



# Green Finance Report 2022

# Content




1 About Hafslund and green finance framework.....	3
2 Reporting .....	4
3 Allocation and impact report 2022 .....	5
4 Presentation of selected projects.....	6
5 External Review .....	8

# 1 About Hafslund and green finance framework

Hafslund AS (“Hafslund” or “the Group”) is a renewable energy group that is wholly owned by the City of Oslo. The Group is Norway’s second largest renewable power producer and has a strong commitment towards innovative solutions for electrification.

Hafslund established a Green Finance Framework (the “Framework”) in 2021 based on the ICMA Green Bond Principles and the LMA/LSTA/APLMA Green Loan Principles. The Framework defines assets and projects that can be financed by Green Bonds and Green Loans (“Green Finance Instruments”). The Framework outlines the process to evaluate, select, track and report on such investments.

Cicero Shades of Green conducted an independent assessment of the Group’s Framework in 2021. The Framework received the grade Dark Green with Good on governance. Both the Framework and the independent assessment is available at Hafslund’s website [www.hafslund.no](http://www.hafslund.no), and the Framework directly on this [link](#).

Green Project Category	ICMA GBPs	EU Taxonomy	UN SDGs
<b>Renewable energy</b> Investments, and related expenditures, directed towards the development, construction, installation, improvement, operation, repair and maintenance of hydro power projects and related infrastructure.	Renewable energy	Environmental objective: Climate change mitigation  Economic activity: Electricity generation from hydropower	
<b>Climate change adaptation</b> Investments, and related expenditures, aimed at reducing risks associated with climate change, such as fortification of hydropower facilities and dams to ensure they can withstand higher levels of precipitation.	Climate change adaptation	Environmental objective: Climate change adaptation  Economic activity: Electricity generation from hydropower	
<b>Clean transportation</b> Investments, and related expenditures, in infrastructure for electric vehicles, such as charging stations.	Clean transportation	Environmental objective: Climate change mitigation  Economic activity: Infrastructure enabling low-carbon land transport	

# 2

# Reporting

Hafslund's Green Finance Framework states that the Green Finance Report shall include an allocation report and an impact report.

## Allocation report

- Amounts invested in each of the Green Project categories defined in this Green Finance Framework and the share of new financing versus refinancing.
- Examples of Green Projects that have been funded by Green Finance Instruments.
- The nominal amount of Green Finance Instruments outstanding, divided into Green Bonds and Green Loans.
- The amount of net proceeds awaiting allocation to Green Projects (if any).

## Impact report

The impact report aims to disclose the environmental impact of the Green Projects financed under the Framework. Impact reporting will, to some extent, be aggregated and depending on data availability, calculations will be made on a best intention basis. The impact assessment may, where applicable, be based on the metrics listed below.

### *Renewable energy*

- Energy generation capacity from hydropower (MW).
- Actual annual energy generation from hydropower (MWh).
- Annual reduction and/or avoidance of GHG emissions (tonnes of CO<sub>2</sub>e).

### *Climate change adaptation*

- Number of rehabilitated dams.

### *Clean transportation*

- Number of installed charging stations for electric vehicles.



# 3 Allocation and impact report 2022

At the end of 2022 Hafslund had one outstanding Green Bond of NOK 500 million which was issued in 2021 and a portfolio of eligible projects of NOK 1,554 million. There are no Green Loans outstanding.

## Green Finance Instruments (NOK millions)

Instrument	ISIN	Issue date	Maturity date	Outstanding amount
Green Bond	NO0010960370	2021-03-30	2026-03-30	500
<b>Total (NOK millions)</b>				<b>500</b>

## Green Projects (NOK millions)

		2022
New financing	Renewable energy	649
	Climate change adaption	461
	Clean transportation	-
<b>Total new financing</b>		<b>1,110</b>
Refinancing	Renewable energy	312
	Climate change adaption	132
	Clean transportation	-
<b>Total refinancing</b>		<b>444</b>
<b>Total new financing and refinancing</b>		<b>1,554</b>

Of the NOK 1,554 million in eligible projects in 2022, 71% was new financing under the Framework. A total of 15 different projects are included, with 10 hydro power projects and 5 dam rehabilitations. The financed share of the projects (Hafslund's share of the projects adjusted for other financing) under the Framework will result in 196 GWh of new hydropower, and a reduction of 44,692<sup>1</sup> tonnes of CO<sub>2</sub>e. In total the projects will produce 1,031 GWh of hydropower and will annually reduce CO<sub>2</sub>e emissions with 234,668 tonnes.

<sup>1</sup> Source for emissions from European energy mix (in 2020): EEA - Greenhouse gas emission intensity of electricity generation in Europe - <https://www.eea.europa.eu/ims/greenhouse-gas-emission-intensity-of-1>

Source for emissions from Norwegian hydropower: NORSUS / Østfoldforskning's "The inventory and life cycle data for Norwegian hydroelectricity – May 2019"

# 4 Presentation of selected projects<sup>2</sup>

## Tolga power plant

- New hydropower: 205 GWh
- Completed: 2021
- Total investment: NOK 895 million
- Hafslund's share: 75 %



The power plant utilizes a fall of approx. 86 meters in the river Glomma. The power station is built in the mountains and is approx. 20 meters high, 43 meters long and 12.5 meters wide, and has three francis turbines. There are three fish routes so fish can pass both upstream and downstream at all watercourses. Development started in 2018, and the power plant was completed in 2021.

