



**Alternus Energy Group plc**

## **Green Bond Framework**

September 2020

## Company Overview

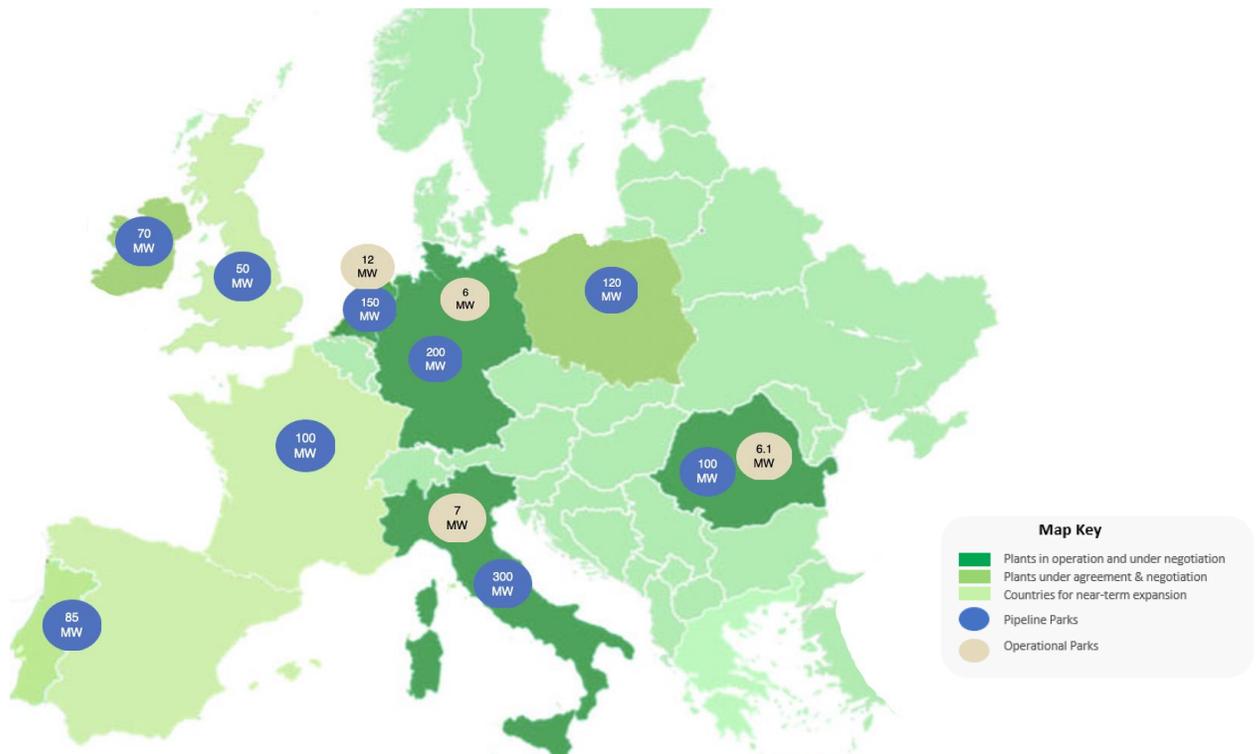
Alternus Energy Group plc (“Alternus” or the “Company”) is an independent power producer (IPP) of green energy, with a current focus in Photovoltaic (PV) solar. The Company currently has 15 employees based globally (U.S., Italy, Ireland, Romania and Germany) with its corporate headquarters in Dublin, Ireland. The Company aims to become a leading global IPP in green energy by owning and operating a global network of distributed and connected green energy power parks. Alternus is successfully executing against a focused and proven strategy of acquiring highly profitable, PV solar parks across multiple jurisdictions, thus maximizing macro-environmental factors, which supports long-term solar growth and caters to the ever-growing need for clean renewable energy.

Current portfolio consists of 23 operating PV solar parks in Germany, Italy, Netherlands and Romania, with a total installed capacity of 30.3MW. The operational parks connect directly to national power grids on long-term feed-in-tariffs and green certificate schemes, in addition to power purchase price agreements and avoid approximately 30,000 metric tonnes of greenhouse gas emissions per year, in CO<sub>2</sub> equivalents (see Appendix 1 for calculations).

