



East Renewable AB (publ) Green Bond Second Opinion

June 12, 2019

East Renewable AB (publ) (“East Renewable”) is a Swedish holding company specialized in developing wind farms in Ukraine. It is currently constructing the 245.7MW Syvashenergoprom wind farm and has additional 743MW of other Ukrainian wind farm projects in the pipeline.

The green bond framework lists eligible projects within the renewable energy category that promote the transition to low carbon, climate resilient growth and sustainable development in Ukraine.

The framework’s underlying project is a 245.7MW onshore wind farm in the Chaplynka district in the Kherson region in Ukraine consisting of 63 wind turbine generators of 3.9MW each. The completed project is expected to meet the electricity needs of approximately 100,000 households and, according to the issuer, is expected to reduce CO₂ emissions by 860,000 tonnes per year compared to the current electricity mix. Construction started in March 2019 and lasts until June 2020. Green bonds under this framework aim to refinance a EUR 60 million bond as well as associated development, operating and interest expenses totaling EUR 75 million.

Proceeds can be allocated to finance equity as well as associated operating costs, advisory fees and other consultancy fees. A small part of the proceeds could potentially also be allocated to general company purposes. The issuer informed us that fossil fuel construction equipment such as diesel generators is used during construction phase.

It is notable that East Renewable is a pure play wind energy company that complies with IFC and EBRD standards. The framework’s underlying project received additional project financing from eight development finance institutions.

The overall assessment of the governance structure to support the implementation of the green bond framework gives it a rating of Good. East Renewable conducted extensive local environmental impact assessments before project initialization. The issuer has in place a sound management and governance structure, as well as regular and transparent reporting of impacts to investors and the public, but does not manage or report construction phase emissions.

Based on the overall assessment of the project types that will be financed by the green bonds, governance and transparency considerations, East Renewable’s green bond framework receives a **CICERO Dark Green** shading. The framework would benefit from application of climate scenarios, ambitions toward managing construction and supply chain emissions, climate resilience assessments as well as life cycle analyses.

SHADES OF GREEN

Based on our review, we rate East Renewable’s green bond framework **CICERO Dark Green**.

Included in the overall shading is an assessment of the governance structure of the green bond framework. CICERO Shades of Green finds the governance procedures in East Renewable’s framework to be **Good**.



GREEN BOND PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the East Renewable's Green Bond Framework dated **May 2, 2019**. This second opinion remains relevant to all green bonds issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the issuer's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence with the issuer. Second opinions are restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO Green is not responsible for an institution's implementation of a framework, nor does it guarantee or certify the climate effects of investments in eligible projects.

Expressing concerns with 'Shades of Green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions of the bonds. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris Agreement. The shades are intended to communicate the following:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of issuer's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the Green Bond Framework. CICERO Green considers four factors in its review of an issuer's governance processes: 1) the policies and goals of relevance to the Green Bond Framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent.



2 Brief description of East Renewable's Green Bond Framework and related Policies

East Renewable AB (publ) (“East Renewable”) is a Swedish holding company that indirectly holds 46.5% of the Ukrainian project company Syvashenergoprom LLC (“Syvashenergoprom”) that is currently constructing a 245.7MW wind farm in the Kherson region of Ukraine. The remaining share is owned by a subsidiary of the Paris based company Total Eren S.A. (“Total Eren”). East Renewable has an additional pipeline of 743MW of other wind farm projects in Ukraine under advanced development. East Renewable is 100% owned by the Oslo based company NBT AS. NBT AS and Total Eren, the parent companies of Syvashenergoprom, are pure play renewable energy companies. While NBT AS focuses solely on developing wind farms in emerging markets such as China and Ukraine, Total Eren focuses more broadly on wind, solar and hydro assets. Currently, Total Eren has 1,600MW of renewable power generation in operation or under construction and has a project pipeline of 2,000MW.

