



# The TCFD recommendations

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Cloudberry Clean Energy ASA

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## The TCFD Recommendations

There is a growing demand for standardized, climate-related risk disclosure in the financial sector, and creditors and investors are increasingly asking for reporting that is consistent, comparable, and clear. The Task Force on Climate-Related Financial Disclosure (TCFD) developed recommendations to enhance market transparency and stability and encourages standardized reporting of financially material climate-related risks and opportunities to provide investors, lenders, and insurers with comparability when assessing and pricing companies.

The TCFD recommendations are grouped into four areas of disclosure that represent core elements of how organizations operate: governance, strategy, risk management, and metrics and targets. Moreover, the framework separates recommended disclosures into three main categories: risks related to the transition to a lower-carbon economy, risks related to the physical impacts of climate change, and climate-related opportunities. The TCFD has also incorporated potential financial impact as an integral part of its disclosure recommendations.

### Core Elements of Recommended Climate-Related Financial Disclosures

#### Governance

The organization's governance around climate-related risks and opportunities

#### Strategy

The actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy, and financial planning

#### Risk Management

The processes used by the organization to identify, assess, and manage climate-related

#### Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities



## TCFD Context Index

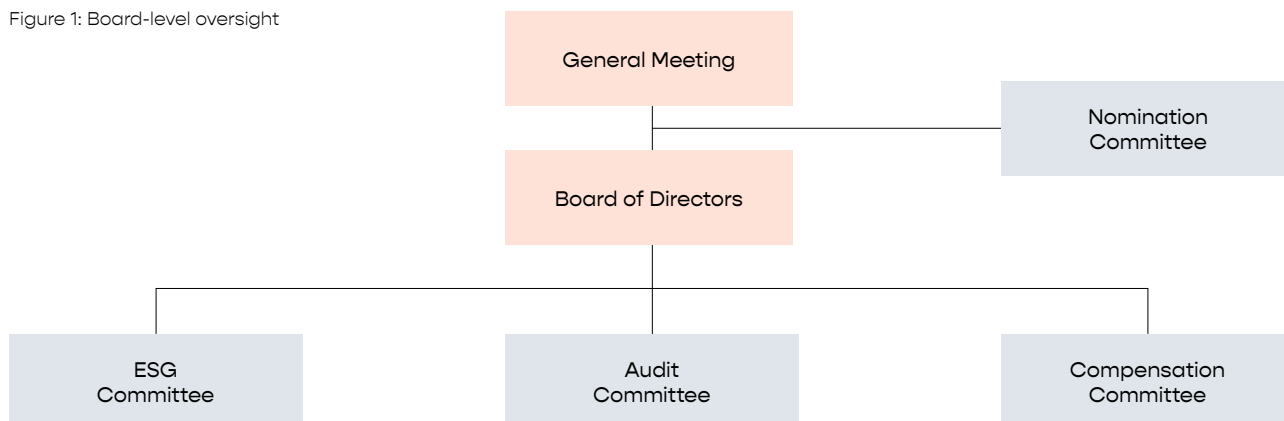
Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
<b>Recommended disclosures</b>			
a) Describe the board's oversight of climate-related risks and opportunities	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	a) Describe the organization's process for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe the management's role in assessing and managing climate-related risks and opportunities	b) Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

In the changing world we are living in, with rising temperatures, climate-related policy changes, and emerging technologies, both risks and opportunities are becoming more prominent. Failure to limit global warming to 1.5 °C may cause severe changes in the world's climate, with subsequent dramatic consequences for the planet. The effect of climate change also has consequences for our operating assets that we need to consider in our business planning.

## Governance

Disclose the company’s governance around climate-related risks and opportunities.

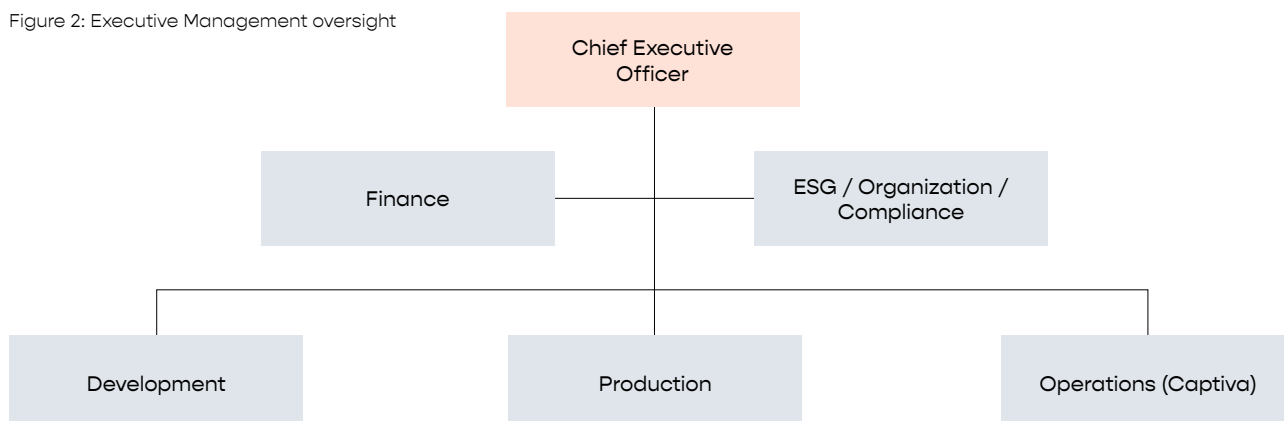
Figure 1: Board-level oversight



Climate-related issues are of high importance to Cloudberry and are to a certain extent integrated into Cloudberry’s overall business strategy. Prior to a project investment decision, relevant risks are assessed by the Management and later presented to the Board of Directors where the climate-related risks are discussed and evaluated. The overall responsibility thus sits within the Board of Directors. In addition, Cloudberry’s overall risk management

