

FAO Climate Change Committee - Ref investigation Into Renewables Figures

Dear Llyr Gruffydd, Janet Finch-Saunders, Delyth Jewell, Julie Morgan, Carolyn Thomas, Joyce Watson,

Following on from my letter sent to you on 06th September 2025:-

The homes supplied figures are used regularly as a selling point in articles, in the public domain, relating to these renewable energy developments. Regardless of Planning Policy Wales Edition 12, These articles have been, and will continue to, mislead the public into believing the developments can actually supply the homes stated.

Just some of the many misleading articles below:-

Steffan Messenger

Environment correspondent, BBC Wales News

22 October 2024

A new wind farm south of Newtown in Powys, capable of generating enough electricity for around 69,000 homes has been given the go-ahead by the Welsh government.

Developers EDF Renewables UK called the decision a "major step forward" for combatting climate change in Wales.

The Garn Fach scheme had been held up over objections from government officials and the environmental regulator over its potential impact on peatland.

While acknowledging that these carbon-rich soils were "irreplaceable", energy secretary Rebecca Evans ruled that there were "wholly exceptional circumstances" why the project could proceed.

07 Nov 2024

Nation Cymru

Martin Shipton

Changes to the Welsh Government's planning policy have resulted in permission being granted for a hugely controversial wind farm that was opposed by some of its own civil servants.

Rebecca Evans, the Cabinet Secretary for Economy, Energy and Planning, agreed with a planning inspector that Bute Energy should be allowed to build Twyn Hywel Energy Park at Senghenydd, near the border between Caerphilly and Rhondda Cynon Taf county boroughs.

The wind farm will consist of 14 turbines, generating 92.4MW of energy – enough to power the equivalent of 81,000 homes every year. It's the first of 16 onshore wind projects across Wales proposed by the company.



Manmoel windfarm approved by minister Rebecca Evans

22ND OCTOBER 2024 ENVIRONMENT LOCAL GOVERNMENT PLANNING AND DEVELOPMENT



By Elgan Hearn
Local Democracy Reporter



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Ms Evans said: "I agree with the inspector's appraisal of the main considerations, the conclusions of the inspector's report and the reasoning behind them, and I accept the recommendations.

"Therefore, I hereby grant planning permission subject to conditions."

Cenin Renewables has said that the proposed development could generate around 61,320 megawatt hours (MWh) of electricity per year.

This is equivalent to the annual electricity needs of 19,250 average UK homes or approximately 59 per cent of households in Blaenau Gwent.

ENVIRONMENT LOCAL GOVERNMENT PLANNING AND DEVELOPMENT

These developments are misrepresented as strategic importance.

Ofgem Median Home Consumption Figures Below Annual 14, 200 kWh with around 80% being gas (energy) 11,500 kWh – so this needs to be shown in the developers figures and reduces there estimates to around 20% of Homes they say they can supply.

Typical Domestic Consumption

Caps on energy prices, like the Energy Price Cap or the Energy Price Guarantee, limit the cost of energy per kWh. Sometimes the typical values below are used to explain what bills might look like for homes with low, medium and high energy use.

Typical values

The energy price cap is calculated using the values below.

| Energy Use | Example – home type and number of residents | Typical annual gas use (kWh) | Typical annual electricity use (kWh) | Typical annual electricity use (multi-rate, such as Economy 7) (kWh) |
|------------|---|------------------------------|--------------------------------------|--|
| Low | Flat or 1-bedroom house; 1 to 2 people | 7,500 | 1,800 | 2,200 |
| Medium | 2-3 bedroom house; 2 to 3 people | 11,500 | 2,700 | 3,900 |
| High | 4+ bedroom home; 4 to 5 people | 17,000 | 4,100 | 6,700 |

Google:- Ofgem median home energy figures

Answer:- Ofgem's median (or typical) figures for UK households, updated in October 2023, are 2,700 kWh of electricity and 11,500 kWh of gas per year for a medium-sized home (2-3 people), reflecting lower usage trends. These figures, known as Typical Domestic Consumption Values (TDCVs), are used to calculate the energy price cap.

Google:- Do Beis and Densz use Ofgem annual homes supplies figures in UK?

Answer:- Yes, both the former Department for Business, Energy & Industrial Strategy (BEIS) and its successor, the Department for Energy Security & Net Zero (DESNZ), use annual homes supplies figures and other data collected and published by Ofgem to compile UK energy statistics and manage energy scheme.

So you now have the Supporting Evidence of homes supplied figures.

Load Factors

The developers are totally inflating the Onshore Load factors, with some above 40% ? (this is not 'Real World performance' based information), this is more corrupt information - which intern inflates the number of homes supplied figures implying more output. This is public deception.

The real onshore load factors:-

Renewables UK Onshore Load Factor 26.34%

Load factors

The load factor is the actual output of a turbine benchmarked against its theoretical minimum output in a year.