Environmental Strategies and Policies:

East Renewable as well as NBT AS and Total Eren are renewable energy pure play companies. East Renewable aims to support the Ukrainian target of 25% renewable energy by 2035 compared to 1% today. The wind farm project that is subject to this green bond framework has achieved financial close and has drawn funding from EBRD, the Netherlands Development Finance Company (FMO), Green for Growth Fund, NEFCO, Proparco, Black Sea Trade and Development Bank, IFU and Finn Fund and, therefore, conforms to EBRD Performance Standards, the Equator Principles and has also received extensive environmental and social scrutiny¹. NBT AS and EBRD have disclosed the documents from the Environmental and Social Impact Assessment (ESIA) on their websites. This package was prepared within the Environmental and Social Due Diligence that was conducted by an independent consultant. Despite not having implemented TCFD recommendations, East Renewable informed us that they are well equipped to address physical climate risks such as heat stress, extreme rainfall, sea level rise, drought and other climate risks. East Renewable informed us that they have in place a comprehensive property & casualty insurance policy that includes protection against flooding, extreme storms, snowfall and other natural events as well as a 15+5 year warranty as well as maintenance service from the wind turbine supplier covering, e.g., necessary repairs due to climate related increased wind turbulence.

The Ukrainian project company Syvashenergoprom has a dedicated CSR strategy, that includes detailed assessments of current status and impacts on sustainable development of involved local communities and impacts on other stakeholder groups such as authorities, civic organizations and media. This includes monitoring and efficiency audits during the implementation. Results will be made publicly available. In addition, an Environmental and Social Action Plan (ESAP) has been developed, which, among others, requires development of a cumulative impact assessment (CIA) to ensure the environmental integrity of the project. East Renewable informed us that construction emissions are focused on fugitive dust and is part of its Dust Management Plan while greenhouse gas emissions from construction are covered indirectly: the Traffic Management Plan indicates the number of vehicles required for construction with up to 52 heavy trucks for components and crane erections as well as up to 100 concrete transport trucks per wind turbine. Supplementary external ecological assessment was conducted to evaluate possible impacts, e.g., on habitats, bats, mammals, fauna and biodiversity. Additional

¹ <https://www.ebrd.com/work-with-us/projects/esia/east-renewable-energy-syvash-wind-project-ukraine.html>



suggested requirements, such as the independent monitoring on impacts on birds and bats, have been implemented. As most of the project site is dominated by agricultural land, Syvashenergoprom committed to activities, such as allocating EUR 20,000 per year to cover fodder for livestock in case of loss to grazing land during construction as well as to monitor construction impact on herders' livestock.

Use of proceeds:

According to the green bond framework, proceeds will be used to finance or refinance assets that fall in the environmental areas included in East Renewable's green bond framework. Green bonds under this framework aim to refinance a EUR 60 million bond (ISIN NO0010841794) as well as associated development, operating and interest expenses totaling EUR 75 million. Proceeds can be allocated to finance equity as well as associated operating costs, advisory fees (e.g., for the investment bank Arctic Securities) and other consultancy fees.

East Renewable excluded investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defence, mining, gambling or tobacco. The issuer informed us that fossil fuel construction equipment such as diesel generators is used during construction phase.

The framework's underlying project is an onshore wind farm in the Chaplynka district in the Kherson region in Ukraine consisting of 63 wind turbine generators of 3.9MW each. Construction started in March 2019 and lasts until June 2020. The construction of the wind farm includes approximately 71km of onsite roads, access roads from the highway, grid connection, construction compound, control rooms and the wind turbines itself. The issuer informed us that the nacelles will be delivered to Port Olvia, Ukraine, from Rostov, Germany, via ship and the towers and blades from Turkey via ship before both are transported with heavy-load vehicles to the construction site. According to the project brief, there will be up to 350 workers on site, which requires a temporary compound, a parking area and a generator with fuel storage. The completed project is expected to meet the electricity needs of approximately 100,000 households and, according to the issuer, is expected to reduce CO₂ emissions by 860,000 tonnes per year compared to the current electricity mix.

Selection:

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green bond funding. The broader the project categories, the more importance CICERO Green places on the governance process.

For this green bond, the eligible projects are the refinancing costs of a wind farm project in Ukraine and associated costs. The major part of the selection process, therefore, has already been conducted. The issuer informed us that a competitive tender process for suppliers has been carried out to select EPC contractors meeting IFC and EBRD standards as well as complying with the Equator Principles. East Renewable informed us that the wind turbine supplier does not provide life cycle analysis. Additional decisions regarding construction details will be suggested by the responsible project director and the engineering company under contract. The issuer informed us that currently all wind turbines are still under construction.

Eligible projects are selected by the executive management team in cooperation with the investment committee, which consists of members of the board of directors. The issuer informed us that decisions will be made in consensus between the project director, the engineering company under contract and the owners' representatives. According to the issuer, environmental issues will be subject to additional scrutiny by environmental experts of the engineering company under contract. The issuer informed us that upcoming decisions will have to comply with the carried out environmental due diligence and are expected to have mostly negligible environmental impact or



are of technical or procedural nature. Internal investment policies stipulate that research and technical studies have to be conducted to ensure projects comply with local market regulations. According to the issuer, these studies include follow-up bird studies for spring and fall migration conducted by ornithologists and consultants.