and all risks perceived by the company and its businesses are subject to a quarterly review by the Audit Committee and an annual thorough review by the Board. The climate-related risks will in addition be assessed by the ESG committee and discussed along with all other relevant risks. The Board of Directors and its work is also described in the company’s Corporate Governance Report.

Figure 2: Executive Management oversight



The Executive Management team assesses and manages climate-related risks and opportunities, with the highest-level of responsibility lying with the Chief Executive Officer and the Chief Compliance and Organization Officer. The manager of the

individual business segment is responsible assessing relevant risks and for implementing risk mitigating actions. The Executive Management team follows up quarterly on key mitigation plans and reports in annually to the Board of Directors.

## Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the company's business, strategy, and financial planning where such information is material.

Cloudberry integrates principles of governance throughout the organization as a key sustainability topic which strengthens our sustainability strategy. Such a commitment requires a continuous evaluation of the current climate-related risks and opportunities that could potentially affect Cloudberry's operations. Cloudberry annually identifies and assesses climate-related risks and opportunities related to our business development and expansion. Two workshops have been facilitated by a third party, the first was held in 2020, and an update to the risks- and opportunities assessment was carried out in 2022. Key personnel in Cloudberry participated in mentioned workshops and additional meetings to uncover potential changes from the previous climate risks and opportunities assessment. This process involved personnel from the sustainability, operations, compliance, development, and finance divisions. Several changes were identified given changing physical and transition-related dynamics in the current market. In total, ten changes to the

risks and opportunities were identified. Following the workshop, a summary report was developed outlining the key elements of each risk and opportunity. To accurately monitor and evaluate risks and opportunities, Cloudberry has defined and updated its thresholds for time horizon, the likelihood of occurrence, and financial impact according to the guidelines of the TCFD framework.

See Appendix A for an overview of identified changes in the 2022 assessment.

### Climate-related risks and opportunities identified over the short, medium and long-term

We have used the TCFD framework to identify and assess climate-related risks relevant for the company's positive or negative financial or strategic impacts on a company-level. They are addressed in the table below. Cloudberry will continuously analyze and assess its climate-related risk strategy to detect other risks and opportunities.

TCFD	Risk	Like-likelihood <sup>1</sup>	Financial Impact <sup>2</sup>	Time Horizon <sup>3</sup>	Description	Risk mitigation	Opportunity
Physical Risks and Opportunities	Extreme Winds	High	Low	Short	Exacerbated wear-and-tear of wind turbines (i.e., increased service and maintenance/repair costs). Higher risks/costs during construction (e.g., wind days and delayed construction). Temporary stop in production causes loss in production time, due to extreme winds.	Cloudberry has emergency plans on-site on all our producing assets. A contingency plan including the climate risk topics is being established. The company uses certified and well-proven technology, aims for long service contracts with solid counterparts, and ensures that agreements with contractors have substantial buffers on weather-exposed operations.	Finding solutions for how future wind turbines (or upgrades of older wind turbines) can maximize production based on increased wind strength. It also opens for the opportunity to build wind parks in areas that are less sensitive.

TCFD	Risk	Like-likelihood <sup>1</sup>	Financial Impact <sup>2</sup>	Time Horizon <sup>3</sup>	Description	Risk mitigation	Opportunity
Physical Risks and Opportunities	Both acute and chronic	High	Low	Short	Damage and lost production to hydro power stations (including higher insurance premiums), as well as lost revenue from overflowing dams.	The technical standard and capacity of our dams and pipelines are designed to withstand most floodings. Cloudberry has emergency plans on-site on all its producing assets.	It is likely that new permits include demands of creating regulation dams to our assets for flood prevention. An opportunity to increase the company's production capacity and be able to take full advantage and be more efficient in producing more power. Overall, increased precipitation will most likely increase revenue for the company.
		High	Medium	Long	Changes in average temperatures will impact the climate of Norway and Sweden, where Cloudberry's current operations are located. Overall warmer climate with increased temperatures, can lead to increased rainfall, increased wind, and longer periods of drought. These climate changes may affect and disrupt Cloudberry's energy production. Possible scenarios are flooding at hydro plants resulting in less production, severe winds exceeding a wind turbine's capacity which leads to production stops, or droughts leading to low water level forcing the company to reduce or even fully stop the electricity production.	Positioning and preparing the company to cope with scenarios from changes in weather patterns by investing in technical capabilities and solutions. With the Captiva portal the company has access to a live overview of all our producing assets with an operational status, and the weather situation at the locations. Cloudberry's mitigation strategy for changing weather patterns is also reflected in Cloudberry's portfolio developments, being diversified within hydro-, wind and potentially sun power development and production.	Wind farms will in most cases get more hours of production due to increased wind, and the production at hydro plants will increase with more rainfall, and fewer water-frozen days in the rivers and lakes due to warmer temperatures. Furthermore, with a warmer climate, comes snow melting to a larger degree than normal, and hydropower plants that previously have been water frozen during winters might be able to produce power during the winter season.

