Electron Holding Plc.

Green Bond

Scope ESG Analysis has used its public proprietary methodology to assess the alignment of the Green Bond Framework (Framework) of Electron Holding Plc. (Electron) with the 2025 Green Bond Principles (GBP) of the International Capital Market Association (ICMA). Scope ESG confirms that Electron's Framework is fully aligned with the GBPs.

This second-party opinion is based on four Green Bond Principles: use of proceeds, process for project evaluation and selection, management of proceeds, and reporting.

Our methodology adds four dimensions in assessing the 'use of proceeds': an assessment of the issuer's sustainability strategy; an assessment of alignment with the EU taxonomy; an assessment about the 'impact of proceeds'; and a review of environmental and social risks.

We have assigned Electron's Framework a Leaf Score of three Leaves, which signals a transformative positive environmental contribution.

Table 1: Issuance assessment summary

Scope's criteria	Electron's Framework description	Scope ESG Assessment
Use of proceeds	→ Renewable energy	ICMA-aligned
Process for project evaluation and selection	→ Establishment of a Green Committee, chaired by the CEO with members of finance, sustainability, and other key departments. → The committee manages, oversees and approves the process evaluation and selection of green projects.	ICMA-aligned
Management of proceeds	→ Proceeds are recorded and tracked in a separate sub-account. → Green Register within the ERP system is managed by the finance department. → Proceeds are periodically reconciled and annually verified by an independent auditor.	ICMA-aligned
Reporting	→ Allocation and impact reports issued within 12 months and annually until full allocation, updated if material changes occur. → Reports detail project allocations, unallocated balance, and track renewable energy, GHG reductions, and energy storage capacity.	ICMA-aligned
Electron's sustainability strategy	→ While there is not a specific sustainability strategy, the company embeds sustainability considerations into its core operations, treating ESG impacts as a central part of its business commitments.	Significant
EU taxonomy alignment	→ Activities align with EU Taxonomy sectors for renewable energy generation, energy storage and installation of renewable energy technologies. → The company confirms compliance with technical screening criteria, DNSH requirements, and minimum safeguards for all relevant activities.	Taxonomy-aligned
Impact assessment	→ Electron's solar PV and hybrid BESS projects contribute to Hungary's renewable energy growth. → Projects help reduce overall CO_2 emissions and advance the country's net-zero targets.	Transformative
Environmental and social risks	→ Electron assesses and manages environmental and social risks for all stages of its projects, integrating mitigation into design, construction, operations and end-of-life.	Transformative

Scope Leaf Score scale

- **Transformative**
- Significant
- Limited
- Poor

Figure 1: Alignment with United Nations Sustainable Development Goals

Figure 2: Engagement with EU Taxonomy draft regulation

Substantial contribution to climate change mitigation
+
Do no significant harm to any of the six environmental objectives
+
Minimum safeguards are complied with

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1. Methodology and assessment process

Scope ESG was commissioned by the issuer to provide a second-party opinion (SPO) on its Framework. This SPO is based on Electron's internal documents, interviews with Electron's relevant stakeholders, and documents related to external market/regulatory research.

The Leaf Score summarises our evaluation and verification of the environmental impact of Electron's Framework. Our minimum requirement for GBP alignment is that each green project category of the Framework has a positive environmental impact, as represented by a Leaf Score of one yellow Leaf.

Table 2: Sector criteria Leaf Score

Scoring	Description	GBP category	Sector criteria
	Transformative environmental contribution and complete alignment with relevant national and industry standards	Renewable energy	The Framework is fully aligned with the GBPs and proactively implements environmental considerations and innovative approaches across the full project lifecycle, considering upstream and downstream impacts and risks. Evidence of supply chain, formal end-of-life plans for components, and low-impact O&M are provided. The issuer is committed to go beyond regional market practice.
	Significant environmental contribution and at least partial alignment with relevant market standards	Renewable energy	The Framework is aligned with the GBPs and applies environmental considerations across the main project phases. Supply-chain transparency is limited, end-of-life processes are partially compliant with regulations, and O&M practices are adopted for priority sites. The Framework is aligned with regional market practice.
	Environmentally friendly but insufficient quantifiable impact metrics and limited alignment with relevant market standards	Renewable energy	The Framework claims alignment with the GBPs but shows material gaps in implementation. Environmental considerations are largely compliance-driven, lifecycle coverage is limited, and upstream/downstream impacts are not assessed. The approach reflects established regional market practice without demonstrable enhancements.
	No significant or negative environmental impact; lack of alignment with relevant market standards	Renewable energy	The Framework is not aligned with the GBPs. There is no documented lifecycle approach, upstream/downstream impacts and risks are not addressed and there is no consideration for environmental impacts. The Framework does not provide decision-useful impact metrics or reporting and falls below market expectations.