Alternus is currently in the process of listing on the Merkur Market on the Oslo Stock Exchange for Q4 2020, with an expectation to list on the Oslo Børs Main Market during 2021.

Alternus has cultivated specialist developer partnerships in-country and internationally that have delivered a current pipeline of approximately 1.2GW worth of solar PV parks, to be completed within the lifetime of the Green Bond, in the current operating countries of Germany, Italy, the Netherlands and Romania plus additional projects in Poland, France, Spain, Portugal, Ireland and the UK as illustrated below.

**Alternus – Pipeline/Operational Location Map**



## Company Overview – Environmental Strategy and Policies

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Alternus is committed to growing its portfolio of clean energy solar PV parks across Europe and internationally with a target to own and operate at least 2GW of solar parks by 2025. At this level, the Company will help avoid over 2 million metric tonnes of CO<sub>2</sub> equivalent annual emissions avoidance using current average CO<sub>2</sub> equivalent emissions avoidance achieved with the current park portfolio. This is the Company's core climate target. To date, the growth strategy has primarily involved the acquisition of already operational solar parks in countries where the combination of economic, environmental and political policies is optimized and supportive for long-term solar growth. Going forward, portfolio growth will reflect 95% of newly constructed projects that will be net addition to global CO<sub>2</sub> emissions avoidance capabilities.

Given the current small size of the Company there is currently no formal sustainability framework in place, however the Company is highly aware and conscious of the ever-growing need to mitigate climate change and this is evident by the Company's core strategy to expand its portfolio of clean energy solar PV. This in turn will have a positive impact on the climate and environment as these parks replace fossil fuel energy production infrastructure. Alternus also consistently strives to manage and operate its solar PV parks in the most environmentally friendly and sustainable way possible by partnering with Tier 1 companies such as BayWa r.e. ("BayWa") to carry out its operations and maintenance. BayWa use local operatives where possible and carry out sustainability reporting in which they systemically record energy consumption and CO<sub>2</sub> emissions in accordance with Global Reporting Initiative ("GRI") standards. BayWa is part of the BayWa Group who are globally active across multiple sectors and their approach is guided strongly by the UN Sustainability Goals as referenced in their annual sustainability report. The BayWa Group have also published a climate strategy in 2019 outlining ambitious commitments and goals for the company. As Alternus grows it will continue to partner with leading companies such as BayWa, who themselves are highly conscious and aware of the need to mitigate climate change and who position sustainability at the core of their operations.

Alternus monitors CO<sub>2</sub> equivalent emissions avoidance of their whole portfolio of operational solar PV parks using the leading MeteoControl Performance Monitoring System. This system reports that the Company's currently owned portfolio is contributing to reducing greenhouse gas emissions in CO<sub>2</sub> equivalents by approximately 30,000 metric tonnes on an annual basis.

From an operational standpoint, Alternus already carries out a number of measures in order to reduce environmental impact and lower carbon footprint. The Company's European headquarters in Dublin, which houses the majority of its employees, is 100% powered from renewable energy fully certified by the electricity supplier. In the office itself, only sustainable natural cleaning products are used via a local eco cleaning company and the Company has a waste management system in place whereby all waste is separated and recycled. Alternus strives to be a paperless and plastic free office and if there is a need to use paper, it is from a recycled source. Company cars are fully electric and any future Company cars will follow suit, with the ability to charge on site at the Dublin office location. The Company is in the process of implementing a policy whereby any flights taken for business purposes will be offset in the most responsible manner via climate charities such as Vita, an Irish development partner who collaborate with local farming communities in Africa to facilitate thriving rural climate smart economies. All of the above will be formalised under the below-mentioned sustainability policy framework aimed at being established over the next year.