TCFD	Risk	Like-likelihood <sup>1</sup>	Financial Impact <sup>2</sup>	Time Horizon <sup>3</sup>	Description	Risk mitigation	Opportunity
Transitional Risks and Opportunities	Policy and legal	High	High	Short	<p>Significant changes in the regulatory framework could have an impact on the renewable energy sector. The European Union has through its announced ambitions and strategies set out an ambitious pathway for reducing emissions. Upcoming reporting legislations such as the Corporate Sustainability Reporting Directive (CSRD) standardizes the reporting requirements for companies and sets out disclosures that covers the three main pillars of sustainability, E, S &amp; G. Similarly, the EU Taxonomy requires companies to classify their products and services according to a set of sustainability criteria. These regulations will directly impact the demand for renewable energy sources.</p> <p>On the flipside, the suggested new taxation for the renewable energy sector in Norway consisting of an increased tax on onshore wind and a windfall tax on hydro and wind power, could slow down, interrupt or even end project plans of upgrading and developing renewable energy plants. This is a risk towards the necessary green shift in Norway.</p>	<p>Being at the forefront is of high importance when preparing for significant changes in regulatory framework, Cloudberry has established a task force group to work with government relations and market communication. Priorities and guidelines are prepared to safeguard that the company takes position where possible. Cloudberry is already working proactively through cooperation with organizations, municipalities, the industry, through the media and meetings with politicians in the Government and the Parliament.</p>	<p>Stricter energy regulations lead to possibilities for the renewable energy sector and provides business opportunities. With regulatory frameworks such as the EU Taxonomy and Corporate Social Responsibility Directive (CSRD) comes revised directives. Cloudberry values standardization of laws and standards which speeds up the transition of capital towards the renewable energy sector, and the company is well positioned to capitalize on the increased demand for renewable energy projects and assets.</p>
		Significant changes in regulatory framework					



TCFD	Risk	Like-likelihood <sup>1</sup>	Financial Impact <sup>2</sup>	Time Horizon <sup>3</sup>	Description	Risk mitigation	Opportunity	
	Transitional Risks and Opportunities	<b>Policy and legal</b>						
Revised permit regulations		Medium	Medium	Short	Historically the process of receiving concession for constructing a power plant has been long due to a more stringent regulatory process. This is especially relevant for wind. With the introduction of REPowerEU Plan (2022) the concession process will be reduced with the goal to produce more renewable energy in the near future. For hydropower, revision of existing hydropower regulation plans is considered low risk as the concessions are perpetual.	Cloudberry is following political proposals and industry association's recommendations on new or revised regulations. Cloudberry seeks to involve with local communities, municipalities, and other relevant stakeholders from greenfield projects but also on M&A processes to secure potential mitigations plans in regard to revised regulations.	The REPowerEU Plan (2022) and the intention to speed up the oncoming green transition may contribute to that permit regulations may be revised and shorter time schedule for future developing projects. In Sweden there is an ongoing political process on wind development projects, to move the local "veto" from municipalities to national level, which may speed up the process on concession and furthermore revised permit regulations.	
<b>Technology</b>								
Improved technologies	Medium	Medium	Medium	Technology related to hydro and wind generators experience rapid improvements. Cloudberry has purchased 60% of the Captiva Group, a data-driven operator, manager, and developer of renewable energy, which delivers management services within operations and maintenance, e.g., technical and commercial digital services, and operational intelligence, visualization and reporting solutions to renewable energy projects in the Nordics.	Cloudberry will maintain a portfolio of assets employing relevant and efficient technology and will ensure that its operating portfolio remains competitive in an evolving landscape. The company invests in power plants of expected high technical standards and prioritize technical solutions that are well-proven and delivered by reputable suppliers. As a part of Cloudberry's overall strategy, and with the data-driven operator Captiva Group, Cloudberry delivers management services within operations and maintenance. The company relies on being updated on new technologies related to power production, operations, and market activities. Cloudberry is well informed of ongoing initiatives and promising technologies.	By closely monitoring technological developments, Cloudberry can adapt and seize opportunities that arise from technology shifts. Being a smaller company allows Cloudberry to be agile and implement strategic initiatives rapidly as required by technological developments. Technical improvements, solutions and services will increase the production of renewable energy and improve the profitability. This influences and results in attractive insurance terms and funding. In addition, improvement of technical solutions enables an increase in output of renewable energy technologies without adding any negative environmental impact.		