2. Introduction

International presence in Central and Eastern Europe

Electron Holding Plc. (Electron) is a Hungarian renewable energy company established in 2017. Electron currently operates power plants with a combined capacity of 200 MW in Hungary and has over 500 MW of additional capacity in development within the country. Its activities span the full spectrum of the value chain, from project development, engineering, and procurement to power plant construction, operations, and electricity trading. The company is dedicated to developing and managing clean energy infrastructure, primarily solar and wind power projects in Hungary, but has also established operations in Serbia, Bosnia, Romania, Greece, and Montenegro with an estimated project pipeline of more than 2 GW.

Electron has expanded its portfolio of products to include large-scale Battery Energy Storage System (BESS) projects in Hungary, currently holding approximately one-third of the country's permitted BESS capacity, calculated at more than 150 MW.

Electron offers end-to-end services

Electron provides end-to-end services across its renewable energy projects. It provides engineering, procurement, and construction (EPC) services and technical, legal, and financial advice from planning through implementation. Once projects are operational, the company manages the asset – operations and maintenance (O&M) – using proprietary remote-monitoring software to enable preventive maintenance, inspections, performance optimisation, and mandatory reporting to MAVIR Plc., Hungary's licensed electricity transmission system operator.

The company develops most solar projects through fully owned units, such as Euronergy SPV, for international solar and BESS development, and Euronergy Storage Ltd. primarily for BESS development and operations. Electron Energy Trade Ltd. is a licensed Hungarian electricity-trading company, delivering power to customers through the Hungarian Power Exchange (HUPX).

Use of proceeds to finance solar parks in Hungary

In 2025, Electron plans to issue a EUR 20 million green bond to primarily finance a new PV solar and BESS project located in Babót, Hungary with 8 MW and 4-hour energy capacity respectively. The rest of the proceeds will fund similar ready-to-build projects to expand solar infrastructure, contributing to the growth of renewable energy and supporting the energy transition in Hungary.

3. Green Bond Principles: assessment of issuance

3.1 Use of proceeds

Table 3: Electron's eligible projects

Green project category	Fulfilment	Leaf score
Renewable energy	Financing new solar park projects in Hungary • Development and implementation of utility-scale Photovoltaic (PV) solar power plants • Development and implementation of hybrid Photovoltaic (PV) solar power plants and battery energy storage systems (BESS)	Transformative

The **renewable energy** project category has been awarded a Leaf Score of three Leaves, reflecting Electron's commitment to accelerating Hungary's transition to clean power through large-scale solar PV plants and BESS. The issuer's key project under this framework is an 8 MW solar park in Babot, scheduled for completion by March 2026. In addition, Electron aims to include a modular lithium-ion 4-hour capacity battery for energy storage. The dual use of PV+BESS hybrid projects is designed for day-night energy shifting. This installation will serve as collateral for the bond, underscoring its strategic importance.

Proceeds to finance an 8MW solar power plant in Hungary with battery energy storage capacity

Beyond Babót, the Framework states that the remaining proceeds will finance similar "ready-to-build", grid-connected projects that meet the Framework's eligibility criteria. Eligible projects will involve the construction or expansion of grid-connected PV or hybrid PV+BESS assets, be aligned with the EU taxonomy criteria, and be designed for a minimum 25-year operational life.

Our assessment: Electron's eligible projects achieve an aggregated Leaf Score of three Leaves. This reflects their alignment with the GBPs, the nature of the projects, supply-chain diversification and control, and other material considerations. While achieving our highest score, additional disclosure on expected benefits and impact metrics would further strengthen the decision.

Use of proceeds score: **Transformative**

3.2 Process for project evaluation and selection

Electron intends to establish a Green Committee responsible for evaluating and selecting projects for the green bond issuance. According to the Framework, the Committee is comprised of key stakeholders of the company including the CEO, and members from the Finance, Sustainability and other relevant departments (such as technical, legal and compliance). If necessary, Electron states that management will consult with an external ESG or sustainability expert as part of the decision-making process.

Establishment of a Green Committee

The Framework stipulates that the Committee will meet regularly during the issuance cycle to identify and recommend eligible projects or expenditures aligned with the use of proceeds criteria. Additionally, it will ensure that environmental and social risks are identified early and mitigated throughout the lifecycle of the project.

While no exclusion criteria are specifically mentioned, Electron states that the Committee will ensure that the proceeds are strictly aimed at funding solar energy parks, correspondent energy storage technologies with clear environmental benefits and robust ESG alignment.

Committee to ensure that proceeds go strictly at funding PV parks + BESS technologies

Our assessment: The process for project evaluation and selection has a Leaf Score of three Leaves as Electron has a detailed project selection process with clear environmental considerations and benefits, a specific Green Committee with specific roles and tasks, and it includes an external ESG expert as consultant if required.

Process for evaluation and selection score: **Transformative**

3.3 Management of proceeds

The Framework states that the green proceeds will be placed in a separate green register, managed by the Finance department within its Enterprise Resource Planning (ERP) system. The register will track all disbursements and commitments, ensuring that an amount equal to the net proceeds is exclusively allocated to eligible green projects.

