Bord na Móna Plc

Delivering Climate Solutions

Bord na Móna

Sustainability Update 2023



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Introduction from Chief Executive



We are Ireland's leading Climate Solutions company today and are playing our part in helping Ireland to transition to a climate neutral economy by 2050.

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During the last year Bord na Móna is continuing the journey that started with our Brown to Green strategy in 2018. Today, our strategy is to become Ireland's leading Climate Solutions company and play our part in helping Ireland to transition to a climate neutral economy by 2050.

This Sustainability Update provides an overview of our efforts to address the most pressing environmental, social, and governance (ESG) challenges of our time. It outlines the initiatives, actions and milestones we have undertaken to transition our business and deliver sustainable solutions for a better tomorrow and clearly demonstrates that the company is now 'More than Móna'.

Concrete examples of Bord na Móna's Environmental, Social and Governance initiatives include

- The company's Carbon Dioxide (CO₂) and Greenhouse Gas (GHG) emissions have fallen by over 82% since 2018 and are on target to reduce further next year.
- This year saw a milestone as Bord na Móna surpassed, for the first time, the generation of over 1 TeraWatt hour (1 million MegaWatt hours) of renewable electricity.
- During this financial year, rehabilitation of over 15,600
 acres was completed across the Peatland Climate Action
 Scheme and on 3rd party lands, similar levels of peatland
 rehabilitation is also expected to be delivered in the
 coming year.
- In addition to local sponsorship, Bord na Móna has directly contributed over €4.5 million, over the past 6 years, into Community Benefit funds across the country.

- Bord na Móna's Accelerate Green initiative has supported 25 companies to grow and become leaders in the provision of sustainable goods and services.
- The company's efforts to develop our diversity, equality, and inclusion (DEI) initiatives have been recognised with a silver 'Investors in Diversity' award from the Irish Centre for Diversity.
- The governance structure for the organisation also achieved a landmark breakthrough this year reaching a 50:50 composition between males and females on the Board of Directors.

The Senior Leadership Team and the Board appreciate that over the coming years mandatory ESG reporting and disclosures will broaden and expand, and the company is investing in resources and infrastructure to meet these challenges.

I would like to express my thanks to our dedicated employees, Board members, partners, and stakeholders who have played a critical role in our sustainability journey. Their unwavering support, encouragement, and collective effort helps us forge a future where sustainable practices are not just a choice but a collective responsibility.

Tom Donnellan

Chief Executive

John MacNamara Corporate Sustainability Lead



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Bord na Móna welcomes more accountability in sustainability reporting and is taking steps to improve how we document our goals, actions and progress towards a sustainable future for all.

Bord na Móna's journey from 'Brown to Green' has been well-documented, as we move away from our traditional fossil fuels business towards being a climate solutions company, helping Ireland reach net zero emissions by 2050.

Through this transition, Bord na Móna remains a company driven to make a return from our commercial activities. However, these returns must be sustainable and accountable over the long term, so that we continue to consider the broader implications and impact of our actions.

At the same time, stakeholders, shareholders and policy makers ask that companies like ours now disclose environmental data and cross-cutting social factors, in addition to traditional metrics of economic performance.

Over the past few years, Bord na Móna published non-financial information as part of our Annual Report aligned with the requirements of the S.I. No. 360/2017 - European Union (Disclosure of Non-Financial and Diversity Information by certain large undertakings and groups) Regulations 2017, also known as the NFRD.

A central pillar of the EU Green Deal is the enactment of the proposed Corporate Sustainability Report Directive (CSRD), which builds upon the existing NFRD. It aims to strengthen and greatly expand the reporting obligations of companies.

Bord na Móna recognises and welcomes the ambition of the CSRD. This Sustainability Update can be seen in part as preparation for future compliance with this legislation once it has been transposed into Irish law. In the interim, as well as preparing this Sustainability Update, Bord na Móna are engaging with the Taskforce on Climate-related Financial Disclosures (TCFD) and aligning with the Science Based Targets initiatives (SBTi).

However, this Sustainability Update and future sustainability reports are more than just compliance exercises. They are designed to provide stakeholders with a systematic and harmonised overview of the goals, actions and progress the company is making towards what traditionally were considered non-financial metrics.

The choice of these metrics is not random. Bord na Móna carried out a double Materiality Assessment with staff and stakeholders to identify the impact of the business on society and environment, and the impact of society and environment on the business – the so-called 'outside-in' and 'inside-out' approach.

The output, from this engagement process across
Environmental sustainability, Social impact, and corporate
Governance (ESG) were distilled into metrics which are
examined in this Sustainability Update. In addition, taxonomy
information and gender pay gap analysis are available on the
company's website.

In this Sustainability Update, we also hear from senior leaders from across the business, who together are delivering on the company's commercial strategy and ESG metrics in Bord na Móna's day-to-day operations.



Metric 1 Greenhouse Gas (GHG) Emissions

The move away from fossil fuels in our energy business and the end of peat harvesting has contributed to a dramatic reduction in Bord na Móna's greenhouse gas emissions.

Bord na Móna's greenhouse gas emissions are of course a key ESG concern for the company. Bord na Móna aligns the calculation of its Scope 1, Scope 2 and material Scope 3 emissions with the Greenhouse Gas Protocol.

Scope 1 are direct emissions from sources owned or controlled by the company, Scope 2 relates to emissions caused indirectly by sources not owned or controlled by Bord na Móna, and emissions from Scope 3 include the 'use of products sold' category. The emissions data in this Sustainability Update, have been independently verified under ISO14064-3.

Since 2018, there has been a dramatic reduction in Bord na Móna's greenhouse gas emissions, as clearly shown in Figure 1. This correlates with the reorientation of Bord na Móna away from fossil fuels and peat harvesting, to the climate solutions company we are proud to be today, with increased focus on decarbonisation, increasing renewables in our energy business and peatlands rehabilitation.

