



# Østfold Energi AS

## Green Bond Second Opinion

May 12, 2022

**Østfold Energi AS (“Østfold Energi”)** is a Norwegian energy producer owned by municipalities in the county of Viken, primarily active in hydropower, district heating, and wind power. Østfold Energi also pursues development opportunities in other sectors including solar, battery storage, and carbon capture and storage. In 2020, Østfold Energi generated around 2,200 GWh from hydropower, district heating, and wind (around 96% was from hydropower).

**Proceeds under the framework can be allocated to two project categories: i) renewable energy (hydropower, wind, and solar), and ii) energy efficiency (district heating).** Østfold Energi expects proceeds from the first bond under the framework to refinance hydropower (70%), solar (20%), and district heating (10%) investments. Renewable energy – including hydropower, solar and wind – is key to a low carbon transition. District heating systems under the framework must have at least 95% renewable inputs (up to 5% inputs can be fossil fuel based, necessary during peak load etc.). Proceeds can also be used by Østfold Energi’s subsidiaries and companies in which it owns a minority share, as well as to purchase share capital of companies. Although, according to Østfold Energi, it only invests in pure play companies that contribute to the transition, it is not a given that these companies consider climate and environmental risks in the same manner as Østfold Energi (e.g. biodiversity).

**CICERO Green assesses that Østfold Energi is likely aligned with relevant EU Taxonomy mitigation criteria.** We note, however, that Østfold Energi: i) estimates that its hydropower and geothermal district heating facilities are below the required lifecycle emission thresholds, and ii) assumes that its bioenergy inputs satisfy the relevant requirements of the Renewable Energy Directive. Østfold Energi should be more systematic on the durability and recyclability of materials to align with the Do No Significant Harm criteria for transition to a circular economy. While Østfold Energi is likely aligned with the EU Taxonomy’s minimum social safeguards, we recommend it more proactively consider possible social risks in its supply chain.

**Østfold Energi has relevant policies in place to support the realization of the framework, but could benefit from greater consideration of supplier and construction emissions, and end of life of provisions for wind and solar investments.** Østfold Energi has a good selection process in place: we welcome the involvement of the Head of Sustainability in the process.

Based on the overall assessment of the eligibility criteria in this framework, governance and transparency considerations, this framework receives an overall **CICERO Dark Green** shading and a governance score of **Good**. Østfold Energi could improve its framework by more systematically considering lifecycle emissions in supplier selection – we therefore welcome that it has recently initiated an internal project in this regard.

### SHADES OF GREEN

Based on our review, we rate the Østfold Energi’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 Østfold Energi’s framework to be **Good**.



### GREEN BOND PRINCIPLES

Based on this review, this framework is found to be aligned 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 client's framework dated May 2022. This second opinion remains relevant to all green bonds and/or loans 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 client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

## 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. 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.

### 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

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green financing are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client'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. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



## 2 Brief description of Østfold Energi's green bond framework and related policies

Østfold Energi AS (“Østfold Energi”) is a Norwegian energy producer owned by municipalities in the county of Viken. Primarily active in hydropower, district heating, and wind power, it also pursues business development opportunities in other sectors including solar, battery storage, and carbon capture and storage.

In 2020, Østfold Energi generated around 2,200 GWh from hydropower, heat, and wind. Østfold Energi owns seven hydropower plants and at least 50% of three others in various parts of Norway, which together produce around 2,000 GWh annually (representing around 96% of Østfold Energi's total energy production). Østfold Energi also owns and operates six district heating systems in Viken, which together produce around 50-55 GWh annually. One system is connected to a waste-to-energy plant, while two others use wood chips as their energy source. The remaining three systems use heat pumps to circulate industrial waste heat and geothermal heat. In respect of wind power, Østfold Energi owns 50% of Kvalheim Kraft – the owner of the 74 GWh capacity Mehuken onshore wind farm in western Norway – and 50% of Zephyr, a Norwegian developer which in Norway has built wind farms with combined 700 MW capacity and operates wind farms with 500 MW capacity.

### Environmental Strategies and Policies

In its corporate strategy for 2022-7, Østfold Energi introduced a target to reduce its own CO<sub>2</sub> emissions by 67% by 2027 (with a 2019 baseline). Measures Østfold Energi is introducing or exploring to achieve this target include the electrification of activities (especially district heating), the use of carbon capture and storage at its waste to energy facility, and a focus on procuring services from suppliers with higher environmental performance. Østfold Energi aims to increase its production of renewable energy by 150 GWh by 2030 (primarily from hydropower and solar), and for its development companies to develop and sell 300 MW of wind and small-scale hydropower capacity by 2027. Østfold Energi previously had a target to be carbon neutral by 2020 without using offsets, but according to its latest report was not able to reach this target.

In 2020, Østfold Energi reported Scope 1, 2 and 3 emissions for itself and any company of which it owns at least 50%, amounting to 14,380 tCO<sub>2</sub>e. Scope 1 emissions totaled 4,302 tCO<sub>2</sub>e, primarily from the combustion of materials in its district heating process, with waste incineration its single largest source of direct emissions. Scope 2 emissions totaled 417 tCO<sub>2</sub>e, primarily from electricity use in energy-production, while Scope 3 emissions totaled 9,659 tCO<sub>2</sub>e, arising from work travel and waste from its own operations, as well estimated annual share of the lifecycle emissions (including construction emissions) for its hydropower, wind, solar and district heating activities. Such lifecycle emissions are estimated based on key figures/metrics and using a proxy table for different NACE codes provided by the Norwegian Institute for Sustainability Research (NORSUS).

Østfold Energi has some environmental requirements in its general procurement policy, for example in respect of the use of environmentally certified products (including timber) where possible. According to its standard tender terms, for the purchase of goods, suppliers must provide information on such products, while the document states it is desirable that all suppliers measure their own emissions in accordance with the GHG Protocol and document their own environmental and climate strategies. The extent to which these factors impact supplier selection is unclear. Østfold Energi's corporate strategy includes focus on improving sustainable procurement practices in the future. Indeed, Østfold Energi informed us that it has initiated an internal project regarding this, for example it suggested including a change of weighting of environmental factors in the procurement criteria for construction projects or the acquisition of equipment.



In respect of biodiversity, Østfold Energi performs environmental impact assessments for all hydropower, solar and wind projects, and such considerations are important parts of the licensing process, including for district heating.

Østfold Energi informed us that it engages with potential local opposition during the licensing process, and considers having good relationships with local stakeholders to be very important. For example, it informed us of a recent project where local landowners became shareholders in a project, and another project where it provided comfort to local fishermen on its approach to biodiversity to mitigate local opposition. While it expects some resistance to its solar projects (given the amount of land required for such farms), Østfold Energi aims to mitigate this by seeking to locate the plants on land with little public value (e.g. gravel pits).

In respect of climate resilience, Østfold Energi emphasizes the strict regulatory requirements in this respect, for example, according to Østfold Energi, licenses for district heating, wind and solar PV facilities in Norway set out climate adaptation requirements. It also provided us with an example of its own approach to climate resilience, namely it recently upgraded one of its reservoirs to ensure soundness against potential climate-change induced flooding. In its resiliency considerations, it uses climate scenarios (in the case of the reservoirs, 100/200-year flooding scenarios). Østfold Energi does not currently report in line with TCFD recommendations.

Østfold Energi produces an annual sustainability report which it publishes on its website.

### Use of proceeds

Proceeds under the green bond framework will finance or re-finance assets and projects related to renewable energy (electricity generation from solar, wind or hydropower) or energy efficiency (district heating facilities or infrastructure). 100% of proceeds from the first green bond issued under the framework are expected to be used for refinancing, and it expects to allocate 70% of proceeds from this bond to hydropower, 20% to solar, and 10% to district heating. Investments are limited to Europe.

Investments can include the acquisition of assets and projects, as well as investments in share capital of companies with such assets and where the use of proceeds should be directly linked to the book value of the eligible assets owned by the acquired company, adjusted for the share of equity acquired. Østfold Energi has confirmed that such investments are limited to pure play companies and that its investment principles only allow investments in companies which contribute to the transition.

Proceeds can be used by Østfold Energi and its subsidiaries, as well as companies in which owns a minority share. Østfold Energi's environmental principles document states that it will influence its partly owned companies to achieve the same environmental standards as it does, which it can do via its ownership and board positions.