The Committee will oversee the monitoring and supervision of the allocation of bond proceeds. Unallocated funds will be temporarily managed according to internal treasury policies, prioritising low-risk, ESG-aligned placements (i.e. short-term green instruments, ESG-screened bank deposits), and communicated to investors. Electron commits to annual reviews by independent auditors or third parties to verify the tracking methodology and allocation process. Electron intends to use all the bond proceeds to finance the development of new solar PV and BEES projects.

Proceeds to only financing new solar PV and BEES projects

Our assessment: Electron's management of proceeds has been awarded a Leaf Score of three Leaves, as the systems and processes for tracking, allocation, and verification are robust, transparent, and supported by external oversight.

Management of proceeds score: **Transformative**

3.4 Reporting

Electron is committed to providing annual reporting to investors describing the allocation of green proceeds and the environmental impact of the projects, if available, until the maturity of the green bond. The report will be available on Electron's website alongside its green financing framework and will be reviewed by an independent auditor.

Annual reporting until bond maturity

Electron will report on the allocation of net proceeds to the eligible green projects and its associated environmental impact within one year of the issuance. In addition, the allocation report will include the metrics detailed in the table below generated through the company's ERP system:

Table 4: Allocation report indicators

Allocation report indicators
Proportion of green investments: Green-rated investments / Total investments (%)
Utilization of green proceeds: Allocated green bond proceeds / Total issued (%)
Green proceeds by environmental category: Distribution according to the Green Bond Framework categories (%)
Other: Additional financial and operational indicators, as relevant

In accordance with the 2021 Harmonised Framework for Impact Reporting, Electron has committed to provide annual reporting on selected impact indicators to illustrate the environmental and sustainability impacts of the projects financed by this green debt instrument. The defined impact indicators are the following:

Established impact indicators

Table 5: Impact reporting indicators

Category	Sub-Category	Impact indicators
Renewable energy	Financing the development and construction of new utility-scale solar PV and hybrid (PV+BESS) projects	Annual GHG emissions avoided (tCO_2e/year
		Annual renewable energy generation (MWh/year)
		Installed renewable energy capacity (MW)
		Installed battery storage capacity (MW or MWh)
		Grid connection date / commercial operation date (COD)

Our assessment: Electron's reporting process has a Leaf Score of three Leaves. The issuer is committed to provide updated information on the use of proceeds with comprehensive details on eligible projects provided yearly. Impact reporting is transparent, using both qualitative and quantitative measures. The issuer also adopts best practices by including an external verifier.

Reporting process score: **Transformative**

4. Assessment beyond GBPs

4.1 Electron's Sustainability Strategy

Sustainability components are part of Electron's core business model

Electron, as a renewable energy company contributes to reducing greenhouse gases (GHG) in the region by facilitating the energy transition away from fossil fuels. The company has incorporated sustainability and impact considerations into their core business model. Within the Framework, Electron states a long-term focus on contributing to the energy transition, and complementing it with a measurable and positive impact on climate and community.

While there is no strictly defined sustainability strategy nor quantifiable targets, the company provides detailed sustainability components that demonstrate its mitigation and environmental plans, fully incorporating them into its business model and five strategic focus areas. Electron's Framework exemplifies how their business approach takes environmental considerations into account at all stages: from procurement of materials, engineering and design, construction ('EPC' integrated model), to operations and management ('O&M' concept), and through to the end-of-life cycle, integrating waste management and recycling.

Strong circular economy and end-of-life practices carried out

Key practices that the company conducts include pre-screening and evaluation criteria not only for sourcing materials and signing on suppliers and sub-contractors, but also for site selection of new projects (i.e. valuing sites where minimal agricultural or conversion is required); complementing EPC activities with comprehensive O&M services – such as real-time digital monitoring that aims to optimise performance and minimise negative impacts and losses; and proper end-of-life management methods for both PV modules and BESS units ensuring compliance with EU regulations like the "Waste classified as Electrical and Electronical Equipment (WEEE) Directive"[1] and the "Restriction of the use of Hazardous Substances (RoHS) Directive"[2] to manage materials responsibly, minimize hazardous waste and promote circular economy (such as the recovery of 95% of key materials from solar panels).

In addition to its sustainability components and CSR considerations, Electron holds four ISO certifications: 9001 (Quality Management System), 14001 (Environmental Management System), 45001 (Occupational Health and Safety Management System) and 50001 (Energy Management System). These reflect how the company is actively engaging in ESG practices to be a more sustainable and best-in-class company.

Our assessment: Electron's sustainability strategy scores a Leaf Score of two Leaves as it demonstrates a strong integration of environmental considerations across its core operations and broader value chain. While the company identifies project risks and carries out mitigation practices, it still lacks a concrete quantifiable strategy with short-medium- or long-term targets with defined objectives.