## Nedre Otta power plant

- New hydropower: 315 GWh
- Completed: 2020
- Total investment: NOK 1,110 million
- Hafslund's share: 50 %



Nedre Otta is the largest hydropower project in Norway in recent years. The power plant uses an existing intake dam and is situated in the mountains outside of Otta. The development of the power plant in Sel and Vågå municipalities started in October 2016 and was put into operation in June 2020.

---

<sup>2</sup> Note that some of the projects have been partly financed elsewhere, and as such Hafslund's investment based on the ownership share is not fully included in the allocation report as financing

## Mork power plant

- New hydropower: 42 GWh
- Completed: 2022
- Total investment: NOK 180 million
- Hafslund's share: 67 %



Hafslund has together with landowners built Mork power plant in Erdal in Lærdal municipality in Sogn og Fjordane. The power plant will utilize a fall of approx. 230 m in the Erdalselva from Hestevollen to Bjørkum. The power plant has a low dam construction, waterway in tunnel drilled with a tunnel boring machine and a standardized compact power station with relatively small interventions in nature. The project is financed by Hafslund.

## Dam Viddalsvatn

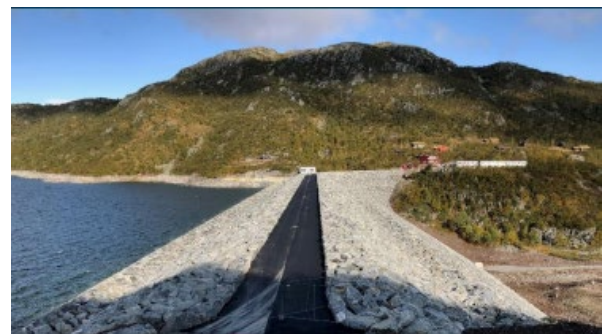
- Planned completion: 2023
- Total investment: NOK 325 million
- Hafslund's share: 93 %



Dam Viddalsvatn was built in 1970-1971, and new requirements for Norwegian rockfill dams have led to the dam facility being upgraded. The water level in the reservoir remains unchanged after rehabilitation. Stone for the rehabilitation is taken from the original quarry in the magazine, and a new quarry.

## Dam Strandevatn

- Completed: 2020
- Total investment: NOK 118 million
- Hafslund's share: 75 %



Dam Strandevatn was Norway's first rockfill dam and was first completed in 1955. The dam was as part of updated government requirements for rockfill dams upgraded. The pond was plastered with new stone on both sides and a new flood tunnel was established for the dam facility to handle future floods.



To the Group Management of Hafslund AS

### **Independent statement regarding Hafslund AS' Green Finance Report for 2022**

We have undertaken a limited assurance engagement in respect of selected information in Hafslund AS' (the "Company") Green Finance Report for 2022.

The scope of our work was limited to giving assurance that an amount equal to the net proceeds from issued Green Finance Instruments has been allocated to Green Projects as described in the "Green Finance Report 2022", page 4-5 section 2 «Reporting» and section 3 «Allocation and impact report 2022» (The Subject Matter Information).

The reporting criteria against which this information was assessed is the Company's "Green Finance Framework» per November 2021, available on the Company website and attached as a pdf-report in the Green Finance Report for 2022 (the Criteria).

Our assurance does not extend to any other information in the Green Finance Report for 2022. We have not reviewed and do not provide any assurance over any individual project information reported, including estimates of sustainability impacts.

#### **Management's Responsibility**

Management is responsible for ensuring that the Company has implemented appropriate guidelines for green finance management and internal control.

Management is responsible for evaluating and selecting eligible green projects, for the use and management of finance proceeds, and for preparing a "Green Finance Report" that is free of material misstatements, whether due to fraud or error, in accordance with the Company's "Green Finance Framework".

#### **Our Independence and Quality Management**

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We apply the International Standard on Quality Management (ISQM) 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, and accordingly, maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### **Our Responsibilities**

Our responsibility is to express a limited assurance conclusion on the Subject Matter Information based on the procedures we have performed and the evidence we have obtained. We conducted our work in accordance with International Standard on Assurance Engagements (ISAE) 3000 revised –

«Assurance Engagements other than Audits or Reviews of Historical Information», issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the Subject Matter Information is free from material misstatement.

A limited assurance engagement in accordance with ISAE 3000 involves assessing the suitability in the circumstances of management's use of the Criteria as the basis for the preparation of the Subject Matter Information, assessing the risks of material misstatement of the Subject Matter Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Subject Matter Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and, among others, included an assessment of whether the criteria used are appropriate. Our procedures also included:

- Obtaining an understanding of the process for the preparation and presentation of the Green Finance Report to provide us with an understanding of how the Green Projects have been allocated in accordance with the Green Finance Framework
- Interviewed those in charge of the Green Finance Report to develop an understanding of the process for the preparation of the Allocation and impact report 2022 section of the report
- Performed substantive testing on a sample basis of the Subject Matter Information
- Considering the disclosure and presentation of the Subject Matter Information.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Subject Matter Information has been prepared, in all material respects, in accordance with the Criteria

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### **Conclusion**

Based on the limited assurance procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that an amount equal to the net proceeds from issued Green Finance Instruments has not, in all material respects, been allocated to Green Projects as described in the "Green Finance Report 2022", page 4-5 section 2 «Reporting» and section 3 «Allocation and impact report 2022» , in accordance with the relevant criteria.

Oslo, 30 March 2023  
**PricewaterhouseCoopers AS**

Marius Thorsrud  
State Authorised Public Accountant  
(This document has been signed electronically)