In general, East Renewable solely invests in wind power projects that meet IFC and EBRD performance standards as well as Ukraine standards for environmental impact assessments, are bankable and have attractive equity returns.

Management of proceeds:

A dedicated, segregated account will be credited in the event that not all net proceeds are fully allocated directly to eligible projects. The account will be managed by East Renewable's Finance Department. Funds are quarterly deducted from the separate account and allocated to eligible projects approved by the Finance Department as long as green bonds are outstanding and the separate account has a positive balance.

East Renewable expects to have no or almost no unallocated proceeds. In case unallocated proceeds remain, they will be used for general company purposes and operating expenses of East Renewable.

Reporting:

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green bond programs. Procedures for reporting and disclosure of green bond investments are also vital to build confidence that green bonds are contributing towards a sustainable and climate-friendly future, both among investors and in society.

East Renewable will publish annual reports on allocation of proceeds as well as the project impact including qualitative performance indicators such as electricity production and avoided tons of CO₂. Both reports will be made available on the East Renewable's website.



3 Assessment of East Renewable’s Green Bond Framework and Policies

The framework and procedures for East Renewable green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in East Renewable’s Green Bond Framework, we rate the framework **CICERO Dark Green**.

Eligible projects under the East Renewable Green Bond Framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Renewable Energy 	Syvashenergoprom’s 245.7MW wind farm in southern Ukraine	Dark Green <ul style="list-style-type: none">✓ Wind power is key to a low-carbon transition.✓ Should manage supply-chain emissions and emissions from construction and maintenance.✓ Wind projects can have adverse local environmental impacts and impacts on local communities. The issuer has conducted extensive local environmental impact assessments before project initialization.

Table 1. Eligible project categories



Background

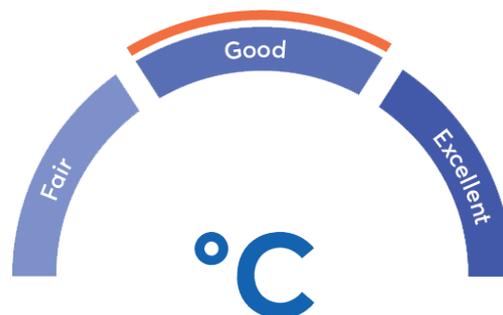
In 2017, global renewable electricity generation grew 6% and reached a quarter of global power output, thanks to the continued growth of solar PV and wind technologies. Despite these positive trends (especially with PV), additional efforts are needed in renewable power generation to meet the targets set out in the IEA's SDS. According to the IEA, the share of renewables in global electricity generation must reach 47% by 2030, up from 25% in 2017.² The IEA's Sustainable Development Scenario (SDS) suggests a global wind power generation of 14,100TWh in 2040 up from 1,500TWh in 2017.³

In 2016, Ukraine's electricity was mainly generated by nuclear (49.2%) and coal (37.2%), while renewable electricity supply was below 7%.⁴ According to Ukraine's 2050 Low Emission Development Strategy, the energy sector currently contributes 65% of total greenhouse gas (GHG) emissions. Ukraine aims to achieve 31-34% GHG reduction compared to 1990 levels.⁵

Governance Assessment

Four aspects are studied when assessing East Renewable's governance procedures: 1) the policies and goals of relevance to the Green Bond Framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

East Renewable has in place a sound management and governance structure, as well as regular and transparent reporting about green bond project achievements to investors and the public. East Renewable is a pure play special purpose company developing and operating wind farms. For this framework extensive local environmental impact and protection studies have been conducted. The project addressed by this framework complies with the environmental financing requirements from eight development finance institutions, has policies for selection of suppliers in place and involved comprehensive environmental screenings as well as project adaptations before commencement of construction. East Renewable will decide on upcoming construction and operation aspects in consensus and based on environmental studies conducted before and during the project. It will report on allocation and impact of the wind farm to the investors. The overall assessment of the governance structure of East Renewable gives it a rating of **Good**. The framework would benefit from application of climate scenarios, ambitions toward managing construction and supply chain emissions, climate resilience assessments as well as life cycle analyses.