The load factor is calculated by RenewableUK as a rolling average of the past five years using data (on an Unchanged Configuration Basis) from the [Digest of UK Energy Statistics](#) published by the Department for Energy Security and Net Zero, using stats 2019-2023 (released in July 2024):

- onshore wind: 26.34%
- offshore wind: 40.58%
- DESNZ "all wind" (onshore + offshore): 30.82%

Google:- Neso Onshore Load Factor

Answer:- NESO (National Energy System Operator) uses **onshore wind** load factors, typically around **25-28%**, as key inputs for grid planning, though they can vary by site and year, with recent UK figures showing ~**25.3%** while some analyses suggest slightly higher generic assumptions (around 30-31%) for future projections, though actual fleet performance often hovers lower due to curtailment issues and weather variations,

Google:- Ofgem onshore load factor

Answer:- Ofgem and the National Energy System Operator (NESO) use specific **onshore wind load factors** in their calculations for the Renewables Obligation (RO) and network charging (TNUoS). The most recent figures vary by region and purpose, but generally fall within the **24.8% to 27.9% range**.

For Renewables Obligation (RO) Calculations

The Department for Energy Security and Net Zero (DESNZ), using data published by Ofgem, calculates load factors to determine the level of the Renewables Obligation. The figures for the 2026 to 2027 obligation period, based on a capacity-weighted average of generation data from April 2017 to March 2025, are:

England: 26.0% Wales: 27.3% Scotland: 25.2% Northern Ireland: 24.8%

So you now have supporting evidence for **Actual** load factors. None of the realistic load factors are even close to the misleading 40% + figures some developers have been claiming in the public arena. Also a Wind farm rated 55MW is not a constant 55MW and could only provide that output if the wind was blowing consistently 24 hours a day, 365 days a year. The public need to see the real energy output, not inflated figures.

Capacity Decrease

Please see (attached) Gordon Hughes 2 study reports into UK & Danish wind farms, showing clear evidence of Capacity Decrease and increasing costs of wind farms . These are in depth fact based detailed reports that reveal, in depth, the drop of output in a short period of time. The maximum these wind farms will make is up to 15 years before the maintenance costs will exceed the gains. With some developers claiming 35 years, again deceiving the public.

Lack of Continuity among Government officials In the planning process and decision making

The emails response below implies the public can question the homes supplied?

Email received from PEDW 03/03/2025:-

Bore da.

Thank you for your E-Mail below.

As you are aware, the deadline to submit a representation in relation to the Application was 10 February 2025. As the deadline has now passed PEDW cannot accept any further representations. I am therefore writing to inform you that unfortunately your E-Mail below has been disregarded.

As you are also aware, the appointed Inspector has already requested further information from the Applicant. Any further information submitted by the Applicant will be the subject of a further period of consultation, restricted solely to the further information.

Ultimately, any decision as to whether to request further information is a matter for the Inspector.

Diolch, Rhys

Swyddog Gwaith Achos Seilwaith / Infrastructure Case Work Officer

Penderfyniadau Cynllunio ac Amgylchedd Cymru (PCAC) / Planning and Environment Decisions Wales (PEDW)

Llywodraeth Cymru / Welsh Government

Adeilad y Goron / Crown Building

Parc Cathays / Cathays Park

Caerdydd / Cardiff

CF10 3NQ

✉ PEDW.Seilwaith@llyw.cymru / PEDW.Infrastructure@gov.wales (Gwaith Achos DAC / DNS Case Work)

☎ Ymholiadau Cyffredinol / General Enquiries – 0300 123 1590



Email Received 02/10/2025:-

Thank you for your reply and for your letters to the Cabinet Secretary for Economy, Energy and Planning, and the Cabinet Secretary for Climate Change and Rural Affairs. Please consider this as a response to all three.

We appreciate your detailed correspondence and recognise several of the issues you've raised. These concerns are reflected in our approach, which is why our targets are designed to incorporate a broad mix of renewable energy sources.

Regarding the planning aspect of your query: It is the responsibility of the parties involved in a case to present their own evidence or challenge that of others during the relevant representations period.

Each DNS application is assessed on its individual merits. When Inspectors make their decisions or recommendations to Welsh Ministers, they consider all submitted representations and undertake a balancing exercise—giving appropriate weight to each matter—to reach a reasoned conclusion.

We encourage you to engage in the planning process, where your concerns about specific projects can be considered by the most appropriate decision-makers.

Yours sincerely

The Energy Policy Team

In a PEDW letter dated 17/02/2025 Cenin Solar Farm the inspector, H Davies, refers to a request for Calculations for Homes Supplied and Carbon consumption from the developer:-

Road might be coordinated with the adjacent proposals.