As Alternus moves forward and expands more into project development and construction with its specialist partners, it is putting a formal sustainability policy framework in place and senior management of the company is fully committed to this activity. Under this framework policy the Company will ensure that all aspects of project development are carried out in a sustainable manner while also mitigating any local environmental and social impact identified under a multi-faceted life cycle assessment which will run alongside the Com-

pany’s project acquisition approval process. As part of this sustainability policy framework, Alternus will further strengthen its strive for responsible procurement when making decisions on partners, contractors and subcontractors in project development. Additionally, the Company will implement an environmental and social management system (ESMS) guided by IFC standards that will reside at the core of group activities and trickle down to project level. Over time, the Company’s goal is to join international initiatives by carrying out sustainability reporting in line with GRI standards. The Company will also use the UN Sustainability goals as a guide to its formal sustainability policy framework document.

Alternus will manage all of the above activities through a dedicated environment and sustainability position within senior management of the Company planned to be appointed during 2021. This person will ensure that all employees will undergo appropriate training to come up to speed with international standards in Life Cycle Assessment and Environmental and Social Management Systems.

## Alternus’ Green Bond Framework

Alternus’ Green Bond Framework is based on the Green Bond Principles published by the International Capital Markets Association (ICMA, 2018), and has been reviewed and approved by [CICERO Shades of Green] in [September] 2020. Accordingly, Alternus will communicate in a transparent manner on the following topics:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

### 1. Use of Proceeds

An amount equal to the net proceeds from the issuance of green financing instruments raised in accordance with this framework, 75% of which will be allocated to the financing of new acquisitions and 25% on refinancing of a pool of “Eligible Projects” in the Renewable energy category. This covers completed and operating ground mounted and rooftop solar PV power plant assets.

Green bond category	Description	Environmental benefits	UN SDG
Renewable energy	<ul style="list-style-type: none"> <li>- Completed and operating solar PV power plant assets.</li> </ul>	<ul style="list-style-type: none"> <li>- Reduction in greenhouse gas emissions.</li> <li>- Climate change mitigation through the use of renewable energy.</li> </ul>	Affordable and Clean Energy (#7)

An Eligible Project may be owned and (re)financed within the structure of a country-specific special purpose vehicle, together with other similar Eligible Projects, which, in turn, are legally owned by Alternus.

Eligible Projects exclude any projects related to fossil fuel-based energy production, transmission, and distribution.

## 2. Process for Project Evaluation and Selection

Eligible Projects to be partly financed with proceeds from Alternus' Green Bonds are evaluated, selected and prioritized by a dedicated Project Acquisition Approval Committee ("PAAC") consisting of members from the business development, strategic planning, operations and senior management teams. Collectively the PAAC team have over 60 years of experience in the acquisition, development and management of renewable energy projects. As mentioned above, as part of the company's growth strategy there will be an environment and sustainability position within senior management of the company that will be a core member of PAAC.

The PAAC team includes the following members:

Senior Management	Operational Management
<ul style="list-style-type: none"> <li>• Vincent Browne – CEO &amp; Chairman</li> <li>• Joseph Duey - CFO</li> <li>• Tali Durant – General Counsel</li> </ul>	<ul style="list-style-type: none"> <li>• Gita Shah – Strategic Planning Manager</li> <li>• Bram Broshuis – Relationship Manager</li> <li>• Stefano Stavrogiannis – Italian Country Mngr</li> <li>• Larry Farrell – VP Operations</li> </ul>

The PAAC team follows a pre-determined and systematic assessment process, involving expert external advisors for additional legal and technical due diligence. Going forward this process will also include environmental and life cycle assessments for new projects as mentioned in the Company overview environmental strategies and policies section of this document. The objective is to affirming project eligibility and compliance with Alternus' Green Bond Framework, and conformance with the Company's financial and commercial ambitions.

The PAAC team hold meetings on a regular basis to determine which projects to progress through the acquisition process and ultimately the acquisition decision, which strives for a consensus decision among its members. The final purchase decision is made by the CEO and CFO based on pre-approval from the PAAC. Larger projects may also require Alternus Board approval.