² <http://www.iea.org/tcep/power/renewables>

³ <https://www.iea.org/weo2018/scenarios/>

⁴ <https://www.iea.org/statistics/?country=UKRAINE&year=2016&category=Electricity&indicator=undefined&mode=chart&dataTable=ELECTRICITYANDHEAT>

⁵ <https://unfccc.int/node/181275/>



Strengths

East Renewable has in place strong requirements regarding the selection process of suppliers, such as mandatory compliance with IFC/EBRD standards and Equator Principles constituting a clear strength of the framework. In addition, the level of screening regarding local environmental impact, feasibility and community impacts aligns with best practice expectations. The scrutiny, that is also in line with the expectations of the various involved development finance institutions provides investors with additional assurance of the environmental integrity of the green bond framework. The issuer informed us that location adjustments of wind turbines were implemented as a response to the environmental impact assessments and potential exposure to flood risks.

Wind energy in Ukraine constitute a crucial part of Ukraine's energy transition. The issuer informed us that the wind farm's new access roads will be gravel roads that mostly will be dead end roads. They will be closed to the general public, made available for the local community (e.g., for agricultural equipment) and maintenance crews for the wind farms. This is a strength of the process since it effectively avoids unintended negative rebound effects due to potential increase of local fossil fuel based traffic.

By focusing on one project, describing the underlying green bond investments specifically and elaborating on associated fees and operating costs, the framework effectively strengthens transparency to investors. This is a clear strength of the framework.

Weaknesses

The framework does not include any requirements regarding emissions from vehicles and on-site diesel generators during the construction and maintenance process. This framework also allows for the use of unallocated proceeds for general company purposes. However, the issuer informed us that there will be no or very little proceeds for general corporate purposes.

Pitfalls

Despite having in place best practice screening procedures of local environmental impact, and comprehensive insurance and warranty policies, the framework would benefit from requiring transparent application of climate scenarios regarding anticipated changes in flooding and wind levels due to climate change. Since the wind farm is built in close proximity to water, climate change could pose a threat to the framework's underlying project's long-term overall positive impact. The issuer informed us that due to potential flood risks adjustments were made to site design and some wind turbines were moved to lower flood risk areas. Insurance and warranty policies provide investors with some financial security; however, insurances often don't cover all indirect costs. In addition, reporting does not include construction and supply chain emissions and does, currently, also not require external verification or audit. We encourage the issuer to manage and monitor climate impact of construction and maintenance operations.

Besides equity, proceeds can be used to finance, or refinance fees and operating costs. East Renewable is encouraged to adopt, where possible, the relevant best practice of the GBPs also for these costs (e.g. report on what type of costs proceeds have been allocated to).



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
0	East Renewable Green Bond Framework May 2, 2019	East Renewable's Green Bond Framework 2019
1	Corporate Social Responsibility programme (CSR) for SyvashEnergoProm LLC	SyvashEnergoProm LLC's strategy paper for social and environmental responsibility
2	Acknowledgement of Budget Allocation – SyvashEnergoProm LLC	Document shows SyvashEnergoProm LLC's acknowledgement to allocate budget in case of loss of grazing land and monitoring livestock impacts
3	Press release from April 18, 2019	"Total Eren & NBT secure the financing for the second phase of the 250MW Syvash wind project in Ukraine"
4	Syvash WPP 250MW – Project Brief	Project Description and grievance redress mechanism of the SyvashEnergoProm LLC's wind farm project
5	Preliminary Environmental and Social Impact Assessment (ESIA), May 22, 2018	ESIA report for the preliminary layout of the Syvash Wind Farm
6	Environmental and Social Impact Assessment (ESIA) Addendum, November 21, 2018	ESIA Addendum report for the final project layout of the Syvash Wind Farm
7	Cumulative Environmental and Social Impact Assessment (ESIA), May 22, 2018	ESIA cumulative report for the preliminary project layout of the Syvash Wind Farm
8	Environmental and Social Action Plan (ESAP), May 22, 2018	ESAP of the Syvash Wind Farm
9	Syvash Supplementary Ecology Report, September, 2018	External ecological assessment of the wind farm project
10	Dust Management Plan	Requirements for the management of soil-derived dusts during construction of the Syvash wind farm power project
11	Traffic and Transport Management Plan	Traffic and transport management arrangements and requirements for the construction of the Syvash wind farm power project
12	Stakeholder Engagement Plan, May 22, 2018	Stakeholder engagement plan for the construction of the Syvash wind farm power project



Appendix 2: About CICERO Shades of Green

CICERO Shades of Green (CICERO Green) is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