Figure 1 shows that in just 6 years, Bord na Móna's greenhouse gas emissions measured as tonnes of carbon dioxide equivalent (tonnes CO_{2eq}) dropped from over 3.4 million tonnes during FY18, to under 0.6 million tonnes in FY23.

Bord na Móna expects a further reduction in GHG emissions during FY24 and is developing transition plans for the business to achieve net zero emissions in line or likely ahead of Government policy and targets.

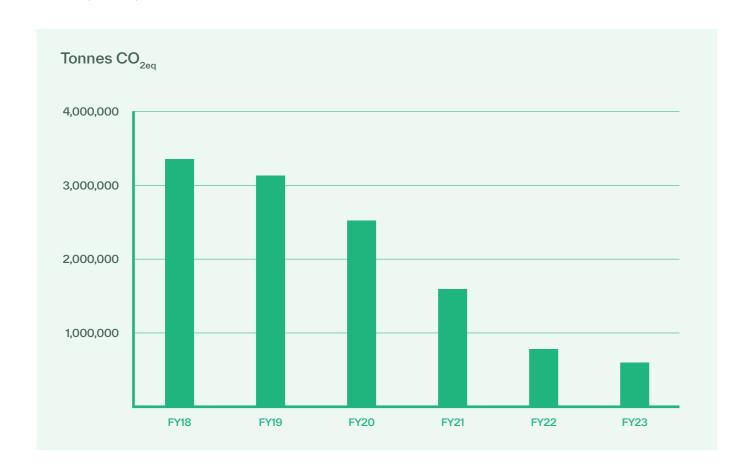


Figure 1 GHG Protocol - Scope 1, 2 and material Scope 3 Emissions by Financial Year (FY)

Metric 2 Energy Efficiency

Bord na Móna is well on the way to achieving, and even exceeding, our target for energy efficiency across the business by 2030.

As a commercial semi-state company, Bord na Móna is expected to play a leading role in delivering climate action.

These actions not only include decarbonisation and reducing greenhouse gas emissions, but also improving energy efficiency across the business.

Under the Government's 2021 Climate Action Plan, commercial semi-state companies are expected to improve their energy efficiency by 50% by 2030. This builds on the previous target and is based on an organisation's existing energy efficiency baseline from 2009.

Bord na Móna continues to both invest in more energy efficient processes and assess its operations to minimise energy consumption. Improvements in building management systems (smart heating and light controls), installation of rooftop solar PV and dynamic route management (Bord na Móna Recycling) have all contributed to a net increase in energy efficiency. As Figure 2 clearly shows, there has been a 60% improvement in Bord na Móna's Energy Performance Indicator (EnPI), which is a measure of energy intensity and used as an indicator of the effectiveness of energy saving efforts.

Figure 2 also shows that at present, Bord na Móna is performing better than the calculated 'Glide Path' (the run-rate necessary to achieve its 2030 target) and the company plans to continue investments in energy efficiency measures across the organisation.

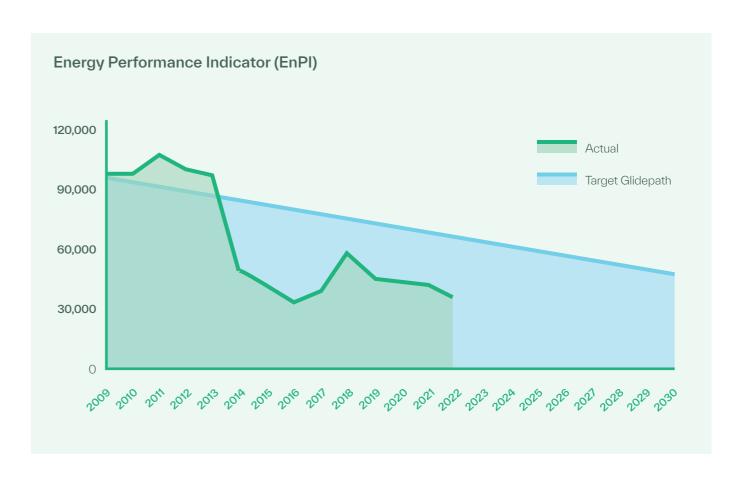


Figure 2 SEAI data showing Bord na Móna's Energy Performance Indicator (EnPI) from 2009 - 2022 (most recent year for available data)

Metric 3 Clean Energy Generation

Rapid growth in Bord na Móna's renewable assets means we are now one of Ireland's leading producers of clean energy.

Bord na Móna's journey in clean energy started from very humble beginnings. Over 30 years ago, the company developed Ireland's first commercial wind farm at Bellacorrick in Co Mayo, with an installed capacity of just 6.5MW.

Fast forward to 2023 and Bord na Móna's renewable assets are continuing to grow rapidly. Clean energy is being produced on a large scale from wind, solar, biomass and biogas. Land previously used for peat harvesting has been transformed into wind and solar farms with the capacity to power thousands of homes and businesses around Ireland

with green electricity, while at the same time ensuring optimum outcomes for peatlands rehabilitation and biodiversity are also achieved, these 'win-wins' are discussed later in this Sustainability Update.

Bord na Móna's ongoing €2.7bn investment programme, which includes inter alia infrastructure development to increase our renewable energy assets, has already helped us as a company to achieve a wonderful milestone at the end of this reporting year (FY23). For the first time Bord na Móna's renewable electricity assets, including our joint venture projects, surpassed over 1,000,000 MWh of clean electricity generated (See Figure 3).

Figure 3 demonstrates Bord na Móna's rapid growth to become one of Ireland's leading producers of green electricity, with output exceeding 1,000,000 MWh.