TCFD	Risk	Like-likelihood <sup>1</sup>	Financial Impact <sup>2</sup>	Time Horizon <sup>3</sup>	Description	Risk mitigation	Opportunity
	Transitional Risks and Opportunities						
Market							
	Volatile power prices	High	High	Short	It is difficult to predict power prices (e.g., 2022 power prices are mostly influenced by geopolitical risks and extreme drought accompanied by changing market dynamics within the European and Nordic grids). Power prices may rise from volatility in commodity prices (incremental producers e.g., through natural gas), increased CO2 prices or higher electricity demand, or they might fall from an expanded supply for instance due to government issued incentives.	Cloudberry cautiously follows the market fundamentals and power price forecasts in the short- and long-term. To mitigate the downside risk of volatile power prices, Cloudberry is positioning its production portfolio so that the company is not dependent on one price area as a hedge toward lock-in effects in the case of depressed prices in certain price areas. Cloudberry has a well-developed overall risk management strategy including price hedging of electricity, and a small portion of the portfolio with PPA to secure fixed income in the short- and medium-term. This strategy further includes close monitoring of market developments, with a special focus on the Nordics.	Cloudberry believes there are strong, fundamental drivers behind a stable, relatively high prices Nordic power market going forward, such as increase in consumption from both electrification and new power intensive industries. The company's ability to execute on both transactions and new investments without affixing a PPA to projects, may enable Cloudberry to both act on investment opportunities and investment decisions other cannot. With a strong financial capability, Cloudberry may also find opportunities in assets in distress due to, for example, short term lower power prices, such as seen in for example NO3 and NO4 during the summer of 2022.
	Supply chain	High	Medium	Short	More extreme weather conditions may cause disruptions in Cloudberry's supply chain. Certain products and components are dependent on very few suppliers often in Asia. A flooding for instance in China may lead to delayed deliveries on crucial components during the construction stage, or when a turbine on a wind power plant needs replacement of a component. Consequently, extreme weather could disrupt the production and transportation of the specific component, which could delay or shut down a renewable energy plant. In addition, there is not much willingness to enter into long-term contracts with suppliers anymore due to the unpredictable situation, possible disruptions and volatile prices. This increases the risk of higher costs in our projects.	Long-term relationship with crucial suppliers is helpful in times with supply chain issues. In addition, it is a priority to have suppliers that are located as close as possible to the construction site to take down the risk of disruptions in the supply chain and the environmental impact. Cloudberry also seeks to reduce the number of suppliers and steps of sub-suppliers in the supply chain to increase control and transparency. For maintenance of our power plants, the company will consider the need for a back-up storage of crucial components that need regular replacement.	By prioritizing more nearby suppliers, Cloudberry will gain a greater degree of control over its value chain and reduce the environmental impact. It will also be easier to follow up the suppliers during the construction stage, during maintenance and repair which reduces the downtime of a power plant.

TCFD	Risk	Like- lihood <sup>1</sup>	Financial Impact <sup>2</sup>	Time Horizon <sup>3</sup>	Description	Risk mitigation	Opportunity	
Transitional Risks and Opportunities	Reputation	Opposition to wind power	High	Medium	Short	In Norway, opposition from anti-wind power organizations for new wind farms (e.g., due to visibility and impact on nature) has historically been of significant risk. In Sweden, municipalities have a right to accept or deny a project late in the permission process, the so called “veto” which could affect Cloudberry.	Wind power is the best source of new clean power in the Nordics. Cloudberry is continuously monitoring the sentiment of external stakeholder groups and maintains communication with key stakeholders to mitigate potential negative reputational risk. Further, Cloudberry has a product portfolio composed of smaller plants in relative proximity to already existing industrial areas, thus limiting the use of unclaimed land areas.	Cloudberry will develop projects in areas where there is local support with a strong focus on local value creation, and the likelihood of potential conflicts can be minimized. Searching and developing projects in connection with or nearby industrial areas is prioritized, as opposed to hunting for the largest and most windy sites. Furthermore, Cloudberry develops shallow water offshore wind projects and will continue to explore opportunities in building industrial value chains, realizing that this contributes to supplying renewable energy locally, whilst protecting biodiversity and minimizing environmental impact.
		Increased focus on permit compliance	High	Medium	Short	Cloudberry must ensure compliance with permits to avoid backlash from external stakeholders either through public or private communication channels.	Cloudberry has implemented processes for project execution and quality control to continually align with permit expectations. A communication plan and a stakeholder dialogue are integrated as a part of the company’s approach and a key to succeed.	With an increased focus on permit compliance, aligning with stakeholder expectations can lead to strengthened reputation and goodwill. As a result, intangible assets such as brand value, stakeholder relationships and employee attraction could be elevated.

<sup>1</sup> The likelihood is based on provisional internal assessments and will be further developed through scenario analyses in the years to come

<sup>2</sup> Financial impact: Low < 25 mill, Medium 25-100 mill, High > 100 mill

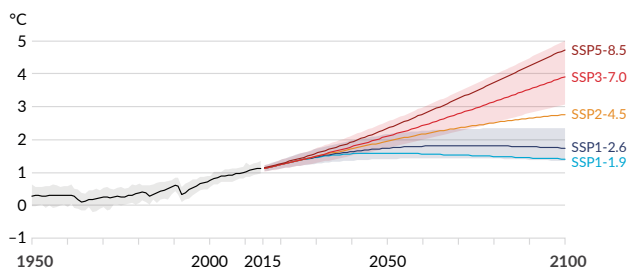
<sup>3</sup> Time horizon: Short: 0-1 years, Medium: 1-5 years, Long: more than 5 years

### The resilience of Cloudberry's strategy, taking into consideration different climate related scenarios

Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

The resilience of our strategy is strengthened by analyzing our main risks in different climate-related scenarios. We have in the first quarter of 2023 conducted an analysis of our main climate-related transitional- and physical risks; volatile power prices and changing weather patterns. A better understanding of how these risks can affect us both in short- and long-term and in different scenarios, tests our strategy resilience and provide us with a better understanding of future strategic and financial impacts in both favorable and non-favorable scenarios.