Proceeds can be used for both CAPEX and OPEX, though Østfold Energi does not currently anticipate any proceeds being used for OPEX. In the case of operating expenditures, a three-year look-back period will be used.

Østfold Energi excludes investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defence, potentially environmentally negative resource extraction, gambling or tobacco.



### 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 finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Østfold Energi's Investment Committee, consisting of its executive management team, is responsible for the evaluation and selection process. The Investment Committee makes decisions by consensus. As part of the selection process, Østfold Energi's Head of Sustainability will present an environmental analysis to the Investment Committee for its consideration.

The Investment Committee determines whether a project or asset complies with the use of proceeds criteria. The green bond framework furthermore sets out eight questions which are required to be reviewed for each investment opportunity, including how an investment contributes to Østfold Energi's ambitions to reduce GHG emissions, reduce environmental impacts and sustain biodiversity. According to Østfold Energi, the identification and consideration of environmental risks is a factor throughout the entire investment process, begun well before the decision of the Investment Committee to allocate proceeds issued under the framework.

The Investment Committee will keep a register of investments financed under the framework and document and file its decisions.

### Management of proceeds

CICERO Green finds Østfold Energi's management of proceeds to be in accordance with the Green Bond Principles and Green Loan Principles.

Østfold Energi will earmark an amount equal to the net proceeds for financing or refinancing assets or projects which comply with the use of proceeds criteria, and endeavor to ensure that the value of such assets or projects exceed the total nominal amount of outstanding green bonds.

Proceeds from green bonds awaiting allocation to eligible assets or projects will be held as cash and short-term money market instruments. To the extent possible, the exclusions listed for use of proceeds also apply to such temporary investments.

### Reporting

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

Østfold Energi will publish a green bond report on its website annually if there are green bonds outstanding or until full allocation. The green bond report will include information on allocation and impact.

In respect of allocation, Østfold Energi will report: 1) the amounts invested in each project category and the share of financing versus re-financing, 2) CAPEX / OPEX share, 3) assets or projects funded by green bonds, 4) nominal amount of green bonds outstanding, 5) the amount of proceeds awaiting allocation, and 6) information on possible relevant changes/developments to the EU Taxonomy.



In respect of impact, the framework states this aggregated for each project category and, on a best effort basis, align with the portfolio approach described in ICMA's Handbook – Harmonized Framework for Impact Reporting. The framework contains some example metrics, namely energy generation capacity, actual annual energy generation, and annual reduction and/avoidance of GHG emissions. Østfold Energi will be transparent on methodologies and assumptions e.g. grid factors. In the case of partially owned companies, Østfold Energi will report only the impacts relating to its ownership share.

We understand there will be no external verification or review of the green bond report.





### 3 Assessment of Østfold Energi's green bond framework and policies

The framework and procedures for Østfold Energi's green finance 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 Østfold Energi 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 Østfold Energi's green bond framework, we rate the framework **CICERO Dark Green**.

#### Eligible projects under the Østfold Energi's 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 and financings 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	Development, construction, installation, operation, improvement, repair and maintenance of facilities as well as the related infrastructure, connected to the generation of electricity from wind power, solar power and hydro power projects subject to a power density above 5W/m <sup>2</sup> or life-cycle emissions below 100 g CO <sub>2</sub> e/kWh, or run-of-river plants without artificial reservoirs.	<b>Dark Green</b> <ul style="list-style-type: none"><li>✓ Renewable energy – including hydropower, solar and wind – is key to a low carbon transition.</li><li>✓ Østfold Energi expects to allocate 70% of proceeds from its first bond under the framework to hydropower, and 20% to solar (no investments in wind are currently expected under this bond).</li><li>✓ Wind projects can be onshore and offshore, and solar projects can include solar PV farms and panels on rooftops. Østfold Energi does not currently have any plans to develop new, greenfield hydropower projects, though it does have ongoing projects to increase the capacity of certain existing hydropower projects.</li></ul>





- ✓ Hydropower, solar and wind projects provide clean, renewable energy, however they entail certain risks and potential environmental impacts that should be mitigated.
- ✓ Renewable energy projects can carry biodiversity and local environmental risks. Østfold Energi has confirmed all projects are or will be covered by Environmental Impact Assessments, that biodiversity considerations are considered in investments decisions, and that these are also part of the licensing process. Its green bond framework contains an example of its approach to biodiversity, namely in respect of salmon and trout in the Lærdal river.
- ✓ Renewable energy projects entail construction and lifecycle emissions. Though it aims to increase its focus on such emissions in its procurement process, Østfold Energi is not systematically seeking to limit these, for example via lifecycle analysis in solar panel selection. Østfold Energi considers that its hydropower projects are significantly below the 100 g CO<sub>2</sub>e/kWh lifecycle emissions threshold and that no fossil fuel equipment or vehicles (e.g. for maintenance) will be financed by proceeds issued under the framework.
- ✓ End of life should be an important consideration in respect of wind farms and solar installations. Østfold Energi informed us of certain measures it is taking in respect of this (e.g. in respect of solar, recyclability is part of the assessment process in project planning) however it acknowledged it can be more active in this regard and will increasingly push its subsidiaries and investments companies in this respect. Indeed, Østfold Energi informs us it anticipates extending the lifetime of a facilities rather than decommissioning.
- ✓ Renewable energy projects can engender local opposition. Østfold Energi seeks good relations with stakeholders and takes practical



approaches to achieve this where possible, for example it aims for its solar plants to be on land with little public value. Nonetheless, risks remain which can be difficult to mitigate: investors should be aware that in 2021, the Norwegian Supreme Court stripped two Norwegian wind farms of their licenses given the interference with the rights of the indigenous Sami people, with similar decisions possible in other Nordic jurisdictions.

- ✓ In respect of physical resilience to climate change, Østfold Energi pointed out that Norwegian licensing requirements are strict in this regard, and that it also used climate scenarios to test its assets (e.g. reservoir flood risks).
- ✓ As part of ‘related infrastructure’ a small share of proceeds can (re)finance transmission lines from a power generation facility to the grid. Though typically shorter in distance than distribution lines, these nonetheless carry certain environmental risks, for example if they run through forests, and are often exposed to extreme weather.
- ✓ ‘Related infrastructure’ can also include the construction of access roads – these can have environmental impacts and induce car use.

Energy  
Efficiency



Development, construction, installation, operation, improvement, repair and maintenance of facilities, as well as the related infrastructure, connected to district heating and cooling where at least 95 per cent of the fuel comes from renewable sources such as sustainably certified wood chips, geothermal heat and waste heat from nearby industries.

Waste-to-energy facilities which are mainly fuelled by residues from households and/or commercial activities will not be included.

**Medium Green**

- ✓ Depending on their inputs and mitigation of other climate risks, district heating and cooling networks can be beneficial sources of heat and cool.
- ✓ Østfold Energi expects to allocate 10% of proceeds from its first bond under the framework to district heating and cooling.
- ✓ Up to 5% of the fuel source can be fossil based. Østfold Energi has confirmed this is necessary for during peak load (e.g. during unpredictably cold winters) etc.



- ✓ The use of certifications reduces certain risks relating to supply chain sustainability. Østfold Energi's two current bio-waste district heating facilities use wood chips from PEFC certified forests. Østfold Energi has furthermore confirmed that these wood chips derive from thinning wood with little or no alternative value.
- ✓ There are associated emissions from the transport of inputs to the facilities. Local sourcing will be prioritized.
- ✓ District heating and cooling facilities also entail construction and lifecycle emissions. As for its renewable energy projects, Østfold Energi could more systematically consider these, and we welcome its intention to focus on supplier and construction emissions during procurement.
- ✓ Østfold Energi confirmed the same considerations of climate resilience apply to its district heating activities as for its renewable energy projects i.e. covered by the licensing process and assessed separately.

Table 1. Eligible project categories

## Background

In February 2020, Norway released updated targets for 2030 to cut emissions by 50-55% from 1990 levels<sup>1</sup> and in 2021 adopted a climate plan outlining the policies to be implemented to reach the target. Greenhouse gas emissions have slightly decreased in Norway since 2015, but 2020 emissions were less than 4% lower than 1990 levels. Fast action is needed to reach the new 2030 goal.

As one of the world's largest energy exporters, Norway has a total installed production capacity of 37,680 MW and a total normal annual production of 153 TWh. Around 96% of Norway's energy production comes from hydropower and currently has more than 800 reservoirs, with a storage capacity equivalent to around 87 TWh.