Electron's sustainability strategy score: **Significant**

4.2 Alignment with UN Sustainable Development Goals (SDGs)

Electron's project categories tied to four relevant SDGs

The SDGs adopted by all UN member states in 2015 are a collection of 17 global targets comprising an agenda for achieving sustainable development by 2030. We deem the following SDGs to be relevant for Electron's project categories:

7. **Affordable and clean energy:** ensure access to affordable, reliable, sustainable, and modern energy for all.
9. **Industry, innovation, and infrastructure:** build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
12. **Responsible Consumption and Production:** ensure sustainable consumption and production patterns

[1] European Commission, *Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)*, 2024 – eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012L0019-20240408

[2] European Commission, *Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)*, 2025 – eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02011L0065-20160715

13. Climate action: take urgent action to combat climate change and its impacts.

Appendix I lists the relevant indicators for assessing Electron's contribution to each SDG. The contribution to the SDGs can be quantified in post-issuance impact reporting. Electron has not defined specific indicators for measuring its direct contribution to each SDG, but its alignment can be assessed using relevant indicators from its allocation and impact reporting.

4.3 EU Taxonomy alignment[3]

The project categories of Electron's Framework pertain to three taxonomy activities:

- 4.1 Electricity generation using solar photovoltaic technology
- 4.10 Storage of electricity
- 7.6 Installation, maintenance and repair of renewable energy technologies

Technical screening criteria assessment

Electron complies with the majority of relevant TSC

Electron's eligible projects are expected to be aligned with the EU Taxonomy technical screening criteria (TSC) for climate-change mitigation under activities 4.1, 4.10, and 7.6. The green proceeds will finance the installation of a new solar energy plant to generate electricity and the installation of battery energy storage systems to store renewable electricity for discharge during off-peak hours.

Do No Significant Harm (DNSH)[4]

Electricity generation, energy storage meet DNSH criteria

Based on Electron's documentation, the projects are designed to meet the DNSH criteria for activities 4.1, and 4.10 and 7.6 on climate change adaptation, transition to a circular economy, and protection of biodiversity, by addressing three main areas:

Climate change adaptation

The three activities identified must comply with DNSH criteria by identifying and assessing physical climate risks (such as flooding, wildfires, or storms) and implement appropriate adaptation measures. These measures for PV and BESS systems should be integrated into the design, placement and operation of the systems to ensure their safety and resilience. While Electron indicates that it aims to comply with EU taxonomy for its solar energy projects, there is limited mention of climate change adaptation within the Framework.

Waste management and end-of-life treatment

Electron's end-of-life treatment for batteries and solar panels complies with the EU Battery Regulation, the WEEE Directive, and hazardous waste management protocols. These aim to ensure that solar panels, wind components, and batteries are responsibly dismantled, reused where possible, or recycled at authorized facilities. Contractors must follow ESG-aligned procedures covering material traceability, safe on-site storage, and responsible disposal to minimize environmental risks.

Environmental impact and biodiversity protection

In selecting sites for their projects, Electron states that they conduct environmental impact assessments (EIAs) and prioritise non-agricultural (or dual-use land), employing agrivoltaic-compatible designs where feasible. The company also integrates animal grazing or vegetation management to enhance biodiversity, when applicable, aiming to avoid habitat fragmentation and protecting ecosystem services to ensure no significant harm to biodiversity and ecosystems are made in any of its projects. . In addition, under Hungarian law, the siting of solar power plants on agricultural land requires land-use conversion consent from the Land Protection

[3] The EU taxonomy regulation was published in the Official Journal of the European Union on 22 June 2020 and entered into force on 12 July 2020. It establishes a basis for the EU taxonomy by setting out four overarching conditions that a particular economic activity must meet to qualify as environmentally sustainable. The taxonomy regulation establishes six environmental objectives: climate change mitigation, climate change adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems.

[4] The EU taxonomy defines a 'do no significant harm' (DNSH) assessment. The DNSH assessment ensures that the other environmental objectives are not harmed while a substantial contribution is made to one or more environmental objectives.

Authority (Földhivital) and EIAs in certain cases. According to Electron's documents, projects cannot be built in protected areas – such as Natura 2000 sites, ecological corridors or landscape conservation zones - this also applies to sites where archaeological remains have been found as it is something that Electron carefully adheres to.

Minimum social safeguards[5]

According to the Framework, Electron ensures that all projects financed with the green proceeds adhere to EU labor standards and international conventions, providing protection for workers. The company states that it has a Code of Ethics guideline defining expectations for employee and management conduct, including whistleblowing procedures, conflict-of-interest rules, and human rights commitments.

