ENERGY SECTION

Spring-Summer Newsletter 2024

Ireland news update

New record set for wind power generation in 2023

The fossil fuel industry lost out on almost €1 billion last year – with an additional €300 million saved on carbon credits – as wind farms provided 35 per cent of the island's electricity and set a record for power they produced. The analysis found that without wind energy Ireland would have had to spend an additional €918 million on gas, most of which would have been imported, for power generation in 2023 and an extra €358million on carbon credits to burn that gas. An additional €279 million (£240 million) was saved in Northern Ireland. **For more information read:**

https://windenergyireland.com/latest-news/7651-new-record-set-for-wind-power-generation-in-2023#:~:text=Wind's%20best%20year%20on%20record,gigawatt%2Dhours%20(GWh).

ESB Networks announces milestone of one Giga Watt of energy storage now available on Ireland's electricity network

ESB Networks has announced that it has 1,000 MW (one Giga Watt) of electricity storage connected to Ireland's network. This figure includes 731.5 MW of battery storage projects and 292 MW from Turlough Hill pumped storage power station – which is celebrating its 50th anniversary this year. Energy storage facilities are connected across the grid, to both the Transmission and Distribution systems, managed by EirGrid and ESB Networks. One Giga Watt of energy storage is enough to power the equivalent of approximately 450,000 homes for one hour, typically during peaks in demand or when frequency support is needed at times of low levels of renewable generation. For context, peak demand on Ireland's electricity system is approximately 5.5 GW. **For more information read:**

https://esb.ie/media-centre-news/press-releases/article/2024/04/25/esb-networks-announces-another-milestone-as-one-giga-watt-of-energy-storage-now-available-on-ireland-s-electricity-network

Gas Networks Ireland Gas Demand Report: 11% increase in overall gas demand in Q1 2024

Overall gas demand for the first quarter of 2024 increased by 11 per cent compared to the last quarter of 2023 and fell by 2 per cent year-on-year when compared to the first quarter of 2023, according to Gas Networks Ireland's latest Gas Demand Report. Demand for gas in electricity generation remained at 39 per cent in Q1 2024 as it did in Q4 2023, while wind energy's contribution to electricity generation saw a slight increase from 42 per cent to 43 per cent over the same period. **For more information listen to:**

https://www.gasnetworks.ie/corporate/news/active-news-articles/gas-demand-mar24/

Ireland news update

Biomethane would replace 10% of gas supply under new plans
The long-awaited draft national biomethane strategy, released in January, sets an objective to scale up indigenously produced biomethane to 5.7 terawatt hours annually by 2030; equivalent to a tenth of Ireland's current overall natural gas use. The biomethane strategy proposes replacing 10 per cent of Irish natural gas supplies by biomethane generated from agricultural feedstocks and food waste through a network of up to 250 anaerobic digesters by 2030. The European Commission through REPowerEU has allocated €37 billion of targeted investments to support development of new capacity and infrastructure in Europe "to accommodate biomethane into the gas grid and create energy communities". **For more information read:**

https://www.irishtimes.com/environment/2024/02/01/biomethane-would-replace-10-of-gas-supply-under-new-plans/

Ireland's largest onshore wind farm to power 140,000 homes unveiled
The ESB and Bord na Móna on Friday marked the completion of Ireland's largest wind farm in North Mayo which has installed capacity of 192 megawatts, meeting the electricity needs of some 140,000 homes. Oweninny wind farm was delivered in two phases with a total investment of €320 million. In 2019, 29 turbines were erected while the second phase, consisting of 31 turbines, has now entered commercial operation. Located between Crossmolina and Bangor Erris, the development adjoins Ireland's first commercial wind farm, Bord na Móna's Bellacorrick, which was built in 1992 and remains in operation. The site includes a €3m visitor interpretative centre focusing on the science, engineering and technology behind renewable energy, while raising awareness of climate change and considering the landscape in which the wind farm is based. **For more information read:**

https://www.irishtimes.com/business/2024/03/08/unveiled-irelands-largest-onshore-wind-farm-to-power-140000-homes/#:~:text=Oweninny%20wind%20farm%20in%20North,and%20cost%20%E2%82%AC320%20million.

Irish Tar & Bitumen first in sector to use a combination of natural and renewable gas to significantly reduce carbon emissions by 30% through energy conversion
Irish Tar & Bitumen is the first company in its industry to switch from powering parts of its operations with heavy fuel oil (HFO) to using a combination of both natural and renewable gas – significantly reducing their carbon emissions by almost one third overnight. **For more information read:**

https://www.gasnetworks.ie/corporate/news/active-news-articles/irish-tar/

International news update

The world's electric car fleet continues to grow strongly, with 2024 sales set to reach 17 million

More than one in five cars sold worldwide this year is expected to be electric, with surging demand projected over the next decade set to remake the global auto industry and significantly reduce oil consumption for road transport, according to the new edition of the IEA's annual Global EV Outlook. It finds that global electric car sales are set to remain robust in 2024, reaching around 17 million by the end of the year. In the first quarter, sales grew by about 25% compared with the same period in 2023 – similar to the growth rate seen in the same period a year earlier, but from a larger base. The number of electric cars sold globally in the first three months of this year is roughly equivalent to the number sold in all of 2020. **For more information read:** https://www.iea.org/news/the-worlds-electric-car-fleet-continues-to-grow-strongly-with-2024-sales-set-to-reach-17-million