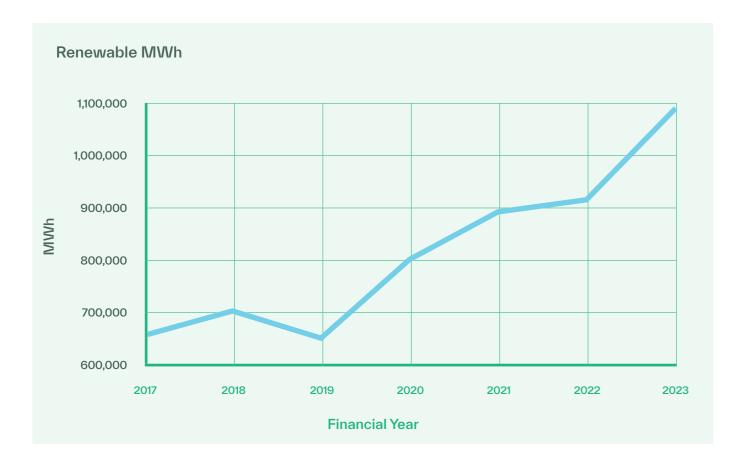


Figure 3 Renewable Energy Generation (MWh pa)



John Reilly Head of Renewables



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Bord na Móna's rapidly expanding renewable energy business is powering thousands of Irish homes and businesses with green electricity.

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Increasing Bord na Móna's renewable generation capacity with more wind, solar, biomass and biogas is top of the agenda for John Reilly, Head of Renewables, as well as developing energy parks and green technologies to decarbonise the economy and secure Ireland's energy future.

Bord na Móna's renewable energy business is playing a key role in the company's decarbonisation journey. The end of peat harvesting accelerated the development and expansion of the renewables business to the point that within a few short years Bord na Móna is now one of the leading renewable energy companies in Ireland.

"Bord na Móna has a very big role to play in Ireland's energy security," says John Reilly, Head of Renewables at Bord na Móna. "The growth in our business means that we are now one of Ireland's leading producers of green electricity, with a 15% share of Ireland's renewable electricity market."

The company's €2 billion investment in renewables is seeing significant expansion in renewable energy infrastructure to increase production capacity from wind, solar, biomass, biogas and green hydrogen. By 2024, 95% of the electricity the company produces will come from renewables, with the company on track to become the leading supplier of green electricity in Ireland.

Bord na Móna's 80,000-hectare landbank allows the delivery of renewable energy projects on a significant scale, including some of the largest onshore wind farms anywhere in Europe, with a typical installed capacity of 100MW. The company developed its first commercial wind farm in Mayo in 1992, which is now one of the oldest operational wind farms in the world.

There are also several sites under development, which will have around 300MW of wind and solar power, co-located with storage technologies.

"We are moving to bigger and bigger wind farms," says John.
"Our wind capacity has accelerated dramatically in the last ten
years. We went from zero to 500MW of installed capacity in
just over a decade. In the next decade we want to increase that
by three-fold, targeting 2 GW of installed capacity by 2030."

The company's newly commissioned wind farm at Oweninney in Co. Mayo, for example, has around 200MW installed capacity and is now the largest operational onshore wind farm in Ireland. The project which has been developed on a Joint Venture basis with ESB, will see another 100 MW installed on the site by the end of the decade. Another, the Ballydermot Wind Farm project in County Kildare, will be operational by 2028, with a 300MW installed capacity.

"We now have wind capacity installed on peatlands that for up to 60 years were providing energy security for the State in the form of milled peat. And now those same sites are continuing their role from an energy security perspective - but doing it in a much more sustainable way," says John.

Offshore wind will also be part of Bord na Móna's renewables portfolio, with the company partnering with leading international offshore wind energy developer Ocean Winds.

"The big growth area in the Irish renewable sector in the next 10-15 years will be in offshore wind and as a leading player in the energy industry, we want to be part of that," says John.





Bord na Móna's Wind and Solar PV projects contributing to Ireland's energy security and climate targets

Bord na Móna is also adding solar to the company's renewable energy portfolio. The company's first utility scale solar farm with a 100MW capacity is currently under construction at Timahoe North in County Kildare, a bog that formerly served the old Allenwood Power Station.

"It's an incredible transition of our land use," says John. "We can see solar growing in our portfolio, co-located with our wind farms. We can do that because our sites are so big. In addition, these projects are delivered with peatland rehabilitation and biodiversity gain embedded in their design."

The first of these co-located facilities will be operational by the end of the decade, at the new Bord na Móna Energy Park at Derrygreenagh in County Offaly, just off the M6 motorway. Renewable assets like wind, solar, battery storage and green hydrogen production (following the successful grant of planning permission earlier this year) will be co-located on the 20,000-hectare site to power energy intensive industries in a clean and sustainable way.

"Our vision is to create these green energy parks that will attract more manufacturing and service industries to the Midlands and create more employment opportunities by helping these sectors to meet their energy needs in a secure, affordable and sustainable way," says John.

The site at Derrygreenagh is one of five Bord na Móna Energy Parks currently in development across its expanding portfolio. "To meet our climate goals and Ireland's growing needs for green electricity, we are targeting an installed capacity in renewables of 3GW by 2035," says John. "About 50% of that will be onshore wind, 25% offshore wind and the remaining 25% will be solar, biomass and flexible gas-fired capacity, as well as storage technologies such as battery storage and green hydrogen."

Bord na Móna is already the largest user of biomass in the Irish electricity sector. The company has been phasing out peat for electricity generation since 2008. To the point that in 2022, 80% of electricity generated at the Edenderry Power Station was from biomass.