Generating capacity and carbon reduction

The application provides estimates of the generating capacity of the scheme and the equivalent number of homes that could be powered. A calculation of the expected annual and lifetime electricity output could also be provided together with an explanation of how these figures are derived from the capacity figure. To better understand the carbon impact of the scheme a carbon balance assessment would be useful, which accounts for the carbon consumption of the project (including manufacture of panels and infrastructure, construction and decommissioning work, and any replacement and repair necessary over the lifetime of the project) as well as the carbon reduction effects based on the anticipated electricity generated.

However this development was approved without this information being presented by the developer?

In a Rebecca Evans letter dated 30/10/2025 it references the developers using 'Homes Supplied' in their planning application evidence and the use of **average** Load Factors (which the developers are not using and instead inflating):-

Thank you for your letter about renewable energy generation figures used in support of applications for Developments of National Significance and in developer public communications.

Welsh Government planning policy does not mandate a specific methodology for use when developers estimate "homes supplied" in their planning application evidence or when they publish information about their development proposals. There are, however, standard formulae for estimating homes supplied which are commonly used by industry when presenting evidence.

Typically, homes supplied calculations calculate estimated MWh (Megawatt hours) generated per year by the development (which includes a 'load factor' to account for the specific technology and any operating limitations of that technology), divided by average household electricity consumption in kWh per year to give the estimated homes supplied. Average household electricity consumption can vary from year to year both nationally and on a country/regional basis.

The Department for Energy Security and Net Zero (DESNZ) provides data which developers can use in their calculations. DESNZ publishes annual [Subnational Electricity Consumption Statistics](#), which include figures for domestic energy consumption, and the [Digest of UK Energy Statistics \(DUKES\)](#) which includes average load factors for different energy technologies. Also, RenewableUK, the trade association representing the renewable energy industry, publishes wind energy statistics on its [UK Wind Energy Database website](#). The RenewableUK website includes information on calculating homes powered (homes supplied) and load factors, indicating that these are modelled using UK Government data.

And the requirement for the information to be accurate? (Which of course it is not) :-

It is incumbent on a developer to ensure that they present sufficient and accurate evidence to support any application for Development of National Significance (DNS) which is submitted to Planning Environment Decisions Wales. Inaccuracies or omissions in evidence may delay or undermine the DNS process or affect the final outcome. The planning process must be satisfied that submitted information is both acceptable and materially relevant to inform the assessment of a proposal. Guidance on DNS procedures and community engagement are set out on the Welsh Government's [Developments of national significance \(DNS\): guidance](#) page.

In a response Email 25/11/2025 the reply changes and states there is no requirement for Homes Supplied?:-

Thank you for your response. You are correct that a 'homes supplied' calculation is not a formal requirement within the DNS process. Instead, applications are assessed based on planning policy, environmental impact, and local impact reports.

Further details can be found in the Welsh Government's guidance: [Developments of National Significance \(DNS\): procedural guidance](#).

Yours sincerely,

The Energy Policy Team

Again in a Rebecca Evans reply 08/12/2025:-

climate change. Whilst planning decisions do not allocate or set targets for homes supplied by renewable energy development, the policy context is supportive in principle to renewable energy development.

There is no continuity in this process. Different people are saying different things? Why would the inspector ask for information relating to the homes supplied, if it is not a requirement?

I have also shown in my previous correspondence the blatant ignorance of PEDW and indeed NRW in relation to the peat at the chosen development sites and shown them clear 'Robust evidence' that the developers are submitting fabricated peat depth report maps. With Some, for example, Cenin Solar Farm at Cil Lonydd recently Approved By PEDW despite being in full knowledge of the developers deception, on-site mines and without the development even having a point of connection into the grid?

The figures the developers are using are bogus.
This current process is not working. It's Corrupt and incomplete with inconsistencies.

I would like to know in detail how you can possibly tell you are hitting energy targets without any accurate output figures from the developers?

You now have all the information you require to order a full and complete investigation into Wind and Solar Farms. The 'no requirement' to look at these figures just supports the corruption.

If you are sure that everything is legit, then important details such as, the Ofgem Median Home figures need to be part of the process. If not a mandatory part of the process, this needs to be altered with immediate effect. Anything else falls short and is guesswork.

I understand the Climate Change committee scrutinise Government processes and procedures. The points I have raised above need to be included in the process. Currently PEDW have free reign to avoid important details and have even been overridden by Rebecca Evans, making their part of the process pointless?

Changes need to be Urgently made and debates need to be held in Senedd in order to address these issues. Avoidance is no longer an option and only serving to show corruption by doing so.

I would hope that you could help push for a debate and changes on these topics?

I know the public are increasingly frustrated with the unjustified endless assault on the Welsh Countryside, which has only increased energy bills. There is no justification - the figures are bogus!

I will look forward to the committees response.

Thank you

sincerely,

Matt Davies January 06th 2026