More than 30% of world's electricity now comes from renewables, report reveals

More than 30 per cent of the world's electricity is now generated using renewables and the European Union is well ahead of this global average, a new report has found. Energy think tank Ember found that major growth in wind and solar helped push global electricity production past this milestone in 2023. The report covers 80 countries which represent 92 per cent of the world's energy demand and historic data from 215 other countries. Its authors say that this rapid growth has brought the world to a crucial turning point where fossil fuel generation starts to decline. Solar was the world's main supplier of electricity last year, providing twice as much new energy than coal. It maintained its status as the fastest-growing source of energy for the 19th year in a row. **For more information read:** **https://www.euronews.com/green/2024/05/08/a-major-turning-point-more-than-30-of-worlds-energy-now-comes-from-renewables-report-revea**

EU Trucks and buses must slash CO2 emissions by 90% by 2040

EU trucks will need to reduce carbon dioxide emissions by 90% from current levels by 2040, as transport ministers agreed today (May 13) to gradually increase the share of zero-emission vehicles in the heavy-duty fleet across the bloc. The law further sets that from 2030, new trucks weighing over 7.5 tonnes need to reduce emissions by 45%, going up to 65% from 2035 and finally reaching 90% emissions reduction from 2040. New urban buses will need to reach a fully zero-emissions target by 2035 with an intermediate target of 90% within six years. **For more information read:** **https://www.euronews.com/green/2024/05/13/trucks-and-buses-to-slash-co2-emissions-by-90-by-2040**

Policy news update

Energy Efficiency Directive 2024

This Directive establishes a common framework of measures to promote energy efficiency within the European Union (EU), contributing to the implementation of the EU's security of energy supply. It lays down rules designed to implement energy efficiency as a priority across all sectors, remove barriers in the energy market and overcome market failures that impede efficiency in the supply, transmission, storage and use of energy. It also provides for the establishment of indicative national energy efficiency contributions for 2030.

The Energy Efficiency Directive (2012/27/EU) was transposed into Irish legislation via SI 426 of 2014 and has been updated via several amendments. These regulations "set out a range of obligations on public bodies relating to the efficient use of energy so that the public sector will demonstrate an exemplar role, including in the areas of energy audits, energy efficient public procurement and purchase or lease of energy efficient buildings". The regulations require Public Bodies:

- To report energy-related data to SEAI in accordance with procedures and methodologies specified by the SEAI.
- To publish an annual statement in accordance with a format specified by SEAI.
- To only purchase or lease buildings with BERs of A3 or higher.
- To only purchase equipment and vehicles that are either listed on SEAI's Triple E register or satisfy energy efficiency criteria published by SEAI.
- That have individual buildings >500m2 or have an annual energy spend >€35,000 to undertake energy audits on 4-year cycles in accordance with minimum criteria specified by SEAI.

Updated Energy Efficiency Directive

There are three specific measures effecting public bodies as follows:

- To achieve an absolute energy consumption reduction each year of 1.9% (baseline public sector energy consumption 2021)

- To renovate 3% of their total owned floor area each year to at least nearly zero-energy buildings (NZEB) or zero emission buildings (ZEB). There is an option for an alternative approach where at least the equivalent of the projected energy savings of this measure are achieved in the buildings owned by the public sector by 31/12/2030. The alternative approach involves the introduction of a renovation passport approach, whereby retrofit measures that may be easier for public bodies to implement but that don't lead to ZEB or NZEB, can be counted towards the target as part of a longer pathway to ultimately reach ZEB or NZEB.

- To promote and ensure where technically feasible the use of "energy performance contracting" for the renovation or large buildings that are owned by public bodies.

Policy news update

Energy Performance of buildings Directive 2024

A major revision of the Energy Performance of Buildings Directive (EPBD) was undertaken during 2023 and the EU institutions have now agreed on a provisional text for the recast EPBD (the updated text).

Zero-emission buildings

(Defined as buildings that have no on-site carbon emissions from fossil fuels and low energy demand and operational greenhouse gas (GHG) emissions)

The overarching ambition is that:

- all new publicly-owned buildings are zero-emission by 2028
- all new buildings are zero-emission by 2030
- existing buildings become zero-emission by 2050

"Where public bodies aim to occupy a new building that they do not own, they shall aim for that building to be a zero-emission building".

Minimum energy performance standards

Non-residential - The new minimum energy performance standards set ambitious targets for renovation, with the bottom 16% of stock to be renovated by 2030 and the bottom 26% by 2033. Member States are also required to establish specific timelines for the renovation of the remaining non-residential stock by 2040 and 2050, in line with the pathway to achieve overall zero-emission status.

Residential - Member States must adopt their own national trajectories to reduce the average primary use of residential buildings by 16% by 2030 and by 20-22% by 2035 (in each case, when compared to 2020). At least 55% of this reduction must be achieved through renovating the worst-performing 43% of buildings.

Solar Energy

The timelines for the requirement to fit solar energy installations on all buildings, as follows:

Building type	Date
All new public and non-residential buildings with useful floor area larger than 250m^2	31 December 2026
All existing public buildings with useful floor area larger than: 2000m^2 750m^2 250m^2	 31 December 2027 31 December 2028 31 December 2030
Existing non-residential buildings with useful floor area larger than 500m2 where the building undergoes a major renovation or an action that requires an administrative permit for building renovations, works on the roof or the installation of a technical building system	31 December 2027
All new residential buildings	31 December 2029

EV charging

There are also requirements for non-residential buildings regarding electric vehicle charging and cabling infrastructure.

Next Steps

After the European Council has formally adopted the proposal, the recast directive will be signed and published. Members States, including Ireland, will then be required to transpose the directive into national law by 2025.