#### Global average temperature development pathways. IPCC AR6 (2021)



Well-below 2°C scenario  
(RCP 2.6/SSP1-2.6, IEA NZE)

Transition risk: Volatile power prices.

These scenarios assume an orderly transition to limit global warming to well-below 2°C or 1.5°C. The scenarios assume a rise in climate policy ambition and coordinated, global climate action to begin gradually in the immediate future. Transitional and adaptation risks and opportunities dominate the well-below 2°C and 1.5°C scenarios. The scenarios assume that global CO<sub>2</sub> emissions peaked in 2020 and declines fast. A high carbon price is introduced in most economies, and global power is mainly generated using renewables. Due to low demand, fossil fuel prices are

low. The energy market is built on a mix of non-fossil energy sources, energy storage alternatives and CO<sub>2</sub> capture for most residual fossil-based fuel supply. New and more stringent regulations will emerge to meet the goals set in the Paris Agreement.

As observed in the 2022 energy market, energy prices are constantly evolving and can, under certain circumstances, be extremely volatile. Today's energy crisis is a reminder of the fragility and unsustainability of our current energy system.

The conducted scenario analysis points to various drivers of volatile power prices, such as the energy mix itself and especially the changing composition of energy sources. The well-below 2°C scenario sees the global energy mix undergo a profound transformation as renewables ramp up considerably. These renewable energy sources are highly weather dependent and could bring volatility to the energy market with them. Another key factor regarding this ramp-up is that the new energy sources are replacing dispatchable energy sources that provide stable, constant and reliable energy supply.

The future energy mix will therefore be dependent on severe investments in storage, flexibility and infrastructure, such as battery technology to store energy generated by Solar PV and grid capacity to meet increased electricity demand. A lack of these investments may have an effect on the volatility of power prices.

Cloudberry cautiously follows the market fundamentals and power price forecasts in the short- and long-term. To mitigate the downside risk of volatile power prices, Cloudberry is positioning its production portfolio so that the company is not dependent on one price area as a hedge toward lock-in effects in the case of depressed prices in certain price areas. Cloudberry has a well-developed overall risk management strategy including price hedging of electricity, and a small portion of the portfolio with PPA to secure fixed income in the short- and medium-term. We constantly consider increasing the PPA portion.

This strategy further includes close monitoring of market developments, with a special focus on the Nordics.

Business-as-usual scenario (4°C)  
(RCP 8.5/SSP5-8.5 & BAU)

Physical risk: Changing weather patterns.

The 4°C Business as Usual scenario is based on the IPCC RCP8.5 / SSP5.8,5 scenario. It is dominated by increasing physical risks due to a lack of coordinated regulations and policy to limit climate change. In this scenario, economic growth is preferred over climate action, and overconsumption of resources continues. The world is still dependent on fossil fuels, and energy intensity continues to be beyond sustainable levels. The growth of greenhouse gas emissions will cause further warming and long-lasting changes in all climate system components, increasing the likelihood of severe, pervasive, and irreversible impacts on people and ecosystems. Water becomes an essential resource with limited availability, and climate-related conflicts increase due to poor agriculture and living conditions. Tens of millions of people are defined as climate refugees and move northwards in the hope of a more secure life. As the globe is warming up, the severity and frequency of extreme weather events are increasing. Flooding, heavy precipitation, and rising sea levels could impact Cloudberry's operations and value chain. The ambition for economic growth is not met, as GDP losses occur due to increased physical risks as the temperatures rise.

The impact from extreme weather events is already affecting Cloudberry. The financial impact in short- and medium-term will not change significantly, but long-term has the possibility of significant impact. The IPCC report highlights that the future will consist of more compound events in the SSP5-8.5 scenario. The scenario projects a change in precipitation patterns where there will rain more during the winter and less during the summer, combining this with drought during summertime can impact the effect from hydropower plants in the future. Drought during the summer months is already increasing and will impact the hydropower plants as there will be a scarcity for the dependent resource.

Wind patterns in the future can potentially decrease, impacting wind power production in the future. One of the areas which the IPCC report cites as an example of areas affected is northern Europe. Icing on the windmill forming on both the blades and the actual windmill is potential risk for wind power production. Certain types of combination weather can impact the forming of ice more than other. The correct combination of temperatures, humidity, precipitation, and wind can lead to ice forming more easily. This type of weather is projected to occur more often in the SSP5-8.5 scenario.

## Risk management

Disclose how the organization identifies, assesses, and manages climate-related risks.

### Cloudberry's process for identifying, assessing and managing climate-related risks and integrate them into Cloudberry's overall risk management

In 2022, Cloudberry updated our policy and procedures regarding risk management. The aim was to heighten the knowledge and awareness of risk, to standardize the process and ensure a common framework and definition throughout Cloudberry and our different risk processes.

The risk management process is part of the leader responsibilities in Cloudberry and should be integrated in all our core processes. We consider threats and opportunities within four main areas: strategic risks, financial risk, market/external risk, and operational risk. All risk assessments should be updated on a quarterly basis, unless there are major events influencing the risk review of Cloudberry - then we update immediately. We discuss Cloudberry's highest risks, which is a result of probability and consequence, in the management team, with the Audit committee and annually with the Board of Directors.