However, with demand expected to increase by 5.8 TWh due to increased electrification of industry and transport, there has been increased focus on the production of wind power and other energy sources. As such, production of wind power in Norway increased almost six-fold over the last decade and now accounts for roughly 2% of its energy mix. Nonetheless, this has not been universally welcomed across Norway, where onshore wind is particularly controversial. Local environmental factors such, such as interference with the landscape, are often cited by critics. Indeed, opposition to onshore wind farms has proved so strong that Norway has a moratorium for

<sup>1</sup> <https://www.regjeringen.no/no/aktuelt/norge-forsterker-klimamalet-for-2030-til-minst-50-prosent-og-opp-mot-55-prosent/id2689679/>



new wind projects and, in 2021, the Norwegian Supreme Court stripped two Norwegian wind farms of their licenses given the interference with the rights of the indigenous Sami people.<sup>2</sup>

Another source of energy generation in Norway comes from district heating, where the gross generation of energy in Norway's district heating plants was 6.5 TWh in 2020. This energy is largely delivered as heat. The fuel mix of these plants contains fossil fuels, woodchips and other wood materials, bio-oils, waste-heat, electricity and waste. Waste accounted for an average of around 50% of all district heating generation (GWh) in Norway in 2020.<sup>3</sup>

## EU Taxonomy

The EU Taxonomy, which entered into force in 2021, seeks to set out common classification systems to determine the environmental sustainability of activities. The EU-taxonomy regulation<sup>4</sup> defines six environmental objectives. To be considered environmentally sustainable, an activity must substantially contribute to one or more of the six objectives, not significantly harm any of the other six objectives (Do-No-Significant-Harm - DNSH) and comply with the technical screening criteria (TSC). In June 2021, EU published its delegated acts outlining the TSC for climate adaptation and mitigation objectives.<sup>5</sup> The DNSH-criteria are developed to make sure that progress against some objectives is not made at the expense of others and recognizes the relationships between different environmental objectives.

CICERO Green has assessed eligible projects in Østfold Energi's green bond framework against the mitigation thresholds and the DNSH criteria for relevant activities in the delegated act adopted in June 2021 (Annex 1). To qualify as a sustainable activity under the EU regulation certain minimum safeguards must also be complied with.<sup>6</sup> We take the sectoral, regional and judicial context into account and focus on the risks likely to be the most material social risks.

Relevant EU-Taxonomy activities are:<sup>7</sup>

- Electricity generation from solar photovoltaic technology
- Electricity generation from wind power
- Electricity generation from hydropower
- District heating/cooling distribution
- Production of heat/cool from geothermal energy
- Production of heat/cool from bioenergy
- Production of heat/cool using waste heat

Comments on alignment as well as thresholds and NACE-codes are given in Appendix 2.

CICERO Green assesses that all the project categories are likely aligned with the substantial contribution to climate change mitigation criteria in the EU Taxonomy. Investors should however note three things:

- Firstly, Østfold Energi estimates it satisfies the lifecycle emissions threshold for hydropower projects. It references a study performed in 2019 by the Norwegian Institute for Sustainability Research (NORSUS)

<sup>2</sup> <https://www.reuters.com/world/europe/two-norway-wind-farms-lose-licence-landmark-ruling-over-indigenous-rights-2021-10-11/>

<sup>3</sup> Ibid.

<sup>4</sup> EU-Taxonomy regulation (2020/852), <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN>

<sup>5</sup> [taxonomy-regulation-delegated-act-2021-2800-annex-1\\_en.pdf](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021D0280&from=EN) (europa.eu)

<sup>6</sup> The safeguards entail alignment with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation's ('ILO') declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights.

<sup>7</sup> We do not separately consider Østfold Energi's transmission activities given these are only undertaken on account of its production of renewable energy and given this represents a very minor use of proceeds.



on Norwegian hydropower, which calculates average lifecycle emissions of around 3.3g CO<sub>2</sub>e/kWh. This paper does not use the same methodology as the EU Taxonomy; however we nonetheless believe it is unlikely that Østfold Energi's actual emissions are close to the EU Taxonomy threshold.

- Secondly, Østfold Energi has not calculated emissions savings from bioenergy use in its district heating facilities and assumes alignment with the relevant requirements of the Renewable Energy Directive. We assess Østfold Energi likely aligned on the basis that it uses certified wood chips and given that wood chips transported less than 500 km are generally under the relevant emission threshold. We assume this transportation distance is applicable here given Østfold Energi's commitment to prioritizing locally sourced biomass.
- Thirdly, Østfold Energi also estimates its geothermal district heating facilities are under the required lifecycle emission thresholds.

CICERO Green has been unable to fully conclude on alignment on pollution prevention and control in respect of district heating/cooling distribution. Here, the EU Taxonomy requires 'fans, compressors, pumps and other equipment used which is covered by Directive 2009/125/EC comply, where relevant, with the top-class requirements of the energy label, and otherwise comply with implementing regulations under that Directive and represent the best available technology'. Given Østfold Energi states it uses best available technologies, it is likely aligned with this requirement in the criteria, however there is not enough information to conclude on compliance with the top-class requirements of the energy label under the Directive.

Subject to the gap in respect of circular economy principles set out below, Østfold Energi appears to be likely aligned with the relevant DNSH criteria. While we have assessed it is likely aligned in respect of climate change adaptation for all EU Taxonomy activities, Østfold Energi could provide more information to substantiate that its methods are based on best practice.

### *Main gaps*

#### *Transition to a circular economy*

In respect of wind, solar, and the production of heat/cool from waste heat, the EU Taxonomy requires that 'the activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish'. Østfold Energi has stated that (for wind and solar projects) it does or will have plans for decommissioning which may extend to recycling. However, the primary option is to extend the life of the asset by renewing the power purchase contract. In respect of district heating, it confirmed it expects suppliers to provide components of high durability. While these are welcome steps, the taxonomy requires a more systematic and ambitious approach to durability and recyclability, which should be woven into project design and should play a larger role in equipment selection.

#### *Alignment with minimum social safeguards*

To qualify as a sustainable activity under the EU regulation certain minimum social safeguards must be complied with. CICERO Green has assessed the Østfold Energi's social safeguards with a focus on human and labor rights. We take the sectoral, regional and judicial context into account and focus on the risks likely to be the most material social risks.

Østfold Energi takes certain precautions against social risks. For example, its general procurement policy, which is attached to all supplier contracts, requires suppliers to respect the human rights provisions listed in the policy. Østfold Energi also informed us about its 'Supplier Declaration Form' (awaiting final internal approval), which each supplier will have to sign. This contains several commitments, for example in respect of forced labor and the right to collective bargaining and organization, and Østfold Energi has stated it will follow up on these with each and every supplier. Notwithstanding these measures, Østfold Energi could improve its approach to social risks.



Østfold Energi does not integrate the OECD social risk due diligence process in a systematic manner, for example it has not evaluated and mapped its most pressing human rights risks, and no one in the organization has the responsibility to manage such risks. Østfold Energi notes that human rights risks are lower in the jurisdictions in which it operates. While this may be the case, there are still social risks present in, for example, the construction sector in these jurisdictions. Moreover, Østfold Energi's operations include certain higher-risk supply chains, particularly solar panel production. We encourage Østfold Energi to introduce more developed procedures for the evaluation of suppliers on these bases, especially in sectors with well-documented risks, and to consider how it can more effectively and proactively manage risks on an ongoing basis.



## Governance Assessment

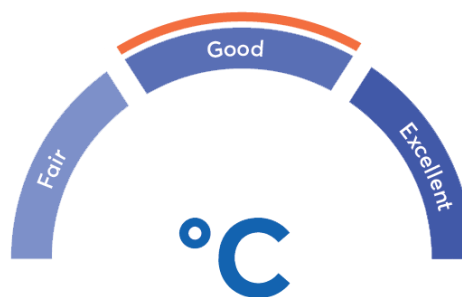
Four aspects are studied when assessing Østfold Energi's governance procedures: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

Østfold Energi has relevant policies in place to support the realization of its framework, as well as a CO<sub>2</sub> emissions reduction target in place (67% reduction by 2027 with a 2019 baseline). Østfold Energi provided us with some examples of how it will attempt to meet this target, such as the use of carbon capture and storage at its waste to energy plant and increased focus on emissions procurement. We encourage transparent reporting on these measures, particularly given many are, we understand, in their infancy. The development of policies or strategies in respect of supplier and construction emissions, as well as end of life provisions, would also elevate Østfold Energi to the next level. To this end, we welcome that it has initiated an internal project regarding construction and supplier emissions, which may include an increased weighting of environmental factors in the procurement process.

