

REPORT FOR INFORMATION

REPORT TO:	All Members
REPORT NO:	COET/06/25
DATE:	9 January 2025
LEAD MEMBER:	Councillor David A Bithell, Lead Member for Housing and Climate Change
CONTACT OFFICER:	Jayne Rodgers, Climate Change and Carbon Reduction Manager
SUBJECT:	Changing Electricity Supply Source
WARD:	All

1. PURPOSE OF THE REPORT

To update Members on changes to the sourcing of our electricity supplied by EDF Energy for 2025/26 and detail the different sources and costs associated with each.

2. INFORMATION

- 2.1 Following the annual invite to validate our requirements from EDF, we were required to choose our energy source for the next financial year 2025/2026, by 22 November 2024. We were able to select the source of our electricity from a variety of options: Zero Carbon, UK Renewable, Clean Renewable and Blended Zero Carbon.
- 2.2 Historically, we have opted for the 100% UK renewable tariff and we receive a Renewable Energy Guarantees of Origin (REGO) certificate confirming this. The Welsh Government Commercial Procurement team have advised that last year most Local Authorities in Wales chose the UK Renewables option also.
- 2.3 We have previously reported to Welsh Government and responded to multiple FOI's confirming that the electricity supplied to our buildings is sourced from 100% UK renewable technologies.

2.4 The following options were available to us:-

Fuel Description	Energy Source	£/MWh Cost	p/kWh Cost
Sourced from zero carbon nuclear generation	Zero Carbon for Business	£3.00/MWh	0.30p/kWh
Sourced from a range of renewable technologies across the UK only	UK Renewable for Business	£8.00/MWh	0.80p/kWh
Specifically sourced from wind, solar and hydro assets	Clean Renewable	£8.50/MWh	0.85p/kWh
A mix of 50% UK Renewable and 50% Zero Carbon for Business	Blended Zero Carbon	£5.50/MWh	0.55p/kWh

2.5 The following table shows these options with projected costings based on our 2023/24 consumption:-

Customer	Consumption kWh 2023/24	Zero Carbon 0.30 p/kWh	UK Renewable 0.80 p/kWh	Clean Renewable 0.85 p/kWh	Blended Zero Carbon 0.55 p/kWh
WCBC	19,367,066.80	£58,101.20	£154,936.53	£164,620.07	£106,518.87
WCBC Unmetered	3,913,180.20	£11,739.54	£31,305.44	£33,262.03	£21,522.49

2.6 Our current tariff, the UK 100% Renewable Tariff, is the second most expensive option.

2.7 If we switched to the Blended Zero Carbon Tariff at **0.55 p/kWh** (50% Renewable Energy/50% Zero Carbon) we could save around £58k per annum, but if we switched to a 100% Zero Carbon Tariff at **0.30 p/kWh**, we could save around £116k per annum.

2.8 The differences between carbon free and renewable sources revolve around the wider impacts of generating the energy:

Carbon Free: When energy sources are labelled carbon-free, the energy is produced by a resource that generates no carbon emissions, such as nuclear or large hydroelectric. Although these resources help reduce greenhouse gas emissions, they may adversely affect the environment or the economy. For example, the waste produced by nuclear power plants needs to be safely stored long term, which can be cost-intensive. Additionally, the creation of dams to build new, large hydroelectric resources has lasting environmental impacts on the surrounding ecosystems.

Renewable Energy: Renewable energy is classified as a naturally replenishing resource that produces zero emissions. Renewable energy sources include solar, wind, geothermal, biomass and biowaste, and eligible hydroelectric. The energy projects may create additional environmental benefits on top of their emissions reductions, such as pollinator-friendly solar programs, or economic job benefits, through the construction of new projects

2.9 Our current source comes with the Renewable Energy Guarantees of Origin (REGO) certification to validate the electricity we use as being from renewable

sources. Welsh Government's Commercial Procurement team confirmed that we would still receive REGO certification with the Zero Carbon energy source, which would state nuclear carbon zero as the energy source rather than UK renewables.

- 2.10 In terms of reporting our annual carbon emissions to Welsh Government there is the option to include information on whether we purchase renewable electricity supplied through the UK grid. However, this is not directly considered in the overall emissions total and forms a separate renewables section of the annual reporting spreadsheet.
- 2.11 Therefore, from a carbon reduction perspective, all the above tariffs are Zero Carbon, but with some differentiated wider impacts.
- 2.12 Given the above, we have changed our energy source to 100% Zero Carbon Tariff at **0.30 p/kWh**, with a saving of around £116k per annum.