Electron adheres to Hungarian and EU labour law standards

Subcontractor requirements are set out in Electron's "Project Execution Plan and Contracts". Before site handover, subcontractors must attest compliance with Hungary's OSH law (Act XCIII/1993) and the construction-site safety decree (4/2002); where multiple firms operate concurrently, a coordinated work plan is required. Contracts require legally employed and adequately trained worker, adherence to Electron's Code of Ethics and ESG guidelines. Site-specific risk assessments and safety briefings are mandatory, and ISO 45001 (or equivalent) OHS management systems are requested where relevant. Oversight is provided by the Green Committee within the issuer's ESG governance framework. These measures indicate a structured approach to worker protection and contractor management consistent with minimum social safeguards.

Our assessment: Electron demonstrates strong alignment with EU Taxonomy requirements by providing evidence to verify compliance with technical screening criteria, DNSH principles, and minimum social safeguards. The company's structured approach, combining early environmental risk identification, responsible procurement, and circular economy integration, supports full DNSH compliance across its activities achieving a three Leaves score.

EU Taxonomy alignment score: **Transformative**

4.4 Impact of proceeds

With the revised Renewable Energy Directive, the EU aims to source at least 42.5% of its energy from renewables by 2030[6]. Compared to it, Hungary's national energy strategy targets around 20% renewables in primary energy by 2030[7] and according to their national climate protection law (Act. XLIV 2020), become carbon neutral by 2050[8], reflecting its push to reduce fossil fuel reliance and strengthen energy independence.

Hungary has made steady progress increasing the share of energy provided from renewable sources, rising to 17.1% in 2023[9] from 12.6% in 2019. The level, still below the EU27 average of 24.5% in the same year, is increasing faster than that of its regional peers[10] as seen on **Figure 3**.

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[5] The EU taxonomy includes a minimum social safeguards assessment to ensure that entities carrying out environmentally sustainable activities, labelled as taxonomy-aligned, meet certain minimum governance standards and do not violate social norms, including human rights and labour rights. Issuers should align with standards such as the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles of Business and Human Rights, and the International Bill of Human Rights. Additionally, issuers should comply with the ILO's Declaration of the International Labour Organisation on Fundamental Rights and Principles at Work.

[6] European Commission, *Renewable Energy Targets*, 2025 - energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-targets_en

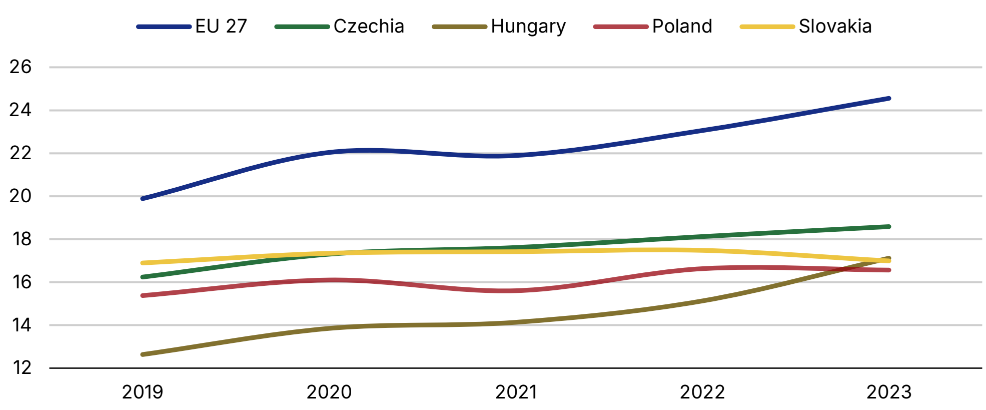
[7] Hungarian Ministry of National Development, *National Energy Strategy 2030*, 2012 - 2010-2014.kormany.hu/download/7/d7/70000/Hungarian%20Energy%20Strategy%202030.pdf

[8] Government of Hungary, *Act XLIV of 2020 on Climate Protection*, 2020 - njt.hu/jogszabaly/2020-44-00-00

[9] Hungarian Central Statistical Office, Share of electricity produced from renewable energy sources, 2025 - ksh.hu/stadat_files/ene/en/ene0012.html

[10] Eurostat, Share of energy from renewable sources, 2025 - ec.europa.eu/eurostat/en/

Figure 3: Renewable energy share (%), 2023



Source: Eurostat, 2025[9]