Østfold Energi has a good selection process in place. We are encouraged by the early consideration of climate and environmental risks, as well as the involvement of the Head of Sustainability in the process (though they are not a member of the Investment Committee).

Østfold Energi generally shows good commitment to transparency. Its reporting follows many aspects of best practice, though it has not committed to an external verification of its green bond report.

The overall assessment of Østfold Energi's governance structure and processes gives it a rating of **Good**.



## Strengths

It is a strength that Østfold Energi expects to allocate 90% of proceeds from its first bond under this framework to renewable energy (hydropower and solar) and 10% to district heating and cooling with at least 95% renewable inputs. We also welcome Østfold Energi's commitment to minimizing fossil fuel use at its district heating facilities, for example many of its facilities use electricity (with a guarantee of origin) or biofuels instead of fossil fuels (where possible and when feasible).

Østfold Energi displays a seriousness towards biodiversity risk, not only relying on licensing or regulatory requirements in this respect.

Østfold Energi's shows a committed engagement with physical climate risks, including the use of climate scenarios. It is considering reporting in line with TCFD recommendations, which we encourage.

## Weaknesses

There are no apparent weaknesses in Østfold Energi's green bond framework.





### Pitfalls

Østfold Energi could more systematically consider lifecycle emissions in project selection. For example, it does not require lifecycle analyses from suppliers and it is not clear to what extent the limited environmental data it requires from suppliers plays into supplier selection. It could also more systematically and stringently approach considerations of end of life of its wind and solar projects – we welcome Østfold Energi’s statement it would increase the focus on this along with its subsidiaries and companies in which it owns a stake.

Proceeds can be used by Østfold Energi and its subsidiaries, as well as companies in which it owns a minority share. Although Østfold Energi only invests in pure play companies that contribute to the transition, it is not a given that these companies consider certain climate risks to the extent Østfold Energi does, for example in respect of local opposition or biodiversity. It is Østfold Energi’s responsibility to ensure it uses its leverage as investor and board positions to minimize or eliminate any such discrepancies. Moreover, we understand that it will only look at the Taxonomy alignment of companies in which it owns at least 50.1% (i.e. consolidated subsidiaries).

Østfold Energi’s exclusions in respect of the use of proceeds (e.g. in respect of investments linked to fossil energy generation) apply to unallocated proceeds only ‘to the extent possible’. This caveat leads to risks that unallocated proceeds are invested in activities not aligned with a low carbon future. Østfold Energi has moreover informed us there is no time limit for proceeds to remain unallocated.

Fossil fuels can account for up to 5% of inputs in Østfold Energi’s district heating and cooling facilities.

Specifically in the Nordic context, risks remain around the interference of wind farms with indigenous rights: in 2021, the Norwegian Supreme Court stripped two Norwegian wind farms of their licenses given the interference with the rights of the indigenous Sami people, with similar decisions possible in other Nordic jurisdictions.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Green Bond Framework (May 2022)	
2	Bærekraftsrapport (2020)	Sustainability Report
3	Konsernstrategi for Østfold Energi (2022 – 2027)	Corporate strategy
4	MAL – Konkurransgrunnlag generell	Standard tender document
5	Alminnelige innkjøpsvilkår	General procurement policy
6	Prinsipper for forretningsutvikling	Business development principles
7	Prinsipper for miljøansvar	Environmental principles
8	Retningslinjer for ansvarlige innkjøp - Leverandørerklæring	Supplier Declaration Form
9	Prinsipper for investeringer	Investment principles



## Appendix 2: EU Taxonomy criteria and alignment

Complete details of the EU taxonomy criteria are given in [taxonomy-regulation-delegated-act-2021-2800-annex-1\\_en.pdf \(europa.eu\)](https://eur-lex.europa.eu/eli/reg/2021/2800/annex-1)

### Electricity generation using solar photovoltaic (PV) technology

Framework activity	Renewable energy		
Taxonomy activity	Electricity generation using solar photovoltaic (PV) technology (NACE codes D35.11 and F 42.22)		
	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation criteria	The activity generates electricity from solar PV technology.	Solar power is assumed to contribute substantially to climate change mitigation.	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	<p>The physical climate risks that are material to the activity have been identified (chronic and acute, related to temperature, wind, water, and soil) by performing a robust climate risk and vulnerability assessment with the following steps:<sup>8</sup></p> <ul style="list-style-type: none"> <li>a) screening of the activity to identify which physical climate risks from the list in Section II of this Appendix may affect the performance of the economic activity during its expected lifetime;</li> <li>b) where the activity is assessed to be exposed to physical climate risks, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity;</li> <li>c) an assessment of adaptation solutions that can reduce the identified physical climate risk.</li> </ul>	<p><b>Information provided by the issuer</b> Physical risks and physical resilience analysis for the sites at which solar PV panels are mounted, is being conducted in connection with the site selection and construction phase as well as on a regular basis during operation, using appropriate risk assessment tools and scenarios. To the extent being perceived necessary during construction or later during operation, climate change adaptation measures are being implemented.</p>	Likely aligned, however Østfold Energi could provide more information to substantiate that its methods are based on best practice.

<sup>8</sup> The Taxonomy is referring to Appendix A in the Taxonomy Annex 1.



	<p>The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:</p> <ul style="list-style-type: none"><li>(a) for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale;</li><li>(b) for all other activities, the assessment is performed using the highest available resolution, state-of-the-art climate projections across the existing range of future scenarios consistent with the expected lifetime of the activity, including, at least, 10 to 30 year climate projections scenarios for major investments.</li></ul> <p>The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports, scientific peer-reviewed publications, and open source or paying models.</p> <p>For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.</p> <p>For new activities and existing activities using newly built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.</p> <p>The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions or rely on blue or green infrastructure to the extent possible.</p>		
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Sustainable use and protection of water and marine resource	N/A	N/A	N/A
Transition to a circular economy	The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish.	<p><b><u>Information provided by the issuer</u></b></p> <p>The issuer confirms that they are following national laws and regulations and obtain licenses for their operations where required.</p> <p>For investments in solar power, the issuer will demand a 40-year lifespan for the power plant. The projects will provide plans for decommissioning, including restoring land.</p> <p>The issuer confirms that they will follow the “pyramid of waste” where reuse of panels will be prioritized over recycling of components.</p>	Likely partially aligned.
Protection and restoration of biodiversity and ecosystems	<ul style="list-style-type: none"> <li>• An Environmental Impact Assessment (EIA) or screening has been completed in accordance with Directive 2011/92/EU,<sup>9</sup> or in accordance with national provisions.</li> <li>• Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</li> <li>• For sites/operations located in or near biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas), an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.</li> </ul>	<p><b><u>Relevant contextual information</u></b></p> <ul style="list-style-type: none"> <li>• Depending on the size and the environmental impacts of the project, an EIA or a screening needs to be conducted. A national competent authority determines which projects are subject to an EIA.</li> <li>• An EIA is not applicable for roof-top solar systems.</li> </ul> <p><b><u>Information provided by the issuer</u></b></p> <ul style="list-style-type: none"> <li>• Environmental impact assessments are performed for each solar project and it implements plans to ensure minimal negative impact throughout its lifecycle</li> <li>• Biodiversity considerations are important requirements in Norway’s licensing process.</li> </ul>	Likely aligned.