The risk assessment and management related to climate risk, is both a specific process in Cloudberry and integrated in the general risk management activities. Cloudberry assesses its risks and opportunities from a short-, medium-, and long-term strategic and financial perspective, and have set threshold values for financial impact. The company identifies the potential financial impact from the risks and opportunities and their significance for Cloudberry.

The financial impact is defined by assessing both the actual cost of the impact as well as a consideration of frequency, with the intervals structured as below.

**Table 1. Financial impact**

Financial Impact	Low	Medium	High
MNOK	<25	25–100	>100
Frequency	<0-1 years	1-5 years	>5 years

The thresholds for the cost of impact and frequency of impact were then converted to a 3x3 risk matrix, ultimately leading to a single classification based on the two input variables.

Time horizon has been identified through an assessment where Cloudberry must implement targeted initiatives to mitigate the risk/realize the opportunity related to development, operation, and dismantling phase. This is in line with the definitions of the overall risk management process in Cloudberry. The time horizons for which Cloudberry evaluates risks and opportunities have been identified to be:

**Table 2. Time horizon**

Time horizon	Low	Medium	High
Years	<0-1	1-5	>5

## Metrics and targets

Disclose the metrics and targets are used to assess and manage relevant climate-related risks and opportunities where such information is material.

### Cloudberry's Carbon Emissions

We positively impact the energy transition by developing and producing renewable energy. Sustainability is at the core of everything we do and well-integrated in our long-term strategy. To improve our climate footprint, we must reduce our environmental impact and avoid CO<sub>2</sub> emissions wherever possible. In 2022, Cloudberry improved and conducted our Scope 3 screening of our carbon emissions, aligned with the Greenhouse Gas (GHG) Protocol, focusing on the most material categories of GHG emissions. The company has developed an in-house system to streamline the process of gathering data on emissions, including emissions from the value chain, our operations and Cloudberry's offices. This will allow us to report GHG emissions on a quarterly basis from 2023. Cloudberry is planning to commit to SBTi and is currently developing a roadmap to reach net-zero no later than 2040, and we aim to use this process to identify pathways to become net-zero even earlier.

### Scope 1, Scope 2 and Scope 3 greenhouse gas (GHG) emissions in tons

Cloudberry's carbon inventory is divided into the three main scopes of direct and indirect emissions, and in 2022 Cloudberry's reported GHG emissions from Scope 1, Scope 2 and Scope 3 were 10,727 tons CO<sub>2</sub>e (25,827 tCO<sub>2</sub>e).

**Table 1. GHG emissions in tons for Scope 1, Scope 2 and Scope 3**

Carbon Accounting	Unit	2020	2021	2022
Scope 1 Total	tCO <sub>2</sub> e	-	-	-
Scope 2 Total Location-Based	tCO <sub>2</sub> e	1	7	5
Scope 3 Total	tCO <sub>2</sub> e	6 978 <sup>1</sup>	25 820 <sup>2</sup>	10 723
<b>Total</b>	<b>tCO<sub>2</sub>e</b>	<b>6 980</b>	<b>25 827</b>	<b>10 727</b>

<sup>1</sup> Adjusted from 186 tCO<sub>2</sub>e previously reported for 2020. The number now includes the Scope 3 emissions from construction of the Odal wind farm.

<sup>2</sup> Adjusted from 196 tCO<sub>2</sub>e previously reported for 2021. The number now includes the Scope 3 emissions the Odal wind farm and the Hån wind farm.

**Scope 1** covers all direct emissions sources, including the use of fossil fuels for stationary combustion

(predominantly diesel generators) and transportation. Cloudberry does not have any company cars and did not purchase any insulating gas (SF<sub>6</sub>) refills in 2022 and has, therefore, zero direct GHG emissions to report in Scope 1.

**Scope 2** includes indirect emissions from Cloudberry's purchased energy (i.e., electricity and heating/cooling). This includes purchased energy for Cloudberry's offices in Oslo, Norway and in Karlstad, Eskilstuna and Särö, Sweden, as well as the energy used at our production sites. In 2022 Cloudberry used a total of 183 MWh of energy, corresponding to the emission of 5 tCO<sub>2</sub>e.

**Scope 3** comprises the reported indirect emissions resulting from Cloudberry's value chain activities. Reporting of purchased goods and services, and upstream transportation and distribution, were identified as the most material reporting categories. The total registered emissions from Scope 3 were 10,723 tCO<sub>2</sub>e. Please see Appendix B for a breakdown of included categories.

**Table 2. GHG emissions in tons, Cloudberry Clean Energy**

Scope	Unit	2020	2021	2022
Scope 1	tCO <sub>2</sub> e	-	-	-
Scope 2 (Location-Based)	tCO <sub>2</sub> e	1.4	7	5
Scope 2 (Market-Based)	tCO <sub>2</sub> e	9.1	56.1	49
Scope 3 (Purchased Goods and Services)	tCO <sub>2</sub> e	183.7	1 134 <sup>1</sup>	6
Scope 3 (Capital goods)	tCO <sub>2</sub> e	6 793 <sup>2</sup>	24 678 <sup>3</sup>	10 693
Scope 3 (Fuel-and-energy related activities)	tCO <sub>2</sub> e	-	-	1
Scope 3 (Waste Management)	tCO <sub>2</sub> e	-	0.9	9
Scope 3 (Business Travel)	tCO <sub>2</sub> e	1.6	4.6	11
Scope 3 (Investments)	tCO <sub>2</sub> e	-	2.1	3
<b>Total GHG emissions</b>	<b>tCO<sub>2</sub>e</b>	<b>6 980</b>	<b>25 827</b>	<b>10 727</b>
Total Energy	MWh	34.6	226	183

<sup>1</sup> Adjusted from 188 tCO<sub>2</sub>e previously reported for 2021. The number now includes the Scope 3 emissions from construction of the Hån wind farm.