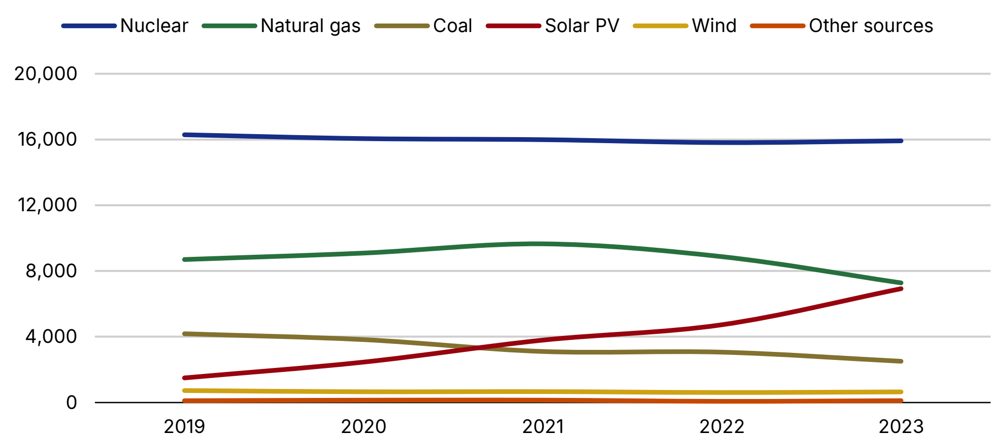
Hungary nearly doubled the renewable share of its electricity mix from 10.0% in 2019 to 24.1% in 2024[11], yet it still remains below the EU average of 44.7% in 2023[12].

Solar Photovoltaic (PV) energy in Hungary

Hungary's renewable growth is led by solar PV

Hungary's renewable mix is dominated by solar photovoltaic (PV), accounting for about 77%[13] of renewable power output. Installed solar capacity exceeded 8 GW by mid-2025 and is projected to reach around 12 GW by 2030[14]. Solar PV alone contributed to around 19% of the entire electricity mix in 2023[15], according to International Energy Agency data.

Figure 4: Electricity generation by source in Hungary (GWh), 2023



Source: IEA, 2025[16]

Solar projects are shaping Hungary's power mix

The renewable sector in Hungary has gained in importance in the past three years where the country has intensified efforts to reduce its dependence on imported fossil fuels, leading to a strategic and more environmental positive shift focused on domestic renewable energy sources. As seen in **Figure 4** this shift is visible in faster development of solar PV parks, positioning them as a central pillar of Hungary's energy diversification. While increase in solar PV parks also have some adverse environmental impacts (see section below), the shift is overall environmentally positive.

[11] Hungarian Central Statistical Office, Share of electricity produced from renewable energy sources, 2025 - ksh.hu/stadat_files/ene/en/ene0012.html

[12] Eurostat, Renewables take the lead in power generation in 2023, 2024 – ec.europa.eu/eurostat/de/web/products-eurostat-news/w/ddn-20240627-1

[13] Hungarian Central Statistical Office, Share of electricity produced from renewable energy sources, 2025 – ksh.hu/stadat_files/ene/en/ene0012.html

[14] Hungarian Ministry of National Development, 2024 Update: National Energy Strategy 2030, 2024 – commission.europa.eu/document/download/0a2953f8-5789-4f6f-9714-03df3d4cbbab_en?filename=HU_FINAL%20UPDATED%20NECP%202021-2030%20(English).pdf#page=25

[15] International Energy Agency (IEA), Country profile – Hungary, 2025 – iea.org/countries/hungary

Battery energy storage systems (BESS) in Hungary

Hungary part of EU effort to rely more heavily on BESS

Over the past five years, there has been a considerable increase in the usage of BESS systems across Europe. Starting from around 2.3 GWh in 2020, by year-end 2024 the annual capacity figure reached 21.9 GWh[16] and is expected to even double by 2026 according to a report published by SolarPower Europe[17].

BESS help in stabilising renewable energy grids by storing excess solar (or wind) power and releasing it when needed. On the downside, BESS also have negative environmental considerations (addressed in the next section), particularly in the mining and processing of raw materials (i.e. lithium or cobalt) and its waste management challenges.

Hungary is still in the early stages of promoting BESS compared with Germany or Italy, but has made regulatory advancements to support their deployment, aligning with its broader energy transition goals. The sector has moved from pilot-scale installations to large-scale deployments. The Hungarian government since introduced multiple state-supported subsidy and tender programs, aimed at deploying up to 1 GWh of grid-connected storage reflecting a strategic shift toward integrating flexible storage solutions into the energy market.

Electron's solar initiatives represent investments that contribute to Hungary's overall renewable targets, supporting grid stability and efforts toward decarbonisation.

Upstream impacts

Supply chain energy profile drives upstream impact

For Electron, the main environmental impact on the supply side comes from how solar modules are manufactured. Around 80% of global solar equipment production takes place in China, where electricity is still largely generated from fossil fuels. This makes the manufacturing process the biggest driver of lifecycle emissions, with material production and technology manufacturing typically responsible for over 90% of the total footprint.

Electron has made progress on this front since its last issuance in 2022. The company has reduced its reliance on Chinese suppliers and shifted more sourcing to European manufacturers, where solar modules typically carry 30%–40% lower lifecycle emissions. This shift also reflects a more rigorous approach to supplier selection, prioritizing regional partners or those with stronger ESG performance and clearer waste management practices.

As stated in the Framework, Electron works with tier-1 suppliers to source durable, high-quality components designed to extend project lifetimes and reduce waste. Environmental and ESG considerations (including emissions management, resource efficiency and product traceability) are reflected in procurement policies. While Electron does not conduct formal ESG audits of its suppliers, it prioritizes working with suppliers already assessed by reputable rating agencies and monitors publicly available information on their performance.