<sup>9</sup> The EU-Directive on the assessment of the effects of certain public and private projects on the environment (the EIA-directive). EUR-Lex - 32011L0092 - EN - EUR-Lex (europa.eu)



## Electricity generation from wind power

Framework activity	Renewable energy		
Taxonomy activity	Electricity generation from wind power (NACE codes D.35.1.1 and F 42.22)		
	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation.</li> <li>The activity generates electricity from wind power.</li> </ul>	Wind power is assumed to contribute substantially to climate change mitigation.	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b>Information provided by the issuer</b></p> <p>Physical risks and physical resilience analysis for the sites at which wind generation towers are placed, is being conducted in connection with the site selection and construction phase, and where relevant on a regular basis during operation, using appropriate risk assessment tools and scenarios. To the extent necessary, climate change adaptation measures are being implemented during construction or later during operation to protect the wind power generation equipment.</p> <p>Østfold Energi is currently reviewing and further developing its sustainability principles and policies, and will also review how to improve and formalize methods related to its risk and vulnerability analysis resulting from climate change for the wind power projects.</p>	Likely aligned, however Østfold Energi could provide more information to substantiate that its methods are based on best practice.
Sustainable use and protection of water and marine resources	In case of construction of offshore wind, the activity does not hamper the achievement of good environmental status as set out in Directive 2008/56/EC <sup>10</sup> of the European Parliament and of the Council, requiring that the appropriate measures are taken to prevent or mitigate impacts in relation to that Directive's Descriptor 11 (Noise/Energy), laid down in Annex I to that Directive, and as set out	<p><b>Relevant contextual information</b></p> <p>In Norway, wind farms are regulated by NVE<sup>11</sup>. New wind farms in addition need an approved plan for environment, transport, and construction (MTA-plan), including input on how to minimize landscape changes and noise. Offshore</p>	Offshore wind farms licensed in Sweden are likely aligned.

<sup>10</sup> The EU-Directive establishing a framework for community action in the field of marine environmental policy. EUR-Lex - 32008L0056 - EN - EUR-Lex (europa.eu)

<sup>11</sup> Norwegian Water Resources and Energy Directorate



	in Commission Decision (EU) 2017/848159 in relation to the relevant criteria and methodological standards for that descriptor.	<p>windfarms are regulated by the Ocean Energy Act (Havenergiloven), also managed by NVE.</p> <p><b><u>Information provided by the issuer</u></b> There are no offshore wind power generation projects currently being constructed, however if the plans to develop new offshore wind power projects in Sweden will be executed, the relevant local and national laws and regulations, which follows the awarded licenses, will be met and followed, including, but not limited to, conducting an EIA study.</p>	
Transition to a circular economy	The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish.	<p><b><u>Relevant contextual information</u></b> Licenses include requirements to allocate either locked funds or provide a bank guarantee for the amount required for decommissioning, and development of plans for decommissioning, possible recycling and reuse of components and the restoration of land.</p> <p><b><u>Information provided by the issuer</u></b></p> <ul style="list-style-type: none"> <li>• Licensing requirements in which Østfold Energi operates include requirements on the construction and operational phases, as well as having concrete plans for decommissions including possible recycling and reuse of components and the restoration of land.</li> <li>• All local and national laws and regulations which follows the awarded licenses for their operations will be met and followed.</li> <li>• Licenses include requirements to allocate either locked funds or provide a bank guarantee for the amount required for decommissioning, and development of plans for decommissioning, possible recycling and reuse of components and the restoration of land.</li> </ul>	Likely aligned.
Pollution prevention & control	N/A		N/A





<p>Protection and restoration of biodiversity and ecosystems</p>	<ul style="list-style-type: none"> <li>• Please see under Electricity generation from solar photovoltaic (PV) technology.</li> <li>• In case of offshore wind, the activity does not hamper the achievement of good environmental status as set out in Directive 2008/56/EC, requiring that the appropriate measures are taken to prevent or mitigate impacts in relation to that Directive's Descriptors 1 (biodiversity) and 6 (seabed integrity), laid down in Annex I to that Directive, and as set out in Decision (EU) 2017/848 in relation to the relevant criteria and methodological standards for those descriptors.</li> </ul>	<p><b><u>Relevant contextual information</u></b></p> <p>In Norway, wind turbines for the production of electricity are covered by the Energy Act and are normally subject to a license. Plants consisting of up to 5 wind turbines with a total installed capacity of less than 1 MW are exempt from the licensing obligation.</p> <p>Wind power installations where installed effect exceed 10 MW need an EIA in accordance with the Planning and Building Act, as a part of the licensing process.</p> <p><b><u>Information provided by the issuer</u></b></p> <ul style="list-style-type: none"> <li>• Environmental impact assessments are performed for each wind project and it implements plans to ensure minimal negative impact throughout its lifecycle</li> <li>• Biodiversity considerations are important requirements in the countries where it operates.</li> <li>• The relevant local and national laws and regulations which follows the awarded licenses for their operations will be met and followed. The issuer confirms that they do not have activities in or near conservation areas or areas with sensitive biodiversity.</li> </ul>	<p>Likely aligned.</p>
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## Electricity generation from hydropower

Framework activity	Renewable energy		
Taxonomy activity	Electricity generation from hydropower (NACE Code D35.11 and F42.22)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation threshold	<p>The activity complies with either of the following criteria:</p> <ul style="list-style-type: none"> <li>a) the electricity generation facility is a run-of-river plant and does not have an artificial reservoir;</li> <li>b) the power density of the electricity generation facility is above 5 W/m<sup>2</sup>;</li> <li>c) the life cycle GHG emissions from the generation of electricity from hydropower, are lower than 100gCO<sub>2</sub>e/kWh.<sup>12</sup></li> </ul>	<p>The eligibility criteria in the green bond framework correspond to the mitigation criteria, though note that Østfold Energi only assumes it is aligned with these criteria rather than undertaking an assessment.</p> <p><b>Relevant contextual information</b> A study performed in 2019 by the Norwegian Institute for Sustainability Research (NORSUS) on Norwegian hydropower, indicates average life-cycle emissions of around 3.3g CO<sub>2</sub>e/kWh. In addition, the study notes that hydropower plants in Norway tend to be located at high altitudes where there is little vegetation as well as colder climate, which leads to limited extra methane emissions from algae growth with could develop in the water storage basin where the climate is warmer.<sup>13</sup></p>	<p>Likely aligned. Note, however, that i) company specific LCA-studies are not performed, and ii) the NORUS study referenced does not use the same methodology as the Taxonomy. We believe, however, that it is likely that actual emissions are significantly below the Taxonomy threshold.</p>
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	<p>Please see under Electricity generation from solar photovoltaic (PV) technology.</p>	<p><b>Information provided by the issuer</b></p> <p>The construction and operation of hydropower facilities (including related water storage in dams) are strictly regulated through NVE.</p> <p>Physical risks and physical resilience analysis for the sites at which the hydropower production facilities and dams are located, is being conducted in connection with the site selection and construction phase of the facilities, as well as on a regular basis during operation, using appropriate</p>	<p>Likely aligned, however Østfold Energi could provide more information to substantiate that its methods are based on best practice.</p>

<sup>12</sup> The life cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018162, ISO 14064-1:2018163 or the G-res tool. Quantified life cycle GHG emissions are verified by an independent third party.

<sup>13</sup> AR-01.19-The-inventory-and-life-cycle-data-for-Norwegian-hydroelectricity.pdf (norsus.no)



		<p>risk assessment tools and scenarios. To the extent being perceived necessary during construction or later during operation, climate change adaptation measures are being implemented.</p> <p>Østfold Energi is reinforcing dams, making them broader and higher by adding an extra layer of rocks (in accordance with Norwegian regulations for dam security “Damsikkerhetsforskriften”). Further, in anticipation of more rain following climate change, Østfold Energi are required to make flood gates related to the dams broader.</p> <p>Østfold Energi is currently reviewing and further developing its sustainability principles and policies, and will also review how to improve and formalize methods related to its risk and vulnerability analysis resulting from climate change for the wind power projects.</p>	
<p>Sustainable use and protection of water and marine resources</p>	<ol style="list-style-type: none"> <li>1. The activity complies with the provisions of Directive 2000/60/EC<sup>14</sup>, in particular with all the requirements laid down in Article 4 of the directive.</li> <li>2. For operation of existing hydropower plants, including refurbishment activities to enhance renewable energy or energy storage potential, the activity complies with the following criteria:             <ol style="list-style-type: none"> <li>2.1. In accordance with Directive 2000/60/EC and in particular Articles 4 and 11 of that Directive, all technically feasible and ecologically relevant mitigation measures have been implemented to reduce adverse impacts on water as well as on protected habitats and species directly dependent on water.</li> <li>2.2. Measures include, where relevant and depending on the ecosystems naturally present in the affected water bodies:                 <ol style="list-style-type: none"> <li>(a) measures to ensure downstream and upstream fish migration (such as fish friendly turbines, fish guidance structures, state-of-the-art fully functional fish passes, measures to stop or minimise operation and discharges during migration or spawning);</li> </ol> </li> </ol> </li> </ol>	<p><b><u>Relevant contextual information</u></b></p> <p>The construction of energy production facilities larger than 1 MW needs a license from the Norwegian Water Resources and Energy Directorate (NVE) according to the “Energy Act” and the “Water Resources Act”. Conditions and rules of operation will be stated in the license.</p> <p>Mitigation of negative environmental impacts as well as impacts on biodiversity, surrounding areas, and cultural heritages are important elements in attaining necessary licenses from NVE.</p> <p>Companies need to complete an EIA and to demonstrate alignment with the EU Water Framework Directive (WFD). For newer installations, minimum requirements include minimum water flow, functional fish migration pathways as well as safeguards for biodiversity and local ecosystems.</p> <p>River basin management (RBM) is conducted on a regional level, and hydropower plants need to be</p>	<p>Likely aligned.</p>