<sup>2</sup> Adjusted from 0 tCO<sub>2</sub>e previously reported for 2020. The number now includes the Scope 3 emissions from construction of the Odal wind farm.

<sup>3</sup> Adjusted from 0 tCO<sub>2</sub>e previously reported for 2021. The number now includes the Scope 3 emissions from construction of the Odal wind farm and the Hån wind farm.

Cloudberry follows the principle of Proportionate Share (by ownership) and is reporting 34% of the total emissions based on the ownership share in Odal wind farm. The previously reported Scope 3 emissions for 2020 and 2021 have been adjusted in the 2022 report. According to the GHG protocol, emissions from the Odal wind farm should be reported under Category 15 (investment Scope 1 and Scope 2), but Cloudberry has decided to include emissions from the construction phase under Category 2 (capital goods) instead. Additionally, the Scope 3 Category 1 and Category 2 emissions from Hån wind farm have not previously been reported. This is adjusted and the 2020 and 2021 figures are updated including the construction activities respectively (concrete, steel, copper, diesel, and production of the wind turbines). The GHG emissions are reported based on the invoices from the construction period, both for Hån and Odal wind farms. In total, the Scope 3 emissions accounted for 99% of Cloudberry's GHG emissions in 2020, 2021 and 2022.

Cloudberry will continue to evaluate and include more aspects of emissions from its value chain activities going forward.

### Principles on reporting emissions

**In-house development projects:** Cloudberry reports emissions on in-house development projects from final investment decision (FID) and starting point of the construction.

**Projects under construction:** Where Cloudberry is the initiator to the construction, the company will report emissions from construction start. On projects under construction where Cloudberry is the legal owner, Cloudberry reports construction phase emissions.

On assets under construction where Cloudberry has entered into an agreement to buy the power plant and is the legal owner after the construction is completed and commission period is approved, Cloudberry reports emissions from takeover.

**Producing assets:** Cloudberry reports its emissions on producing assets and from take-over (additional-ity principle).

### Target

Cloudberry monitors national and international climate politics and their potential impact on our strategy and business. We strive to ensure that the company makes the right decisions and assessments on how climate risks might affect us. Cloudberry has a scalable platform and is positioned for valuable growth, both in terms of energy production and in-house development backlog and pipeline. Cloudberry's strategy is to continue its sustainable growth organically and strategically in the Nordic market. Areas of our business will have residual GHG emissions, which we will neutralize while minimizing our footprint as much as possible. Cloudberry will further calculate the total Scope 3 emissions and determine a decarbonization pathway to do our part for society to become a low-carbon economy. Going forward, the GHG emissions will be reported on a quarterly basis. Cloudberry will commit to SBTi and currently we are developing a roadmap to reach net-zero no later than 2040. We aim to use this process actively, to identify opportunities to speed up the process and reach net-zero sooner.



## Appendix

### Appendix A – Changes in risk identification

#### Transitional risks and opportunities

##### Policy and Legal

###### New risk

Risk	Likelihood	Financial impact	Time horizon
Significant changes in the regulatory framework	High	High	Short

###### Rationale for inclusion:

The recent proposal of changes in the regulatory framework in Norway through a new taxation structure for the renewable sector poses a direct risk for Cloudberry. If implemented, the new framework will significantly impact Cloudberry's portfolio, and could potentially interrupt or even end projected plans for upgrading and developing plants.

###### Risk change:

Risk identification	Likelihood	Financial impact	Time horizon
<b>Risk identification 2020</b>			
Revised regulation of new water/hydro permits	Medium	Low	Medium
Revised wind power permitting	High	Medium	Short
<b>Risk identification 2022</b>			
Revised regulation of new water and hydro permits	Medium	Medium	Medium

###### Rationale for change:

The risks were merged in 2022 as the increased level of granularity did not produce any additional level of clarity in mitigation strategies and opportunity identification. In the hydro segment, the concessions awarded are perpetual and are therefore viewed as low risk overall. For the wind segment, the overall risk level is comparably higher as the industry has not yet reached the same level of maturity. Despite this, the mitigation strategy for both segments remain similar, through monitoring and stakeholder engagement. As the transition towards renewable energy continues to gain momentum, Cloudberry is well positioned

to capitalize on opportunities in the market by focusing persistently on project quality and permit compliance.

##### Technology

###### New risk

Risk	Likelihood	Financial impact	Time horizon
Disruptive technologies	Low	High	Long

###### Rationale for inclusion:

Resulting of an increase in focus on and market preferences for renewable technologies, the risk for disruptive technologies which can outcompete the current portfolio or alter market dynamics increases. Cloudberry monitors technological developments both within its operating segments as well as the broader renewable space to ensure that any potential disruptive technologies are detected.