Electron's net environmental impact remains positive

Even with the higher emissions tied to manufacturing in some regions, Electron's projects still deliver a net benefit. By replacing fossil-based electricity with solar power, the company achieves significant lifecycle carbon savings and makes better use of land and resources in Hungary. Maintaining high technical and ESG standards across its supply chain also supports long-term project reliability and environmental responsibility.

Downstream impacts

Ground-mounted solar PV parks play an important role in the country's renewable energy transition, but at the same time, if not sustainably conducted, they may also bring environmental changes to surrounding ecosystems, particularly in relation to soil quality, vegetation, and local biodiversity. The development of these parks often involves land modification, which can affect soil structure and local habitats. As previously mentioned in the above sections, Electron takes into consideration the elements of biodiversity, site development and ecological stewardship in their

[16] SolarPower Europe, *European Market Outlook for Battery Storage 2025-2029*, 2025 – solarpowereurope.org

[17] Solar Power Europe: *An association for the European solar PV sector, uniting 300+ organisations and collaborating to shape regulations and business landscape for solar growth in the region. It actively engages in EU and international projects.*

projects. Furthermore, they are also exploring innovative options such as pollinator-friendly planting schemes and promoting chemical-free cleaning and maintenance routines.

Electron seeks to address harmful downstream impacts

The PV modules themselves present an environmental challenge after their 25–30-year lifespan. Without proper recycling infrastructure, their disposal can result in large volumes not only of regular waste, but also of e-waste, some of which may contain hazardous materials. In the case of hybrid systems combining solar PV with BESS units, environmental considerations extend beyond land use, and PV cell modules disposal, to also include the handling and disposal of battery-related materials.

As Hungary develops its battery manufacturing and storage capacity, particularly with lithium-ion systems, attention is increasingly being paid to potential waste streams and their long-term management. Materials such as metal-oxide compounds and certain solvents, if not properly treated, could pose environmental risks.

To mitigate harmful impacts, Electron has implemented systematic sorting, storage, and disposal protocols, in partnership with certified waste service providers, to facilitate recycling and their proper disposal. End-of-life solar panels are dismantled and sent to authorized facilities for material recovery, supporting circular economic goals. These certified recycling partners which can recover up to 90-95% of key PV material components, extract raw materials from the batteries and disposes properly of all the rest, thus complying with local and EU environmental regulations, such as the WEEE Directive and the RoHS Framework.

Overall, while PV parks and BESS play an important role in improving grid reliability and supporting renewable integration, ensuring strong regulatory oversight and safe recycling pathways will be essential to mitigate potential downstream impacts.

Our assessment: The projects are completely aligned with specific environmental objectives outlined in the Framework and consider the entire value chain. Projects effectively address the most material impacts within the sector, region, supply chain and waste management processes, making a meaningful contribution to sectoral sustainability goals.

Impact of proceeds score: **Transformative**

4.5 Environmental and social risks

Electron's projects involve a variety of environmental and social risks that are significant given the scale and nature of its operations. This category aims to evaluate the company's strategy for identifying and mitigating risks not detailed above. For the outlined projects, focused areas of concern are material sourcing (including waste management), health-and-safety considerations, and community concerns (including biodiversity considerations) – all detailed in **Table 6**.

From the Framework, Electron proactively addresses environmental and social risks by conducting internal impact studies before project development and by integrating risk assessments at each project stage. During the operational phase, the company provides management services to minimize environmental impacts and ensures that all projects comply with national regulations and internal policies. Electron discloses project-related risks and has a dedicated team with guidelines in place for the evaluation and selection process.

Use of ERM systems to identify and monitor business risks

To manage these risks effectively, Electron has established several protocols and is equipped to implement them. For example, it conducts lifecycle assessments, integrated EPC models, operations and management services, and the use of their enterprise resource planning (ERP) system. Furthermore, the company is aligned with internationally recognised standards, including ISO-certified management systems. We note that this structured approach allows the company to identify, mitigate, and manage potential harmful environmental and social impacts through due diligence, regular monitoring and thoughtful integration of risk considerations.

Our assessment: Electron's environmental and social management has achieved a Leaf Score of three Leaves. The company has established sustainable mitigating strategies at various stages of the lifecycle of its products and proper risk assessments that addresses direct and indirect risks associated with the project categories described in the Framework.