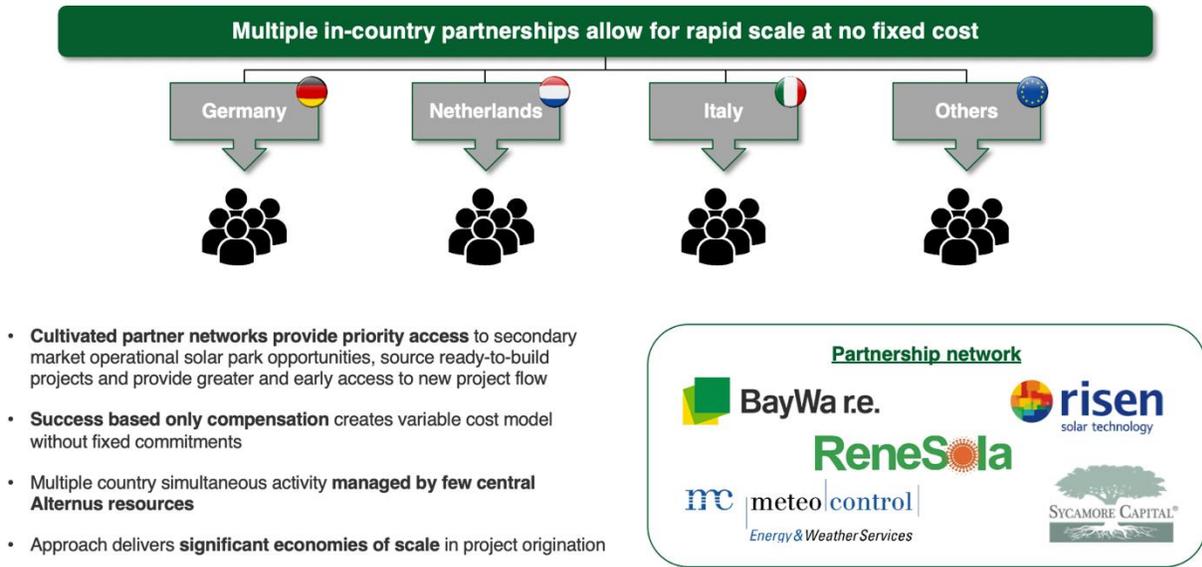
### Distributed Asset Origination

Alternus' current focus is on two streams of project origination:

- I. acquisition of independent operational parks in the secondary market and
- II. collaboration with international strategic partners and in-country local development partners to develop ready-to-build (RTB) and commercially operational projects for long term operation and ownership by Alternus

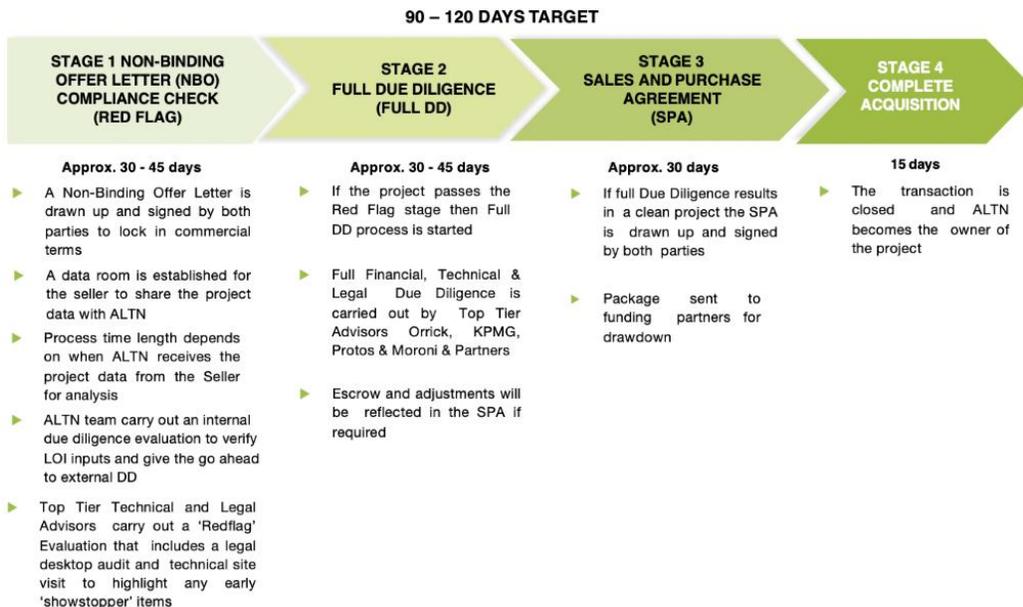
Through its partners the Company has broad and far reaching access to agent networks and project developers and construction companies ("EPC's) that provide numerous investment opportunities in the secondary and pre-operational markets in Europe.

