

ASSESSMENT

13 February 2023



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Purmo Group Oyj

Second Party Opinion – Green Finance Framework Assigned SQS3 Sustainability Quality Score

Summary

We have assigned an SQS3 Sustainability Quality Score (good) to Purmo Group Oyj's (Purmo) green finance framework dated February 2023. The company has established its use-of-proceeds framework to finance projects across one eligible green category, energy efficiency. Purmo has described the main characteristics of the sustainable financing instruments within a formalized financing framework that is aligned with the International Capital Market Association's (ICMA) Green Bond Principles 2021 (including the June 2022 Appendix 1), and the Asia-Pacific Loan Market Association, Loan Market Association, and Loan Syndication and Trading Association's (APLMA/LMA/LSTA) Green Loan Principles 2021. The framework also demonstrates a moderate contribution to sustainability.

Sustainability quality score

SQS3



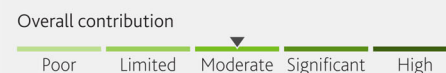
Alignment with principles USE OF PROCEEDS



FACTORS ALIGNMENT



Contribution to sustainability



Expected impact
 Relevance and magnitude

ADJUSTMENTS

ESG risk management No adjustment
 Coherence No adjustment

Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of Purmo's green finance framework, including the framework's alignment with the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1) and the APLMA/LMA/LSTA's Green Loan Principles 2021. Under its framework, Purmo plans to take out use-of-proceeds green loans and issue use-of-proceeds green bonds, green hybrid bonds, green commercial papers and other types of debt instruments to finance projects for one green category, as outlined in Appendix 2 of this report.

Our assessment is based on Purmo's framework dated February 2023, and our opinion reflects our point-in-time assessment of the details contained in this version of the framework, and other public and nonpublic information provided by the company.

We produced this SPO based on our [Framework to Provide Second Party Opinions on Sustainable Debt](#), published in October 2022.

Issuer profile

Purmo Group Oyj (Purmo) is a heating and cooling equipment manufacturing company headquartered in Helsinki, Finland, with operations in 24 countries, manufacturing in 11 countries and distribution of products to over 100 countries. Purmo designs, manufactures and distributes radiators, underfloor heating systems, convectors, cooling and ventilation systems, and components for controlling and monitoring heating such as thermostats, mostly for residential use. In 2021, total net sales at Purmo were €843.6 million and EBITDA was €103.9 million. The company was publicly listed on Nasdaq Helsinki in 2022, and its market capitalization was €343 million as of January 2023. The company's sustainability strategy is based on its employees, community engagement, products and manufacturing processes. The company's goals include achieving carbon neutrality (Scopes 1 and 2) in its production by 2050, incorporating circular design principles across all its products, becoming a diversified and inclusive workplace, and employees performing community service.

Strengths

- » The objectives set are defined, relevant and coherent.
- » The roles and responsibilities for project evaluation and selection are clearly defined and include relevant expertise.
- » It is committed to reallocating proceeds to projects that are compliant with the framework.

Challenges

- » Unavailability of thresholds for the eligible category.
- » Reporting shortcomings related to environmental benefits (case studies will be provided).
- » Possibility of negative environmental lock-ins from radiators being installed in heating systems using conventional gas or oil boilers.

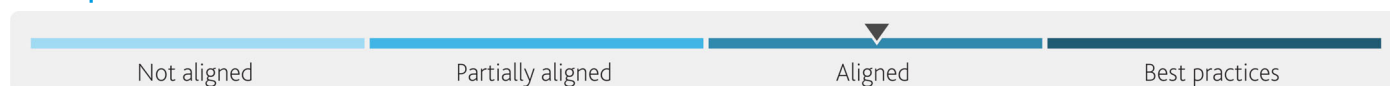
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Alignment with principles

Purmo's green finance framework is aligned with the four core components of the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1) and the APLMA/LMA/LSTA's Green Loan Principles 2021:

- Green Bond Principles (GBP)
- Social Bond Principles (SBP)
- Green Loan Principles (GLP)
- Social Loan Principles (SLP)
- Sustainability-Linked Bond Principles (SLBP)
- Sustainability Linked Loan Principles (SLLP)

Use of proceeds



Clarity of the eligible categories – ALIGNED

Purmo has communicated the nature of the expenditure, and has set eligibility criteria for the eligible category, as well as exclusion criteria. The location of projects has been defined as anywhere Purmo has operations (24 countries) or manufacturing facilities (11 countries), with 21 manufacturing sites in total. The framework includes descriptions of the eligible projects to be financed. The company considers eligible activities to be enabling activities that will allow its clients to comply with the EU Taxonomy Climate Delegated Act, but does not use the taxonomy directly as eligibility criteria.

Clarity of the environmental or social objectives – BEST PRACTICES

Purmo has clearly outlined climate change mitigation as the environmental objective associated with its eligible category, which is relevant to the eligible projects and coherent with recognized international standards. The framework has referenced the United Nations' (UN) Sustainable Development Goals (SDGs) and associated targets, and the environmental objectives in the EU Taxonomy in articulating the objectives of the eligible category.