As for the future, the final decarbonisation of Bord na Móna's portfolio will see the company switch from peat and fuel oil in its thermal assets to biomass and gas, as a transition fuel. The plan is to decarbonise that gas by using a mixture of biomethane generated from organic waste and green hydrogen generated from renewables. In doing so this firm capacity will ultimately be fired on sustainable biomass and biogas.

"That will provide us with the firm back-up capacity required to take carbon completely out of our electricity production by 2035 and provide the people of Ireland with a clean, affordable and reliable supply of power," says John.

Metric 4 Biodiversity

Bord na Móna continues to nurture biodiversity across our lands, many of which are of high ecological importance.

Bord na Móna first developed a Biodiversity Action Plan in 2010 that placed conservation at the core of our business. The plan covered a six-year period, from 2010 to 2015 and at the time it was recognised as a significant initiative by Bord na Móna.

The development and promotion of the plan was the first of its kind amongst corporate entities in Ireland. In a comprehensive way, the first Biodiversity Action Plan explained why biodiversity is important to Bord na Móna and how the company could build on the peatland management, rehabilitation, restoration and conservation that was part of Bord na Móna's history since the 1940s.

Each objective in the Bord na Móna Biodiversity Action Plan was supported by a suite of actions and key performance indicators (KPIs) and for the greater part, all the actions outlined in the 2010-2015 Biodiversity Action Plan were

acted upon, implemented and/or were under development by the time the period covered in the plan expired. Over the course of the plan, priorities and focus changed as would be expected, but the key aspects of the Plan remained relevant and continue to be relevant.

The second Bord na Móna Biodiversity Action Plan was launched in April 2016. This built on the foundation of the original core objective and the actions set out in the first plan, reframing them in the context and perspectives of peatland biodiversity management, restoration and conservation.

This Plan also incorporated how a complement of activities including renewable energy infrastructure, niche commercial opportunities, tourism and amenity projects could be accommodated on Bord na Móna lands, while remaining aligned with the company's biodiversity goals and broader climate ambitions. A tangible and recent example (see Figure 4) is the ongoing peatlands rehabilitation at the newly constructed Cloncreen Wind Farm.

A third Biodiversity Action Plan to cover the years 2025-2030 is planned to be produced in 2024. All our Biodiversity Action Plans involve a stakeholder consultation process.



Figure 4 Peatland rehabilitation at the Cloncreen Windfarm

The Bord na Móna estate contains habitats of high ecological value such as Annex I habitats as defined under the EU Habitats Directive (Directive 92/43/EEC). Rehabilitated or restored bogs host species of conservation value or conservation concern that are rare and under pressure in the wider landscape.

Most recently the re-colonisation of Ireland by Eurasian (also called Common) Crane (Grus grus), listed on Annex I of the EU Birds Directive¹, has occurred on a Bord na Móna owned

naturally re-wetting cutaway bog². It is expected that present and future cutaway bog rehabilitation may assist in the breeding expansion of this iconic species by both improving the quality of the existing habitat used by the current breeding pair, and by creating more suitable habitat in the region. During this reporting period, the single breeding pair produced the first Eurasian Crane chicks to fledge in Ireland in over 300 years³.



Left to Right

Figure 5 Whooper Swan: A species listed in Annex I of the EU Birds Directive which occurs on the Bord na Móna estate in significant numbers during the winter period. Figure 6 Bog Cotton: A characteristic species of Cutaway Bog. Figure 7 The Irish hare (Lepus timidus hibernicus), a widespread species on Bord na Móna property. Figure 8 Narrow-bordered Bee Hawkmoth (Hemaris tityus)

Metric 5 Peatland Rehabilitation

Peatland rehabilitation is creating diverse, new habitats and maximising the value of the land as a carbon store.

There is a world-wide consensus that re-wetting peat and restoration of hydrology in damaged peatlands can improve carbon storage, reduce carbon emissions, improve water storage and attenuation, and help support biodiversity⁴. Re-wetting peat is the key action required to retain and maximise the value of peatland as a carbon store, promoting carbon absorption by the peatland vegetation and restoring sites to become carbon sinks⁵.

Bord na Móna has been actively engaging in peatland rehabilitation on our lands since the 1990s and prior to

2020, Bord na Móna had rehabilitation initiatives across approximately 20,000 hectares of peatlands in total.

We have also been carrying out rehabilitation improvements of cutaway bogs to promote biodiversity, resulting in an extensive network of cutaway bog with a range of established habitats. These cutaway bog areas illustrate how former peat production areas can be rehabilitated with a combination of natural regeneration and targeted rehabilitation to return relatively quickly to species diverse areas.

The Enhanced Decommissioning Rehabilitation and Restoration Scheme (EDRRS) was approved by the Irish Government in November 2020 and outlines planned improvements on up to 33,000 hectares of Bord na Móna peatlands over the coming years, spanning bogs previously used for industrial peat extraction. Funding for the scheme was secured through the EU Recovery and Resilience Facility

(RRF), the key instrument at the heart of NextGenerationEU⁷. At a national level, this funding is administered through Ireland's National Recovery Resilience Plan (NRRP)⁸.

The objectives of EDRRS is to rehabilitate these peatlands so that the improvements optimise climate, environmental, ecological and hydrological impacts. In undertaking this work, Bord na Móna has reassigned employees from peat harvesting activities into rehabilitation operations.

The Scheme is administered by the Department of the Environment, Climate and Communications (DECC) with the National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage as the Regulator. Bord na Móna is the operator of the Scheme. Work under EDRRS began in early 2021 and the scheme will be completed by mid-2026.

This is a complex project, involving ongoing engagement with many diverse stakeholders including the Environmental Protection Agency (EPA), relevant NGOs (Non-Governmental Organisations), local communities (with whom consultation takes place) and neighbouring landowners, in addition to the National Parks and Wildlife Service (NPWS), the Irish Department of the Environment, Climate and Communications (DECC), and Bord na Móna.