<sup>14</sup> The Water Framework Directive, EUR-Lex - 32000L0060 - EN - EUR-Lex (europa.eu)



	<p>(b) measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydro-peaking operations) and sediment flow;</p> <p>(c) measures to protect or enhance habitats.</p> <p>2.3. The effectiveness of those measures is monitored in the context of the authorisation or permit setting out the conditions aimed at achieving good status or potential of the affected water body.</p> <p>3. For construction of new hydropower plants, the activity complies with the following criteria:</p> <p>3.1. In accordance with Article 4 of Directive 2000/60/EC and in particular paragraph 7 of that Article, prior to construction, an impact assessment of the project is carried out to assess all its potential impacts on the status of water bodies within the same river basin and on protected habitats and species directly dependent on water, considering in particular migration corridors, free-flowing rivers or ecosystems close to undisturbed conditions.</p> <p>The assessment is based on recent, comprehensive and accurate data, including monitoring data on biological quality elements that are specifically sensitive to hydromorphological alterations, and on the expected status of the water body as a result of the new activities, as compared to its current one.</p> <p>It assesses in particular the cumulated impacts of this new project with other existing or planned infrastructure in the river basin.</p> <p>3.2. On the basis of that impact assessment, it has been established that the plant is conceived, by design and location and by mitigation measures, so that it complies with one of the following requirements:</p> <p>(a) the plant does not entail any deterioration nor compromises the achievement of good status or potential of the specific water body it relates to;</p> <p>(b) where the plant risks to deteriorate or compromise the achievement of good status/potential of the specific water body it relates to, such deterioration is not significant, and is justified by a detailed cost-</p>	<p>incorporated in the existing river basin management plans. This is regulated in the Water Directive, which is implemented in Norwegian law. Old hydropower plants do not have licenses but must comply with and are subject to the same requirements and the same audit regime as plants with a license.</p> <p>Smaller energy projects with lesser environmental impacts may be handled through simplified handling procedures.</p> <p>NVE is carrying out audits to monitor performance.</p> <p>To receive a license for a new hydropower plant, the Water Resource Act (§25) needs to be fulfilled, requiring that the overall consequences locally, regionally and nationally are investigated. This will be a part of the application to receive a and focus on e.g., the environment, nature and biodiversity. A license will only be issued if the advantages of the development are outweighing the disadvantages. Consequences must be adapted to the expected lifespan of the development.</p> <p><b><u>Information provided by the issuer</u></b></p> <ul style="list-style-type: none"> <li>• For all hydropower projects, Østfold Energi carries out EIAs as part of the planning process to ensure minimal negative impact throughout the asset life cycle.</li> <li>• The issuer undertakes various mitigation measures to protect water and marine resources, for example habitat improvement measures for trout and salmon, improved fish passage measures and voluntary increased release of water in regulated rivers.</li> <li>• Its hydropower plants are subject to inspection by qualified employees to ensure good environmental conditions and to assess the need for new mitigation measures.</li> <li>• The issuer adheres to the EU Water Framework Directive and national laws.</li> <li>• The issuer's hydropower stations are river based and do not have issues with sediment flows.</li> <li>• Habitat protection is a part of the requirements given to hydropower stations.</li> </ul>	
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	<p>benefit assessment demonstrating both of the following: (i) the reasons of overriding public interest or the fact that benefits expected from the planned hydropower plant outweigh the costs from deteriorating the status of water that are accruing to the environment and to society; (ii) the fact that the overriding public interest or the benefits expected from the plant cannot, for reasons of technical feasibility or disproportionate cost, be achieved by alternative means that would lead to a better environmental outcome (such as refurbishing of existing hydropower plants or use of technologies not disrupting river continuity).</p> <p>3.3. All technically feasible and ecologically relevant mitigation measures are implemented to reduce adverse impacts on water as well as on protected habitats and species directly dependent on water. Mitigation measures include, where relevant and depending on the ecosystems naturally present in the affected water bodies:</p> <ul style="list-style-type: none"> <li>(a) measures to ensure downstream and upstream fish migration (such as fish friendly turbines, fish guidance structures, state-of-the-art fully functional fish passes, measures to stop or minimise operation and discharges during migration or spawning);</li> <li>(b) measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydro-peaking operations) and sediment flow;</li> <li>(c) measures to protect or enhance habitats. The effectiveness of those measures is monitored in the context of the authorisation or permit setting out the conditions aimed at achieving good status or potential of the affected water body.</li> </ul> <p>3.4. The plant does not permanently compromise the achievement of good status/potential in any of the water bodies in the same river basin district.</p> <p>3.5. In addition to the mitigation measures referred to above, and where relevant, compensatory measures are implemented to ensure that the project does not increase the fragmentation of water bodies in the same river basin district. This is achieved by restoring continuity within the same river basin district to an extent that compensates the disruption of continuity, which the planned hydropower plant may cause. Compensation starts prior to the execution of the project.</p>		
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Transition to circular economy	N/A		N/A
Pollution prevention and control	N/A		N/A
Protection and restoration of biodiversity and ecosystems	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b><u>Relevant contextual information</u></b></p> <p>The construction of energy production facilities larger than 1 MW needs a license from the Norwegian Water Resources and Energy Directorate (NVE) according to the “Energy Act” and the “Water Resources Act”.</p> <p>To receive a license the company needs to complete an EIA, including implementation of mitigative measures. This is also required by the “Planning and Construction Act”.</p> <p><b><u>Information provided by the issuer</u></b></p> <ul style="list-style-type: none"> <li>• Environmental impacts and biodiversity considerations are important parts of the licensing requirements in the countries in which it operates.</li> <li>• According to the issuer they are following national laws and regulations and have completed EIAs for all projects, also hydropower plants without a license.</li> <li>• The issuer confirms that they do not have activities in or near conservation areas or areas with sensitive biodiversity.</li> </ul>	Likely aligned.



## District heating/cooling distribution

Framework activity	Energy efficiency		
Taxonomy activity	District heating/cooling distribution (NACE D35.30)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation criteria	<p>The activity complies with one of the following criteria:</p> <ul style="list-style-type: none"> <li>(a) for construction and operation of pipelines and associated infrastructure for distributing heating and cooling, the system meets the definition of efficient district heating and cooling systems laid down in Article 2, point 41, of Directive 2012/27/EU<sup>15</sup>;</li> <li>(b) for refurbishment of pipelines and associated infrastructure for distributing heating and cooling, the investment that makes the system meet the definition of efficient district heating or cooling laid down in Article 2, point 41, of Directive 2012/27/EU starts within a three-year period as underpinned by a contractual obligation or an equivalent in case of operators in charge of both generation and the network;</li> <li>(c) the activity is the following: <ul style="list-style-type: none"> <li>(i) modification to lower temperature regimes;</li> <li>(ii) advanced pilot systems (control and energy management systems, Internet of Things).</li> </ul> </li> </ul>	<p><b><u>Relevant contextual information</u></b> In respect of point a) of the EU Technical mitigation criteria, Article 2, point 41, of Directive 2012/27/EU defines “efficient district heating and cooling” as “a district heating or cooling system using at least 50 % renewable energy, 50 % waste heat, 75 % cogenerated heat or 50 % of a combination of such energy and heat”.</p> <p><b><u>Information provided by the issuer</u></b> Østfold Energi’s district heating and cooling systems typically use more than 95% renewable sources (assuming electrical boilers are considered renewable since certificates of origin for the electricity used is acquired).</p> <p>Østfold Energi has informed that it must deviate from 100% biomass use at certain times (peak-load, maintenance, unforeseen shutdowns etc). Electricity is therefore only used as a back-up and come with a guarantee of origin in such circumstances.</p>	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b><u>Information provided by the issuer</u></b> As part of the licensing award an analysis of physical risks and physical resilience for the sites at which district heating facilities are located, is being conducted in connection with the site selection and construction phase as well as during operation (regularity is depending on site risk assessment), using appropriate risk assessment tools and scenarios.</p>	Likely aligned, however Østfold Energi could provide more information to substantiate that its methods are based on best practice.