## Distributed Project Origination



## Alternus Advanced Project Acquisition Process for Operational Projects

The Company’s acquisition process ensures that as many risks as possible are eliminated or reduced prior to the closing of an acquisition. Alternus uses Tier 1 law firms (Orrick, Jones Day, Watson Farley & Chimento) as part of its due diligence activities. The Company conducts a preliminary “Red Flag” process to eliminate any major hurdles. This allows the Company to focus only on those projects that have a greater likelihood of closing. Local attorneys then perform a full due diligence on the project to identify any risk related to the current Feed-in-Tariff (FiT) structure, offtake agreements, permitting, environmental, land rights, interconnection and corporate issues. Tier 1 technical groups (Protos, Moroni, Renenco, Baywa, Evergy) are used to perform the technical evaluation of projects. This process also follows a preliminary “Red Flag” methodology to identify any major risks items early, on before a detailed, full due diligence, is performed for projects that are likely to close. The technical due diligence focuses on production estimates, equipment analyses, operating costs and potential risk around interconnect or FIT revocation based on non-compliance issues. Alternus uses leading accounting firms such as KPMG for any financial due diligence required as part of the acquisition process.



## “Finance First” Organisation

Alternus is a “Finance First” run organisation. The Company uses a detailed financial model as a starting point to any evaluation with regards, to individual projects identified, or market entry into new geographic locations. This process allows the Company to quickly eliminate projects that do not meet the Company’s pre-determined set of investment criteria. In this way, the Company is not focused on the emotional side of an acquisition, but rather the economics that drive the business. The PAAC team hold meetings on a regular basis to determine which projects to progress through the acquisition process and ultimately the acquisition decision.

## Operational and Asset Management for Owned Projects

Acquired projects are managed operationally with Alternus’ dedicated operational team who, in turn, manage the specialist service providers contracted to maintain the parks and ensure maximum production levels. Alternus use Tier 1 service providers e.g. BayWa (<https://www.baywa-re.com/en/>) for its operations and maintenance (O&M); BayWa manages over 8.3GW of renewable energy assets worldwide. Alternus entered into a Master Agreement with BayWa to lock in pricing, with price decreasing as more MWs are added. BayWa have a contracted target of 98% performance uptime for the facilities managed. Alternus also use MeteoControl (<https://www.meteocontrol.com/en/>), a world leading performance monitoring solution, to monitor project performance 24/7.

Alternus focuses on being an international green energy power producer and operator over the long term, not a financial fund. Therefore, the Company carries out asset management activities in-house. The Company’s finance function prepares billings, performs revenue assurance and manages the cost for each facility. Local in-country tax experts are used to prepare the required compliance documents. Local operations groups in each country are used to provide real time responses as required and to augment group O&M processes. They are also responsible for liaison with the various landowners and other stakeholders in the projects.

## Insurance

Alternus use the insurance broker Solarif for its insurance needs (<https://www.solarif.nl>). Solarif focuses solely on insurance for solar parks and has been arranging insurance cover for solar projects globally for over 10 years. Given this pedigree, Solarif brings in-depth knowledge about the type and level of coverage required for the various parks relating to type, location and contract types. Ultimately the assets are insured by leading insurance companies. Under these policies, the parks are covered for business interruption, replacement of equipment, and loss of revenue in certain circumstances.

## 3. Management of Proceeds

The net proceeds from Alternus’ Green Bonds will be deposited in the general account and an amount equal to the net proceeds will be earmarked for allocation to the Eligible Projects, in accordance with Alternus’ Green Bond Framework.

Alternus intends to allocate the full amount of the net proceeds within the first 6 months following the issuance of the Green Bonds on a portfolio basis. Pending the allocation or reallocation of the net proceeds, Alternus will place any surplus unallocated proceeds in an ordinary bank account or short-term money market funds until deployed or allocated to an Eligible Project and will report on any unallocated proceeds should that arise in its regular public market reports.