Bord na Móna and our partners are giving nature a helping hand, we're changing the future and creating new possibilities for biodiversity, renewable energy and public amenities.



Figure 9 Aerial view (2023) of Killaranny Bog, Co. Offaly which was rehabilitated under EDRRS in 2022. The network of re-engineered bunded cells is now retaining water on the bog, thus reducing emissions.



Left to Right:

Figure 10 Aerial view (2023) of Oughter Bog in County Offaly, which was rehabilitated under EDRRS in 2021. Pioneer habitats were developing since 2012. A mosaic of emergent habitats is now visible which supports onsite Biodiversity. Figure 11 Aerial view (2021) of Kellysgrove Bog in County Galway, with restoration underway. The machine which is visible is creating drain blocks along previously excavated drains designed to facilitate peat extraction. Figure 12 Aerial view (2022) of Kellysgrove Bog in County Galway, with restoration complete. Water levels are visibly higher resulting in reduced emissions and enhanced habitat.

Ger Breen Head of Land and Habitats



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Integrated land use is the way forward for Bord na Móna to develop new sustainable, low-carbon businesses and meet climate and biodiversity goals.

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From brown to green, Bord na Móna's decarbonisation journey is well underway. For Ger Breen, Head of Land and Habitats, transitioning the business to a sustainable future has meant rapidly rethinking the management and use of Bord na Móna's estate.

The decision by Bord na Móna in 2019 to end peat harvesting has accelerated the company along a path cited as "the biggest challenge of land use in modern Irish history". Bord na Móna's 80,000-hectare landbank is the company's biggest asset, and today's focus on decarbonisation has created new and significant opportunities that previously would not have been feasible.

Ger Breen is leading the Lands and Habitats business forward with a strategy of integrated land use that supports rehabilitating and restoring Ireland's bogs to help meet climate and biodiversity goals through the implementation of the Enhanced Decommissioning Rehabilitation and Restoration Scheme (EDRRS), as well as the renewal and repurposing of the company's land assets towards renewable energy and other modern, low-carbon businesses.

"The use of our land for renewable energy projects like wind farms and energy parks will contribute significantly to answering Ireland's climate challenge and decarbonising the economy," says Ger.

"Bord na Móna has traditionally supplied energy products to the people of Ireland. We want to continue to supply these energy products - but instead of using a high carbon fossil fuel, we can now use our land to generate green electricity by deploying renewable energy technologies powered by wind and solar."

Aside from using Bord na Móna's isolated peatlands for renewable energy projects, there is a second "win" from a land

use and carbon perspective that has potential to help reduce Ireland's carbon footprint.

"Renewable energy projects only take up about 3 - 5% of our land," says Ger. "The vast majority of the remaining 95 - 97% of our peatlands will be restored to their natural state where possible depending on hydrological breaks. We are turning them from being a carbon source to a carbon store - and eventually to a carbon sink." Peatland (organic) soils have the greatest capacity of all soils to store carbon.

Bogs that are unsuitable for restoration are being rehabilitated into rich and diverse habitats for Ireland's native plant and animal species. "As we've started to restore the landscape, nature is coming back quite quickly," says Ger.

In 2021, the first year of the Peatland Climate Action Scheme, Bord na Móna rehabilitated 8,000 hectares of peatland in the largest bog rehabilitation programme in the world. By the end of 2022, over 14,000 hectares had been completed. The target is to rehabilitate up to 33,000 hectares of Bord na Móna's peatlands prior to 2030.

Workers who previously harvested peat for power generation have undertaken a number of training courses, reskilled themselves and are now delivering the rehabilitation programme on the bogs.

Bord na Móna's people and expertise mean that resources can also be deployed to aid in the peatland rehabilitation of third-party lands and contribute on an even larger scale to meeting Ireland's climate goals. About 20% of Ireland's landscape is wetlands approx. (1.45 m Hectares) but much of this has been drained in the last 100 years, resulting in degraded peatlands and reducing the landscape's natural ability to act as a carbon sink.



Ongoing peatlands rehabilitation at the Bord na Móna Mount Lucas windfarm

The company wants to be an active partner in changing the land use in Ireland through partnerships with Coillte, the largest owner of peatlands in Ireland, the National Parks and Wildlife Service (NWPS), and private landowners. Bord na Móna has already rehabilitated about 3,000 hectares of land for the National Parks and Wildlife Service, with a further 22,000 hectares planned.

Also high on Ger's agenda is the potential of the land to support eco-tourism and create sustainable jobs in communities embedded in Bord na Móna's history for decades.

"At Bord na Móna we know the value of working closely with communities," says Ger. "To bring more tourists to the Midlands, we are looking at the construction of greenways where the old railways used to run through our bogs. We have entered into a strategic partnership with Fáilte Ireland and sourced funding to enable the construction of the trials. We are developing a Recreational strategy on the opportunities we could leverage on our lands for additional infrastructure that will enhance the ecotourism offering in the Hidden Heartlands of Ireland."

In recent years, Bord na Móna has developed public amenities around sites such as the Lough Boora Discovery Park and

Mount Lucas Windfarm in County Offaly, attracting thousands of visitors every year and providing important recreational space for local communities and visitors.

Bord na Móna is also supporting new, innovative businesses to set up in former peat production facilities, with alternative uses currently being sought for about 35 properties.

For example, Irish company Manna Drones is now leasing the Bellair Workshop in West Offaly. They also use the air space over the Bellair Bog for the mandatory testing of Drones before commencing the supply of goods and services to their customers. The former briquette factory in Littleton, Co. Tipperary was sold to a company recycling black plastics into plastic bead.