<sup>15</sup> The EU-directive on Energy Efficiency, EUR-Lex - 32012L0027 - EN - EUR-Lex (europa.eu)





Sustainable use and protection of water and marine resources	<p>Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852<sup>16</sup>, in accordance with Directive 2000/60/EC<sup>17</sup> of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders.</p> <p>Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU<sup>18</sup> of the European Parliament and of the Council and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed.</p>	<p><b><u>Relevant contextual information</u></b></p> <p>District heating and cooling systems are covered by the Energy Act, and the licensing obligation is triggered if the system supplies external consumers and has a capacity of more than 10 MW.</p> <p>District heating and cooling installations under 50 MW are regulated by the “Pollution control regulation”, and installations over 50 MW need a license from the Norwegian Environment Agency.</p> <p>Measures to avoid degradation of water are included in the permit and in the EIA-process.</p> <p><b><u>Information provided by the issuer</u></b></p> <p>Østfold Energi operates its district heating facilities under licenses provided by NVE.</p> <p>Østfold Energi does not work in areas with water scarcity.</p> <p>All national laws and regulations are followed, and where required licenses are obtained, including alignment with the WFD.</p>	Likely aligned.
Transition to a circular economy	N/A		N/A
Pollution prevention and control.	Fans, compressors, pumps and other equipment used which is covered by Directive 2009/125/EC <sup>19</sup> comply, where relevant, with the top-class requirements of the energy label, and otherwise comply with implementing regulations under that Directive and represent the best available technology.	<p><b><u>Information provided by the issuer</u></b></p> <p>Although Østfold Energi has not implemented the specific EU Directive in the procurement procedures, it is applying best available state-of-the-art technology with high durability, low emissions and high operating efficiency. As an example, when procuring equipment for the waste heat solution at Sarpsborg Varmesentral, environmental features were given 30% weight in the selection process.</p>	Likely aligned with the best available technology requirement aspect of the criteria, though there is not enough information to conclude on the compliance with the top-class requirements of the

<sup>16</sup> The regulation on the establishment of a framework to facilitate sustainable investment. EUR-Lex - 32020R0852 - EN - EUR-Lex (europa.eu)

<sup>17</sup> The Water Framework Directive. EUR-Lex - 32000L0060 - EN - EUR-Lex (europa.eu)

<sup>18</sup> The EU-EIA-directive.

<sup>19</sup> The EU-directive on establishing a framework for the setting of ecodesign requirements for energy-related products. EUR-Lex - 32009L0125 - EN - EUR-Lex (europa.eu)



		Going forward, Østfold Energi will consider adopting this EU Directive in its procurement policy the effort of reducing scope 3 emissions.	energy label (where relevant).
Protection and restoration of biodiversity and ecosystems	Please see under Electricity generation from solar photovoltaic (PV) technology.	<b><u>Information provided by the issuer</u></b> Considerations of biodiversity are considered in the licensing process.	Likely aligned.



## Production of heat/cool from geothermal

Framework activity	Energy efficiency		
Taxonomy activity	Production of heat/cool from geothermal (NACE D35.30)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation criteria	<p>The life-cycle GHG emissions from the generation of heat/cool from geothermal energy are lower than 100gCO<sub>2</sub>e/kWh.</p> <p>Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.</p> <p>Qualified life-cycle GHG emissions are verified by an independent third party.</p>	<p><b>Information provided by the issuer</b> Life-cycle GHG emissions are estimated to 70gCO<sub>2</sub>e/kWh for Østfold Energi's aggregated district heating facilities, and the geothermal facility at Kalnes is most likely lower than this figure.</p>	Likely aligned, though note this is based on estimations.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b>Information provided by the issuer</b> Physical risks and physical resilience analysis for the site at which the geothermal district heating facility is located, has been conducted in connection with the site selection and construction phase, as well as being assessed on a regular basis during operation, using appropriate risk assessment tools and scenarios. To the extent being perceived necessary during operation, climate change adaptation measures are being implemented to protect the production facilities.</p>	Likely aligned, however Østfold Energi could provide more information to substantiate that its methods are based on best practice.
Sustainable use and protection of water and marine resources	Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders. Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU of the European Parliament and of the Council 327 and	N/A (according to the issuer there is no application of ground water, only under-ground heat exchangers are applied)	N/A



	includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed. <sup>20</sup>		
Transition to a circular economy	N/A		N/A
Pollution prevention and control.	For the operation of high-enthalpy geothermal energy systems, adequate abatement systems are in place to reduce emissions level in order not to hamper the achievement of air quality limit values set out in Directives 2004/107/EC and 2008/50/EC.	N/A (according to the issuer there is no application of ground water, only under-ground heat exchangers are applied)	
Protection and restoration of biodiversity and ecosystems	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b>Information provided by the issuer</b></p> <p>Considerations of biodiversity are considered in the licensing process.</p> <p>The wells are going 250 meter into the ground and not impacting biodiversity or ecosystems (heat is extracted from the bedrock). The site at which the surface building is located is relatively limited and the facility represents no harm or danger to the local ecosystems.</p>	Likely aligned.

<sup>20</sup> The Taxonomy is referring to Appendix B in the Taxonomy Annex 1.



## Production of heat/cool from bioenergy

Framework activity	Energy efficiency		
Taxonomy activity	Production of heat/cool from bioenergy (NACE D35.30)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation criteria	<p>1. Agricultural biomass used in the activity for the production of heat and cool complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001.<sup>21</sup> Forest biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.</p> <p>2. The greenhouse gas emission savings from the use of biomass are at least 80 % in relation to the GHG emission saving methodology and relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.</p> <p>3. Where the installations rely on anaerobic digestion of organic material, the production of the digestate meets the criteria in Sections 5.6 and criteria 1 and 2 of Section 5.7 of this Annex, as applicable.</p> <p>4. Points 1 and 2 do not apply to heat generation installations with a total rated thermal input below 2 MW and using gaseous biomass fuels.</p>	<p><b>Information provided by the issuer</b></p> <ul style="list-style-type: none"> <li>Norwegian standards and regulations for forest management apply.</li> <li>Woodchips derive from sustainably managed forests with PEFC certification.</li> <li>Østfold Energi's relevant bioenergy facilities are assumed to comply with Article 29 in the EU Directive 2018/2001: the relevant aspects of ØE's portfolio can be divided in two parts; bioenergy facilities at Mysen and Torpum using certified wood chips, and facilities using biodiesel from suppliers using e.g. fish cuts and remains from rapeseed oil production. Note that biodiesel is not a primary fuel at any current facilities, but can be used at certain times (peak-load, maintenance, unforeseen shutdowns etc).</li> <li>Østfold Energi has not made the calculation of the GHG emissions savings to confirm that these are at least 80% compared to the methodology set out in Annex VI.</li> <li>Østfold Energi's facilities does not rely on anaerobic digestion, hence this criterion is not relevant.</li> </ul>	<p>Likely aligned, on the assumption that Østfold Energi's commitment to sourcing its biomass locally results in transportation distances of less than 500km, and on the basis that i) it uses certified woods chips and ii) biodiesel use is not a primary fuel but used only in specific situations as a secondary fuel (such as peak load, maintenance, emergency shut down etc).</p>
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b>Information provided by the issuer</b></p> <p>Physical risks and physical resilience analysis for the sites at which district heating facilities are located, is being conducted in connection with the site selection and</p>	<p>Likely aligned, however Østfold Energi could provide more information to substantiate that its</p>

<sup>21</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.