##### Market

###### Risk change

Risk identification	Likelihood	Financial impact	Time horizon
<b>Risk identification 2020</b>			
Lower power prices	Medium	High	Long
<b>Risk identification 2022</b>			
Volatile power prices	High	High	Short

###### Rationale for change:

Recent alternations in the competitive landscape because of macroeconomic challenges has emphasized that this risk can be more precisely defined by placing importance of the more prominent variable of volatility in power pricing, rather than a focus on the risk of lower power prices. This change also places this risk as the most material risk for Cloudberry.

**New risk**

Risk	Likelihood	Financial impact	Time horizon
Supply chain	High	Medium	Short

**Rationale for inclusion:**

With more extreme weather conditions comes increased supply chain risk exposure. Cloudberry sources components for its portfolio from suppliers worldwide and certain components have an elevated supply chain risk due to their location and criticality. A lack of sourcing options due to climate risk could significantly increase the cost or lead time for projects.

**Reputation****Removed risk**

Risk	Likelihood	Financial impact	Time horizon
Opposition to wind power	High	Medium	Medium

**Rationale for removal:**

Given the current landscape, anti-wind power organizations do not carry the same momentum as during the first risk assessment in 2020. Cloudberry continues to monitor this risk, but it now falls outside the category of main climate-related risks in the 2022 assessment.

**Risk change**

Risk identification	Likelihood	Financial impact	Time horizon
<b>Risk identification 2020</b>			
Increased focus on corporate carbon footprints	Medium	Medium	Medium
<b>Risk identification 2022</b>			
Increased focus on permit compliance	Medium	Medium	Medium

**Rationale for change:**

Carbon footprints are in 2022 an integrated part of Cloudberry's operations and are both well-managed and well-governed within the company. As a result, not meeting stakeholder expectations related to carbon accounting is no longer a material risk for Cloudberry. In the 2022 re-evaluation, the risk was updated to focus on permit compliance as there

are increasing expectations for quality control and measures to prevent harm to the environment or people affected by Cloudberry's projects. This adjustment makes the overall risk broader in scope but increases relevancy in the current market.

**Physical risks and opportunities****Chronic****Risk change**

Risk identification	Likelihood	Financial impact	Time horizon
<b>Risk identification 2020</b>			
Warmer, wetter and windier	High	Low	Long
<b>Risk identification 2022</b>			
Changing weather patterns	High	Medium	Long

**Rationale for change:**

Cloudberry's previous risk identification did not meet the required standard when it was re-evaluated in 2022 and was therefore adjusted to reflect the current conditions more accurately. The previous risk identification only examined the positive outlook of changing weather conditions, where windier weather would yield higher production on average for wind farms and wetter weather would similarly be an opportunity for hydropower plants. It did not consider that the weather could also become drier, leading to lower output. By updating the risk to a broader focus on changing weather patterns Cloudberry is better suited to account for alterations that could have a financial impact over time.

## Appendix B – Scope 3 breakdown

**Category 1** (purchased goods and services): For 2022 Cloudberry reported a total of 6 tCO<sub>2</sub>e in Category 1. These emissions include the transportation between service providers' location and the locations of hydro plants and wind farms that received service. This was a total of 31,425 km. Cloudberry's reporting system aims to include irregular emissions, such as those from the production and replacement of major parts and onsite work. For example, four days of work with an excavator at the hydropower plant Finnesetbekken has been included under Category 1. For the years in which we have construction using concrete, steel, copper, the associated emissions, and other construction related emissions, these will be reported under Category 1.

**Category 2** (capital goods): This report includes the emissions from the production, transportation, and installation of wind turbines purchased by Cloudberry. In 2022, this amounted to 10,693 tCO<sub>2</sub>e and included the wind turbines at the Odal and Hån wind farms. This was the most significant component of Cloudberry's scope 3 emissions, accounting for 99.7% of the total GHG emissions (Scope 1, Scope 2 and Scope 3). Our calculations are based on LCA numbers provided by the turbine manufacturer, adapted to fit site specific numbers such as hub height and wind conditions. Going forward, Cloudberry will report these emissions in line with payments made to the turbine manufacturer. I.e., when 20% of the payments are made, 20% of the emissions are reported. Cloudberry has adopted this approach as the payments follow the construction progress and the production under

the turbine supply agreement. The exception is the initial payment under the supplier agreements, as the carbon emissions will occur at a later stage in the production cycle of the machinery. The number reported for 2022 includes 17% and 60% of the total Category 2 emissions for the construction of the wind farms Odal and Hån respectively.

**Category 3** (Fuel-and-energy related activities): In accordance with the GHG protocol, Cloudberry reports the well-to-tank and transmission & distribution emissions related to the electricity use at the powerplants and offices. Since the power plants and offices are in the Nordics, this accounted for only a minor portion of the total emissions.

**Category 5** (waste management): Cloudberry reports on waste management from our offices, projects under construction, and power plants under operation. Waste from Cloudberry's offices in Oslo, Karlstad, Eskilstuna and Särö accounted for 5,932 kilograms. The waste from Hån wind farm during construction in 2022 totaled 28,910 kilograms. Combined, all of Cloudberry's waste management contributed to 11 tCO<sub>2</sub>e.

**Category 6** (business travel): Cloudberry reports emission from air travel, rental cars and mileage allowance, which in total accounted for 11 tCO<sub>2</sub>e.

**Category 15** (investments): Cloudberry reports the electricity used in the hydropower plants in Forte Energy Norway AS, where the company has 34% ownership.

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