The radical change in the use of these properties by modern, innovative businesses will bring more skilled jobs and indirectly support local communities.

By rethinking how the company manages its land and assets, Bord na Móna is restoring hope for nature, for communities, for the climate and for the future.

Metric 6 Recycling

Bord na Móna's innovative waste management solutions are contributing to a reduction in what goes to landfill.

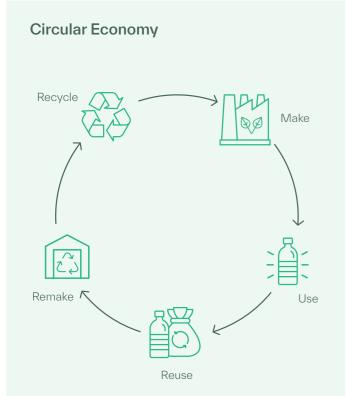
Bord na Móna's Recycling business continues to serve the needs of over 140,000 customers across Ireland. At its core, it aims to align itself with the Government's Climate Action Plan by supporting a transition to a circular economy where resources are kept in use for as long as possible until they are regenerated into new products at the end of their life cycle.

The most recent figures from the Recycling business show the company's considerable contribution to resource recovery and sustainable waste management in Ireland. Figure 14 shows that 90% of all waste material collected by Bord na Móna is recycled or recovered, with only 10% destined for landfill.

Bord na Móna Recycling continues to invest in innovative and resource efficient technologies, including the deployment last year of Ireland's first fully electric Refuse Collection Vehicle (RCV).

The company is also planning an anaerobic digestion plant, which will transform biodegradable waste into green biogas for use in the national gas network. This investment will complement the company's existing landfill gas unit in Kildare, which is currently part of Bord na Móna's electricity generation fleet. It produces about 30,000 MWh of renewable electricity each year, which is enough power to illuminate about 25% of the public street lighting requirement in Ireland.

Together, our sites and technologies are helping us to be more innovative and efficient in how we separate waste, increase plastic recycling and convert low value waste into high value products to support Ireland's drive to more sustainable waste management.



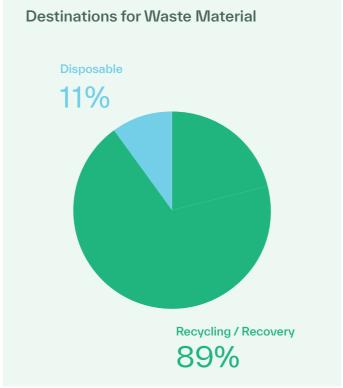


Figure 13 Model of circular economy for Bord na Móna Recycling

Figure 14 Breakdown of destinations for waste material collected by Bord na Móna Recycling



Cormac Manning Head of Recycling



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Rethinking waste collection and recycling to support Ireland's drive towards sustainable waste management and the circular economy.

Bord na Móna's Recycling business is playing a key role in meeting climate goals by turning landfill gas into electricity, increasing plastic recycling and providing thousands of Irish homes and businesses with innovative waste management solutions.

As one of the country's leading waste collectors and processors, Bord na Móna Recycling is supporting national waste policy and helping to lower Ireland's carbon footprint by repurposing waste into commodities, minimising what goes to landfill and reducing the volume of waste that is exported.

Bord na Móna Recycling is involved in every stage of the waste management chain, from collection through to treatment, recycling and where necessary disposal. By converting low value waste into high value products Bord na Móna is helping to recycle and repurpose waste for thousands of homes and businesses around Ireland.

For Cormac Manning, Head of Recycling at Bord na Móna, sustainable development of the business means committing to providing an efficient, affordable and reliable service to customers, while also aligning with the development of innovative technologies and new sites that embed recovery and recycling into waste management.

"It is a really exciting time for Bord na Móna Recycling as policy initiatives and public awareness are driving a move towards a more circular approach to resource use. The transition away from the linear "take-make-use-dispose" model is now an imperative and Bord na Móna Recycling is investing in necessary infrastructure and processes to delivery this paradigm change"

Since 2007, Bord na Móna's waste collection business has grown in terms of the services offered and the operational footprint, with now over 140,000 customers across the country.

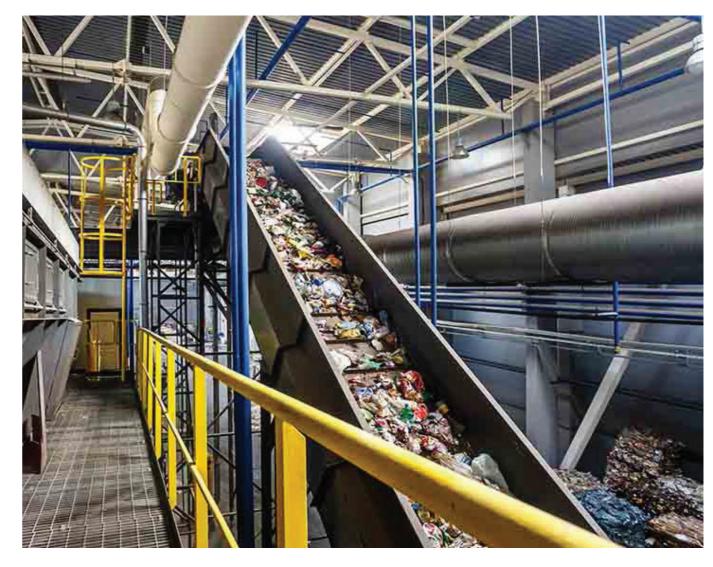
Bord na Móna Recycling collects and processes waste from household, commercial, industrial, and construction & demolition customers across the country.