Environmental and social management risk score: **Transformative**

Table 6: Risk mitigation projects and measures

Associated project risks	Electron's risk mitigation measures
Material sourcing	Electron's projects depend on materials whose extraction and sourcing may result in considerable environmental impacts. Building renewable energy infrastructure (such as solar PV systems, wind turbines, and hybrid BESS models) requires, among others, resources like rare earth metals, concrete, and steel. If not sourced sustainably, these materials can contribute to habitat degradation, pollution, and elevated greenhouse gas emissions. For instance, solar panels utilize silicon, copper, and rare earth elements, while construction activities rely heavily on steel and cement, both of which have carbon-intensive production processes. Electron mitigates these risks by prioritizing Tier 1 suppliers, followed by local and European suppliers and requiring compliance with local regulations or ISO certification standards (45001). While they do not conduct formal ESG reviews on its suppliers, the company conducts an evaluation process to assesses and determine the materials and suppliers used on their projects and prioritise only qualified suppliers who have already been assessed by recognised organizations. Lastly, a key aspect related to the materials used is its proper waste management and end-of-life treatment. As described in previous sections, Electron conducts recycling practices (i.e. solar panels dismantling and component recovery), has selected authorized waste management partners, and adheres to local regulations as well as EU Directives, altogether helping mitigate risks associated with in this category.
Health and safety	In Hungary, workplace health, safety, environmental, and fire protection requirements are governed by the 1993 Occupational Safety and Health Act, complemented by EU regulations and minimum standards. A further health and safety risk relates to the sourcing of PV components, as some may originate from regions where forced labour is a concern. At the project level, Electron requires its subcontractors to fully comply with the 1993 Occupational Safety and Health Act, as well as Decree 4/2002 (II.20.) SzCsM-EüM, which sets out occupational safety obligations for construction sites and related activities. In addition, all subcontractors are contractually bound to hire only legally employed and professionally trained workers, and to observe all applicable labour, tax, and social security laws throughout the construction process.
Community concerns	Projects such as solar farms, wind turbines, and BESS units through their construction and operation, have an impact on land use. It is most noticeable when large-scale installations require widespread land clearing, potentially disrupting local communities, ecosystems, and wildlife habitats. Additionally, the construction of new buildings and transportation infrastructure to complement the renewable energy facilities may present further settlements and biodiversity-related risks. In order to mitigate these risks, prior to their construction, the company engages local stakeholders early to address their concerns and any issues that might arise. Through community engagement, Electron aims to identify and mitigate potential impacts – such as land use concerns, visual or noise effects, and ecological disruption – incorporating their feedback into the final project design and ensuring all construction and operational activities meet Hungarian and EU standards.

Appendix I: SDG alignment

GBP category	SDG alignment	Indicators to be evaluated
Renewable energy		• Added renewables capacity MW in each year • Total capacity of renewable energy in MW • Annual GHG emissions avoided (tCO_2e/year) • Annual renewable energy generation (MWh/year) • Installed renewable energy capacity (MW) • Installed battery storage capacity (MW or MWh) • Grid connection date / commercial operation date (COD)

Appendix II: EU Taxonomy activities

EU Taxonomy					DNSH				
Sector	**Activity**	**Eligible project category**	**Mitigation/ Adaptation**	**TSC**	**Adaptation**	**Water**	**Circular Economy**	**Pollution prevention**	**Biodiversity**
Energy	4.1 Electricity generation using solar photovoltaic technology	Renewable energy	Mitigation	Aligned	Insufficient information		Aligned		Aligned
	4.10 Storage of electricity	Renewable energy	Mitigation	Aligned	Insufficient information		Aligned		Aligned
	7.6 Installation, maintenance and repair of renewable energy technologies	Renewable energy	Mitigation	Aligned	Insufficient information		Aligned		Aligned

Aligned · Partially aligned · Insufficient information to assess alignment · Not aligned

Appendix III: Documents provided by Electron and/or public sources

Document category	Document description
Market research on sector/regional standards	Hungarian National Energy Strategy 2030 – Ministry of National Development, 2024
	Energy system of Hungary – International Energy Agency, 2024
	Environment and Energy Management – KSH, 2024
	European Market Outlook for Battery Storage 2025-2029 – SolarPower Europe, 2025
	Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (WEEE) – European Commission, 2025
	Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) – European Commission, 2025
	Act XLIV of 2020 on Climate Protection – Government of Hungary, 2020
Green bond-specific documentation provided by Electron	Green Bond Framework
	Information on use of proceeds
	Site selection documentation

Lead Analyst

Stefan Ritzka
+49 69 667 738 965
s.ritzka@scopeesg.com

Supporting Analyst/s

Wendy Fernandez
+33 186 266-316
w.fernandez@scopegroup.com

Nikolaus v. Salmuth
+49 69 667 738 910
n.salmuth@scopeesg.com

Group Managing Director/s

Christian Werner

Florian Schoeller

Applied methodologies

Applied Green Bond Principles, ICMA, 2025
Applied Scope Green Bond's SPO Guidelines, March 2025

Scope ESG Analysis GmbH

Lennéstraße 5
D-10785 Berlin
scopegroup.com

Phone: +49 30 27891-0
Fax: +49 30 278 91-100
scopeesganalysis@scopeesg.com

in
Bloomberg: RESP SCOP
Scope contacts

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