owned by 2030, and for all new renewable energy projects to have an element of local ownership by 2020.

The Welsh Government's [Local Energy Service](#) provides financial and technical support to help social enterprises and SMEs across Wales to develop their own renewable energy schemes. It consists of a toolkit that provides guidance in developing a project from initial concept through to construction and operation, support and advice, loans and grants for project development, and a partnership portal for peer to peer support.

The Welsh Government is currently [consulting on A low carbon pathway for Wales](#). The consultation is seeking views on how Wales should reduce its emissions to 2030, in line with its duty under the *Environment (Wales) Act 2016*. The consultation is heavily focused on supporting and promoting renewable energy projects. On the issue of nuclear power it says:

A new nuclear power station on Anglesey would be an enormous capital investment and we are working with partners to capture the maximum possible benefit for Wales from its construction and ongoing operation. Small Modular Reactors (SMRs) may provide potential benefit building on the existing technical capacity at existing Welsh nuclear sites. These are very much dependent on UK Government funding decisions.

The Welsh Government is also consulting on [Petroleum Extraction Policy in Wales](#). The consultation proposes a future policy for petroleum extraction:

We do not believe that the evidence set out above, alongside the analysis, presents a compelling case that the benefits of petroleum extraction outweigh our commitment to sustainably manage our natural resources. Therefore our proposed future policy for petroleum (oil or gas) extraction is: **we will not undertake any new petroleum licensing in Wales, or support applications for hydraulic fracturing petroleum licence consents.**

The Research Service has recently published a [blog on the consultation](#).

In her letter to the Committee, the Cabinet Secretary for Energy, Planning and Rural Affairs refers to radioactive waste. She says the Welsh Government has adopted a policy of geological disposal for the long-term, safe and secure management of higher activity radioactive waste – and that a geological disposal facility (GDF) would only be deliverable in Wales on a voluntary basis. This means a local community would have to express a willingness to enter into discussions about potentially hosting a GDF. The Research Service published a [blog on the Welsh Government's GDF consultation](#).

## Welsh Government support for nuclear power

In [Energy Wales: A low carbon transition](#) the Welsh Government sets out its view on the role of nuclear power in Wales' energy mix:

In the short term, gas, nuclear and bio-energy will provide the energy to compensate for the intermittency in supply from renewable resources. In the medium to long term, the development of

energy storage technologies and a next-generation 'smart grid' will provide further scope for managing the intermittency and balancing supply and demand more effectively [...]

The development of the Horizon nuclear new build (Wylfa B) is a vital component of not just the Anglesey Energy Island programme but of our wider energy future in providing a constant energy source to complement the intermittency of renewable sources. There are undoubtedly risks associated with nuclear power but the risks posed by climate change are now so serious that we cannot dispense with a key proven low-carbon technology. The Welsh Government supports the development of a new nuclear power station on Anglesey. This development also offers significant long-term economic benefits to Anglesey and North Wales in general with the potential to contribute £2.34 billion to the economy over the period to 2025. Horizon estimates 5,000 construction jobs at peak and around 800 direct jobs in operation over its lifespan.

The Welsh Government has been vocal in its support for nuclear power. On 5 June 2018 the Cabinet Secretary for Economy and Transport issued a [written statement on Wylfa Newydd](#). He outlined that the UK Government had announced it was entering into negotiations with Hitachi on the proposed Wylfa Newydd project. The Cabinet Secretary welcomed the announcement:

The £15 billion Wylfa Newydd new build project in Wales over the next 10 years. Indeed, it is the largest private sector investment in Wales in a generation which comes with real economic transformation potential.

On 28 June 2018, the Cabinet Secretary issued a [statement relating to the UK Government's visit to Trawsfynydd and the launch of the nuclear sector deal](#). He said:

Welsh Government has led the way over many years in supporting the nuclear sector. We have invested considerably in the sector across many areas [...]

We stand ready and willing to work with the UK Government of this hugely exciting and important nuclear agenda.

The statement lists a number of ways that the Welsh Government has supported the nuclear sector in Wales: through supporting the development of supply chains, forming the Wales Nuclear Forum, supporting skills development, funding research, development and innovation.

## National Assembly for Wales action

During the Fourth Assembly, the Environment and Sustainability Committee undertook an inquiry into a Smarter Energy Future for Wales. The recommendations in the report included that Wales should:

- Aim to meet all of its energy needs from renewable sources and, in the context of the need to reduce carbon emissions by at least 80% by 2050, set a target date for achieving this; and

- Ensure that national carbon emissions and demand reduction targets become local duties. They should be delivered through the framework set by the Well-being of Future Generations Act.

There have been Plenary questions to the Cabinet Secretary For Energy, Planning and Rural Affairs, Cabinet Secretary for Economy and Infrastructure, and the First Minister on a wide range of areas relating to the petition, including renewable energy, nuclear developments and decarbonisation. The Welsh Government's position is outlined in the previous section. Additionally, in 2017 there was a Plenary debate on [decarbonising the public sector in Wales](#). In June 2018 there was a [Plenary debate on the Swansea Bay Tidal Lagoon](#). During the debate there was cross-party disappointment at the UK Government's decision not to fund the project.

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