EPA Licensed Facilities

- 1. Bord na Móna Recycling Portlaoise
- 2. Bord na Móna Recycling Tullamore
- 3. Bord na Móna Recycling Nenagh
- 4. Bord na Móna Recycling Navan
- 5. Bord na Móna Recycling Lusk6. Bord na Móna Recycling Rosslare
- 7. Silliot Hill Civic Amenity Centre
- 8. Athy Civic Amenity Centre
- Drehid Landfill/Composting/ Landfill Gas Facility



Figure 15 Map of EPA licenced facilities managed by Bord na Móna Recycling



Bord na Móna's Recycling Centre in Tullamore

Last year, circa 400,000 tonnes of materials were collected by the Recycling fleet, which includes Ireland's first fully electric Refuse Collection Vehicle (RCV). Recyclable and compostable elements of these waste-streams are processed and recovered in a network of dedicated sites across the country. Bord na Móna now manage nine strategically located EPA-licensed facilities across Ireland.

A range of advanced waste processing, segregation, treatment and recycling technologies are deployed at Bord na Móna's waste facilities to efficiently and economically extract the maximum benefits from waste and reduce what goes to landfill.

The largest is the Drehid Waste Management Facility, which began operating in 2008 and is currently licensed to accept 120,000 tonnes per year of household, commercial and industrial waste. This site also has dedicated infrastructure to convert landfill gas into renewable electricity, sufficient to meet the annual requirements of over 6,000 homes per year. This facility also composts 25,000 tonnes of organic, primarily food waste from householders and catering outlets, each year.

Metric 7 Employee Wellbeing

As Bord na Móna continues to make significant positive impacts across climate change, the environment, and biodiversity, the broader concept of corporate Sustainability, as defined by the CSRD, also includes the organisation's own workforce.

Sharon Doyle, Bord na Móna's Head of Human Resources and Corporate Affairs, explains that "As part of Bord na Móna's evolution to a Climate Solutions company, employee experience and engagement is at the core of the transition". Sharon adds "Bord na Móna is focused on creating a great place to work and ensuring that colleagues can bring their whole self to work and achieve their full potential - we strive to create a culture of inclusion, mutual respect, and equal opportunities for colleagues."

This Sustainability Update reflects Bord na Móna's journey towards assessing and reporting material impacts that can affect the company's employees, and sees the company report on topics including, 'gender equality' and 'diversity', 'training and skills development' together with 'work-life balance', in advance of the formal legislation for these disclosures being enacted.

Gender Equality

For the 12-month period ending June 2022, Bord na Móna published the company's first Gender Pay Gap report. This report is available online and can be accessed via the following link.

Diversity

Bord na Móna has established an ED&I (equality, diversity and inclusion) Steering group, comprised of employees from across the company, each playing a key role in communicating our colleagues' views, disseminating ongoing company developments within the ED&I space internally and inputting in the design, development, and implementation of the ED&I strategy at Bord na Móna. The company is a signatory to Diversity Charter Ireland and has followed up its 2021 Bronze award from the Irish Centre for Diversity with a silver award Investors in Diversity during this financial year.



A full calendar of events and webinars celebrated equality and inclusions across Pride Month, Autism awareness, and the company's own #BeYourself initiative to highlight Diversity Day 2022.

Training & Skills Development

Over the past three years, training of peat harvesting workers with the skills necessary to implement peatlands rehabilitation has been a priority for the company. Bord na Móna operates very progressive policies for staff education, training and upskilling as the company recognises that employee development is critical in fostering a culture of innovation, facilitating employees to

reach their full potential and filling critical positions with capable individuals from within the organisation. Bord na Móna's training and skills development cuts across specialist technical and professional courses and includes a formal Educational Support program for employees which provides practical assistance and backing for career development. In addition to bespoke training needs for individual employees, company-wide training initiatives are also undertaken, during this financial year, these included Sustainability and Diversity awareness programmes.

Work-Life Balance

Employee health & wellbeing is becoming a strategic business priority and a core part of responsible business for Bord na Móna. The company has engaged with employees across the company on their employee experience and wellbeing. In this area, Bord na Móna were awarded the 'KeepWell Mark' accreditation in 2022 and continue to offer a dedicated Employee Assistance Programme.

During the course of this financial year, the Team organised 11 online webinars for staff with topics ranging from stress, mental health to money management and dealing with anxiety in children and teenagers; over 570 employees logged on for these sessions.

Outside of the specific upcoming requirements of the CSRD, Bord na Móna has also developed schemes and policies to attract and retain new talent to the organisation. During this year the company introduced new graduate, scholarship and apprenticeship programmes as part of the organisation's 'Pathways to the Future'.

The company also continues to provide employees with personal, professional and career development opportunities with training available across a broad spectrum of programmes including Linkedin Learning, Supervisory and Project Management courses. During the year, Positive Impact, the company first Female Mentoring Academy was launched with the stated aim of providing development and progression support to colleagues across the organisation.

The Renewable Energy and HR teams were delighted earlier this year when Bord na Móna won the most popular Graduate Recruiter in Utilities, Energy and the Renewable sector at the 17th GradIreland awards ceremony.











Bord na Móna ED&I (equality, diversity and inclusion) Steering group



International Women's Day event in Bord na Móna

Metric 8 Community Engagement and Gain

Bord na Móna remains committed to supporting local communities and bringing positive change to the Midlands region.

From its very inception, Bord na Móna has played an integral role in supporting local communities around our many sites and operations. Though our 'Brown to Green' strategy has brought tremendous change to the company as we have transitioned to being a climate solutions company, we remain committed to supporting the communities in our traditional heartland in a positive way.

Delivering on the objectives of Ireland's ambitious Climate
Action Plan require us at Bord na Móna to develop
renewable and circular economy infrastructure in a manner
which embraces community engagement and stakeholder
consultation. We understand that while these Climate Action

projects benefit all of society, it is important that the local areas hosting these developments also directly benefit from these initiatives.