All relevant information regarding the issuance of Green Bonds and projects (re) financed will be monitored and kept in the Company's accounting systems.

#### 4. Reporting

Alternus publishes quarterly financial reports to meet its public market filing obligations. In addition, Alternus will also report at least annually to meet the requirements of ICMA's Green Bond Principles (2018). The first report will be made for the quarter ended December 31, 2020. These reports will include annual reporting on each Eligible Project financed or re-financed by the net proceeds of Alternus' Green Bond issuance(s) and any tap issues. The annual reports will be subject to independent audit by a leading external professional audit firm – such as Grant Thornton.

##### Allocation reporting

- Descriptions of the solar power parks and/or special purpose vehicles financed or refinanced by the net proceeds from the issued Green Bonds, including location and legal entity name.
- Monetary amount allocated to each special purpose vehicle, housing the solar parks, split by Green bond and equity as appropriate.
- Monetary amount of any unallocated net proceeds from the issued Green Bonds.
- Consolidated quarterly balance sheet and income statement of the projects related to the Green Bonds

##### Impact reporting

- Installed capacity of solar power production (in MWs) for each solar plant or special purpose vehicle to which it belongs.
- Consolidated annual solar power generation (in MWhs) for the projects related to the Green Bonds
- Consolidated annual greenhouse gas emissions avoided (metric tons CO2 equivalents) for the projects related to the Green Bonds. See Appendix 1 for details of grid factors used in these calculations.

Where confidentiality agreements, competitive considerations, or a high number of underlying projects limit the amount of detail that can be made available, Alternus will present information in generic terms or on an aggregated portfolio basis (e.g. at the special purpose vehicle level).

## External Review

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### Second-Party Opinion

Alternus has appointed [CICERO Shades of Green] to review the Eligible Green Projects and to provide a Second Party Opinion on its Green Bond Framework. The Second Party Opinion and the Green Bond Framework will be made available on Alternus' website.

### Annual assurance report

The allocation of Green Bond proceeds, adherence to asset selection criteria, and environmental metrics will be reviewed by an independent auditor who will provide a limited assurance. The auditor's report will be made available on Alternus' website.

## Appendix 1

### Environmental Savings CO<sub>2</sub>-eq avoidance:

The higher a country's portion of renewable energy sources in the fuel mix, the lower the CO<sub>2</sub>-eq emissions. The amount of CO<sub>2</sub>-eq avoided as a result of using a PV system depends on the fuel used and respectively the conventional energy used by a county. Each country has a CO<sub>2</sub>-eq factor based on this mix. Alternus uses life cycle assessment emissions factor across its portfolio for the calculation of CO<sub>2</sub>-eq avoidance.

Country	Standard emission factor* (t CO <sub>2</sub> /MWhe)	Lifecycle assessment emission factor* (t CO <sub>2</sub> -eq/MWhe)
Italy	0.483	0.708
Germany	0.624	0.706
Netherlands	0.435	0.716
Romania	0.701	1.084

\*Emission factors taken from European Commission JRC Technical Reports: Covenant of Mayors for Climate and Energy: Default emission factors for local emission inventories - Version 2017

### Calculation for CO<sub>2</sub>-eq avoidance:

Generated electricity in kWh x lifecycle assessment emission factor for CO<sub>2</sub>-eq avoidance in kg/kWh= avoided CO<sub>2</sub>-eq in kg

### Alternus portfolio CO<sub>2</sub>-eq avoidance calculated to July 2020:

2019/2020 YTD	2020 Total Actuals KWH	2019 Total Actuals KWH	2019 CO <sub>2</sub>	2020 CO <sub>2</sub>	
Italy	5318428.2	6898519.48	4884	3765	Mt
Romania	5171591.0	6476760	7021	5606	Mt
Germany	862953.5	1062809.498	750	609	Mt
Netherlands	10082228.0	11449740	8198	7219	Mt
<b>Total</b>	<b>21435200.6</b>	<b>25887828.98</b>	<b>20,853</b>	<b>17,200</b>	<b>Mt</b>