		construction phase as well as on a regular basis during operation, using appropriate risk assessment tools and scenarios. To the extent being perceived necessary during construction or later during operation, climate change adaptation measures are being implemented to protect the production facilities.	methods are based on best practice.
Sustainable use and protection of water and marine resources	Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed with the aim of achieving good water status and good ecological potential as defined in Article 2, points (22) and (23), of Regulation (EU) 2020/852, in accordance with Directive 2000/60/EC of the European Parliament and of the Council and a water use and protection management plan, developed thereunder for the potentially affected water body or bodies, in consultation with relevant stakeholders. Where an Environmental Impact Assessment is carried out in accordance with Directive 2011/92/EU of the European Parliament and of the Council <sup>22</sup> and includes an assessment of the impact on water in accordance with Directive 2000/60/EC, no additional assessment of impact on water is required, provided the risks identified have been addressed <sup>22</sup> .	<b><u>Information provided by the issuer</u></b> Østfold Energi does not work in areas with water scarcity.  Østfold Energi follows national laws and regulations, and obtains licenses where required, including aligning with the WFD.	Likely aligned.
Transition to a circular economy	N/A		N/A
Pollution prevention and control.	For installations falling within the scope of Directive 2010/75/EU, emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for large combustion plants, ensuring at the same time that no significant cross-media effects occur. For combustion plants with thermal input greater than 1 MW but below the thresholds for the BAT conclusions for large combustion plants to apply, emissions are below the emission limit values set out in Annex II, part 2, to Directive (EU) 2015/2193. For plants in zones or parts of zones not complying with the air quality limit values laid down in Directive 2008/50/EC, results of the information exchange <sup>203</sup> , which are published by the Commission in accordance with Article 6, paragraphs 9 and 10 of Directive (EU) 2015/2193 are taken into account. For anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil	<b><u>Relevant contextual information</u></b> In Norway, combustion plants above 50MW are subject to emission limits set by the Norwegian Environment Agency (Miljødirektoratet). The emission limits from the Environment Agency for NOX and dust are aligned with those in the EU Directive 2010/75, but do not include a limit for SO2. The EU directive 2010/75 is transposed in Norwegian law and supervised by the Norwegian Environment Agency through a license.  Plants below 50MW in size are subject to the Norwegian pollution regulation (Forurensningsforskriften in Norwegian, Chapter 27a). For plants 5-50MW, emission limits for NOX and dust are in line with the EU Directive 2015/2193 but the Norwegian requirements do not	Likely aligned.

<sup>22</sup> The Taxonomy is referring to Appendix B in the Taxonomy Annex I.



	<p>improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in Component Material Categories (CMC) 4 and 5 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use. For anaerobic digestion plants treating over 100 tons per day, emissions to air and water are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for waste treatment. No significant cross-media effects occur.</p>	<p>include limits for SO<sub>2</sub>, however combustion of bioenergy is associated with low SO<sub>2</sub>-emissions.</p> <p>For plants below 5MW, the Norwegian regulation does not include emission limits for NO<sub>X</sub>. There is currently a proposal in place to adjust the Norwegian pollution regulation in line with EU requirements and therefore it expects emission levels to harmonise over time.</p> <p><b><u>Information provided by the issuer</u></b> The plants financed under the framework are below 50 MW and pursuant to Norwegian pollution regulation are therefore in line with NO<sub>X</sub> and dust limits.</p>	
<p>Protection and restoration of biodiversity and ecosystems</p>	<p>Please see under Electricity generation from solar photovoltaic (PV) technology.</p>	<p><b><u>Information provided by the issuer</u></b> Considerations of biodiversity are considered in the licensing process.</p>	<p>Likely aligned.</p>



## Production of heat/cool using waste heat

Framework activity	Energy efficiency		
Taxonomy activity	Production of heat/cool using waste heat (NACE D35.30)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	CICERO Green's comments on alignment
Mitigation criteria	The activity produces heat/cool from waste heat.	Heat from waste heat is assumed to contribute substantially to climate change mitigation.	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Electricity generation from solar photovoltaic (PV) technology.	<b>Information provided by the issuer</b> Physical risks and physical resilience analysis for the sites at which waste heat recovery facilities are located, is being conducted in connection with the site selection and construction phase as well as on a regular basis during operation, using appropriate risk assessment tools and scenarios. To the extent being perceived necessary during construction or later during operation, climate change adaptation measures are being implemented to protect the production facilities.	Likely aligned, however Østfold Energi could provide more information to substantiate that its methods are based on best practice.
Sustainable use and protection of water and marine resources	N/A		N/A
Transition to a circular economy	The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish.	<b>Information provided by the issuer</b> Østfold Energi demands the highest quality materials from its suppliers. This includes requiring equipment with high durability.	Likely partially aligned.
Pollution prevention and control.	Pumps and the kind of equipment used, which is covered by Ecodesign and Energy labelling comply, where relevant, with the top class requirements of the energy label laid down in Regulation (EU) 2017/1369, and with implementing regulations under Directive 2009/125/EC and represent the best available technology.	<b>Information provided by the issuer</b> <ul style="list-style-type: none"> <li>• A requirement for the use of Best Available Techniques is included in the license from the Norwegian Environment Agency.</li> <li>• Østfold Energi complies with national laws and regulations and obtains licenses where required.</li> <li>• Østfold Energi demands the best available options from its suppliers in terms of technology as well as</li> </ul>	Likely aligned.





		quality. This is considered by Østfold Energi to be best available technology.	
Protection and restoration of biodiversity and ecosystems	Please see under Electricity generation from solar photovoltaic (PV) technology.	<p><b><u>Information provided by the issuer</u></b></p> <p>Considerations of biodiversity are considered in the licensing process.</p> <p>EIAs are carried out.</p>	Likely aligned.



Minimum social safeguards		
No.	Questions	Answers (to be filled in by the issuer)
1	<p>Does your company have a policy or made a commitment on human rights (workers' rights are here considered included in human rights)? Signed by top management?</p>	<p>Our document "Alminnelige innkjøpsvilkår" (general procurement policy) includes commitments on human rights. These are contained in all our requests that we send out and shall also be attached to our contracts.</p>
2	<p>Do you integrate the OECD social risk due diligence process?</p> <p>1. Do you map human rights risks in your business activities and when entering into partnerships or projects?            2. Is someone in your company in charge and responsible for the risk mapping and mitigation of risks related to human rights?            3. Do you evaluate whether identified risks are successfully managed? How?            4. Do you issue an integrated report or CSR-report dealing with human rights risks and how you mitigate these?)</p>	<ol style="list-style-type: none"> <li>1. Østfold Energi has not included this in our investment policy.</li> <li>2. Østfold Energi has not a dedicated person for mapping risks related to human rights as the risk for this is very low in the countries in which it is operating. However, the purchasing manager is responsible for ensuring that the suppliers sign supplier declarations and thereby make them responsible for safeguarding human rights.</li> <li>3. Østfold Energi is currently not systematically evaluating this, but is considering the need for this in the future. Østfold Energi has initiated an internal project to safeguard compliance with the Transparency Act (the new law on enterprises' transparency and work on fundamental human rights and decent working conditions).</li> <li>4. We issue a sustainability report which includes society, social responsibility, climate and nature, which together with our general procurement policy (of products and services) ("alminnelig innkjøpsvilkår") meet our needs in this regard.</li> </ol>



3	<p>What do you consider are your most salient human rights risks? Please explain why.</p>	<p>By operating in Norway and nearby Nordic countries Østfold Energi generally consider the risk of violating human rights to be very low. We are considering how we can ensure low risk to human rights violations in the supplier value chain. We believe we have good control over the immediate suppliers, but it is more challenging to have control over the suppliers to our direct suppliers.</p>
4	<p>Do you screen suppliers by using «social» criteria? What are they? Do you include human rights requirements in contracts with suppliers and partners? Do you sometimes include a right for you to do inspections? In what situations?</p>	<p>In the general procurement policy, we have included specific requirements related to human rights. These conditions are attached to all tenders we issue and shall also be attached to the contracts we enter into. In addition, we have made a “Supplier Declaration Form”, which each supplier to Østfold Energi will have to sign after being finalized and implemented.</p> <p>We have not included a right to conduct inspections as we consider the risk to generally be very low in the area in which we operate, as stated above.</p>
5	<p>Do you have a whistleblowing mechanism for employees and others? How does this work? Do you require suppliers and others you are in a business relationship with to have such a mechanism? Do you gather the content of complaints from your partners?</p>	<p>Østfold Energi has established routines for how employees can report negative incidents without being exposed to negative reactions. Østfold Energi updated its reporting routines in accordance with the changes in law, applicable from 01.01.2020.</p>
6	<p>Do you allow your workers to organize? Do you require that your suppliers or partners allow this?</p>	<p>Østfold Energi allow our employees to be members of labor unions and organizations. Suppliers and partners are also required to allow for this, and is part of our general procurement policy (page 4, clause 13, third bullet).</p>



## Appendix 3: About 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, the International Institute for Sustainable Development (IISD) and the School for Environment and Sustainability (SEAS) at the University of Michigan.