For this reason, Bord na Móna has established Community Benefit and Near Neighbour schemes to support local projects and activities. In the last year, just under €1m has been allocated to these schemes across the Midlands. Schemes range from energy efficiency measures, refurbishment of local halls, to the procurement of training materials, and the provision of emergency medical equipment.

These schemes have enormous impact on local communities, ensuring no one gets left behind as we move towards a better, more sustainable future for all.

Details of the different funds and governance arrangements are available on the Bord na Móna website.



Visitor information at Cloncreen Windfarm



Sharon Doyle Head of Human Resources & Corporate Affairs- Accelerate Green



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Bord na Móna's leading accelerator programme dedicated to scaling companies developing products and services in green innovation.

The Bord na Móna Accelerate Green programme helps green start-ups to scale and lead the response to climate action and sustainability, contributing to Ireland's climate goals and creating more sustainable jobs.

Achieving a just transition to a low carbon economy is extremely important to Bord na Móna, as the company moves away from carbon-intensive peat. Bord na Móna supports a transition where the benefits of a green economy are widely shared and support communities affected by the closure of peat-fired power stations and the end of peat harvesting.

As one of the leading partners in the EU-funded LIFE Peatlands and People project, Bord na Móna committed to developing a new accelerator programme that could act as an economic catalyst for the Midlands by supporting innovative start-ups invested in creating modern, sustainable businesses and high-value employment.

Bord na Móna's Accelerate Green programme launched in 2021 and is the first equity-free Irish accelerator dedicated to scaling companies leading the response to climate action and sustainability by developing products and services based on green innovation.

"Bord na Móna has a proud history of providing sustainable employment to the communities we operate in," says Sharon Doyle, Head of Human Resources & Corporate Affairs at Bord na Móna. "We want to continue this tradition as a climate solutions company by partnering with new, sustainable businesses committed to green innovation for climate action and job creation in the green economy."

Accelerate Green brings together both Bord na Móna's organisational and commercial expertise in transitioning to a climate solutions company, and program delivery providers, Resolve Partners' expertise in building innovative companies that scale.

Participants gain access to the necessary tools, advice, mentoring, and community of expertise to understand the opportunities of transitioning to a green, low carbon economy, and how to overcome obstacles that prevent scale. They can also network and engage with key industry partners of the climate change economy, as well as gain potential financial investment.

Accelerate Green provides access to Bord Na Móna for collaboration, and as a potential reference customer, and opens access to infrastructure and R&D test beds.

"Accelerate Green gives us an insight into what is novel and innovative in our industry," says Sharon. "Bord na Móna is already contributing to the green economy with our Renewables, Land and Habitats, and Recycling operations, but there is a lot more going on in this space in Ireland that we're happy to support and encourage, particularly in the Midlands, where many of the companies who have gone through the programme have also generated employment. The programme also helps us to develop relationships with green companies, who have worked with us to solve problems and improve processes in our own business."

Already 25 innovation-driven enterprises across renewable energy, carbon reduction, waste and the circular economy,



The third cohort of participant on Bord na Móna's Accelerate Green programme

have benefited from the programme. Feedback from participants on the programme so far has been excellent.

"Working on the Accelerate Green programme helped us to refocus and redefine our business direction, resulting in the launch of a new renewable energy technology business," says Páraic O'Toole, CEO of Automsoft.

"Taking part in the programme brought expertise, clarity and clear thinking to the process, as well as access to external experts with a range of backgrounds. The outcome was a pivot to a massive and aggressively growing market where we have a unique proposition solving a well understood business problem."

"Being part of Accelerate Green played a crucial role in accelerating Positive Carbon by providing access to potential customers and investors, as well as invaluable strategic support," says Mark Kirwan, CEO of Positive Carbon.

"Participating on the programme greatly impacted Positive Carbon's growth and development as a company."

From the success of the programme, Bord na Móna has announced a €5 million investment in Accelerate Green over the next three years. This could see the programme expand to offer more focused courses for specific sectors.

But the primary aim of Bord na Móna's Accelerate Green will remain to help companies at the cutting-edge of developments in the climate and sustainability sectors to grow and contribute to Ireland's green economy.

Document References

- http://datazone.birdlife.org/species/factsheet/commoncrane-grus-grus/text
- Copland, A.S., Cullen, C., Ryan, T., Murphy, J.N., Doyle, S., Cregg, P. &. Kelly, S.B.A. (2022). Confirmed breeding of Common Crane Grus grus in Ireland in 2019 – 2021. Irish Birds 44: 99-103
- Doyle, S., Cullen, C., Cullinan, P., Hehir, J., Murphy, J.N., McCorry, M., Cahill, S., McNicholas, D., O' Sullivan, J. (2023). First Breeding Success of Common Cranes Grus grus in Ireland since the sixteenth century. 8th Irish Ornithological Research Conference: Book of Abstracts. Available online at: Https://www.ucc.ie/en/media/research/ornithology/ corc/CORC2023BookofAbstracts.pdf
- Minayeva, T. et al. (2017). Towards ecosystem-based restoration of peatland biodiversity. Mires and Peat, Volume 19 (2017), Article 01, 1–36, http://www.mires-and-peat.net
- Anderson, R., Farrell, C., Graf, M., Muller, F., Calvar, E., Frankard, P., Caporn, S., Anderson, P. (2017). An overview of the progress and challenges of peatland restoration in Western Europe. Restoration Ecology, Issue 2, Pages 271-282
- 6 https://www.gov.ie/en/publication/136a7-bord-na-monabog-rehabilitation-scheme/
- ⁷ https://next-generation-eu.europa.eu/index_en
- https://www.gov.ie/en/publication/d4939-national-recovery-and-resilience-plan-2021/



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