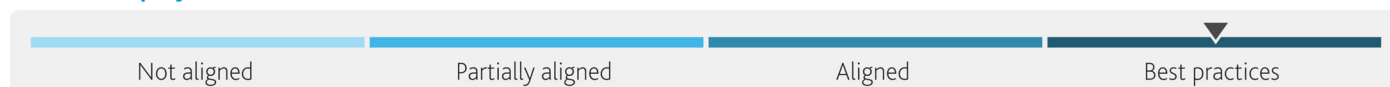
Clarity of the expected benefits – ALIGNED

Purmo has identified relevant environmental benefits for its eligible category. The benefits appear to be measurable. The company has not committed to report on environmental benefits by using quantitative indicators, and so far has only provided examples of potential metrics it may use. However, the company will always use case studies to illustrate the environmental benefits of eligible investments. Purmo has committed to limit the look-back period for refinanced projects to three years in internal documentation, and it has committed to disclose the estimated share of refinancing to investors before each bond issuance.

Best practices identified

- » Objectives set are defined, relevant and coherent for all project categories
- » Relevant benefits are identified for all project categories
- » Commitment to transparently disclose the share of proceeds used for refinancing where feasible
- » Commitment to transparently communicate the associated look-back period where feasible

Process for project evaluation and selection



Transparency and quality of process for defining eligible projects – BEST PRACTICES

Purmo has established a clear process for proposing, selecting, approving allocations for, and monitoring eligible projects, which are formalized in its publicly available framework. The process is run by the Purmo Group ESG Steering Group (ESG SG), chaired by the company's head of corporate social responsibility (CSR) and sustainability, and also comprising its CEO and CFO, product managers and operations directors. Any member of the ESG SG can propose an eligible project, which is then evaluated by the head of CSR, verified by the full steering group and marked on the Green Financing Register. The ESG SG, besides being responsible for the final approval of the eligible projects, is also charged with the continued monitoring of existing projects. The ESG SG will meet at least twice per year and will also ensure that the Green Financing Register of eligible assets is kept up to date. The decisions of the ESG SG will be documented and filed. In case of significant divestments of operations affecting the allocation of proceeds, Purmo will reallocate proceeds according to the eligibility criteria of the framework.

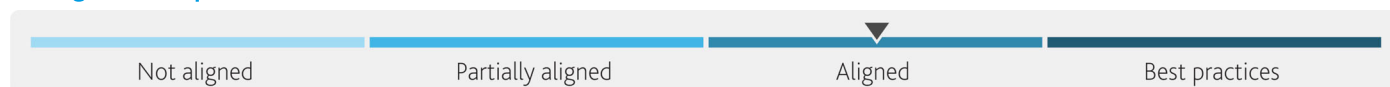
Environmental and social risk mitigation process – BEST PRACTICES

The environmental and social risk mitigation process has been communicated by the company, and general information about the company's approach to environmental and social risks is also publicly available in its annual report. The management of such risks includes initial assessments and screenings (that is, preventive measures), as well as corrective measures. Significant environmental and social risks are assessed across eligible categories against national regulations such as the UK Modern Slavery Act, international agreements such as the UN Global Compact, and various internal policies, including the Supplier Code of Conduct. Each of the company's manufacturing sites manages its environmental impact through ISO 14001-certified environmental management systems, and the company aims to achieve ISO 50001 certification across all its plants by 2025. Any potential environmental, social and governance (ESG) controversies linked to eligible projects under the framework are monitored.

Best practices identified

- » The roles and responsibilities for project evaluation and selection are clearly defined and include relevant expertise
- » There is evidence of continuity in the selection and evaluation process through the life of the financial instrument(s), including compliance verification and procedures to undertake mitigating actions when needed
- » The process for project evaluation and selection is traceable
- » Material environmental and social risks for most project categories are identified
- » Presence of corrective measures to address environmental and social risks across projects
- » ESG controversies are monitored

Management of proceeds



Allocation and tracking of proceeds – ALIGNED

The proceeds will be placed in the company's general treasury. They will be earmarked for allocation to the Green Finance Register of eligible green projects, to be validated by the ESG SG in accordance with the green finance framework. The balance of eligible proceeds will be adjusted biannually in case a portfolio approach is taken or on a bond-by-bond basis. In any case, Purmo has committed to ensure that an amount equal to the green financing net proceeds exclusively supports the financing or refinancing of green assets or expenditures. The company has committed to allocating net proceeds within 36 months.

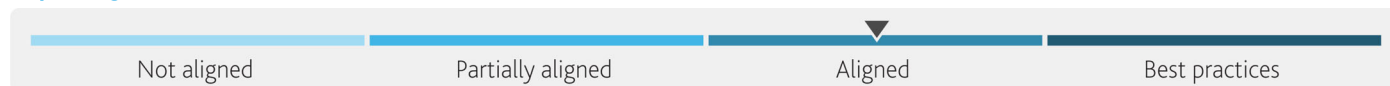
Management of unallocated proceeds – BEST PRACTICES

Any temporary unallocated proceeds will be invested in the company's liquidity reserve and managed accordingly. In its framework, Purmo has made a specific commitment to exclude allocation to greenhouse gas (GHG)-intensive activities (finance fossil fuel energy generation) or a number of controversial activities (nuclear energy generation, weapons and defense industries, gambling and tobacco); these exclusion criteria also apply to temporarily unallocated proceeds.

Best practices identified

- » Broad disclosure of a clearly articulated and comprehensive management of proceeds policy to external stakeholders; bondholders or lenders at a minimum
- » Disclosure on temporary placements and presence of exclusion criteria toward environmentally or socially harmful activities
- » Commitment to reallocate proceeds to projects that are compliant with the framework

Reporting



Transparency of reporting – ALIGNED

Purmo will report the use of proceeds of bonds issued under its framework annually, and this reporting will be made publicly available on its website in a Green Finance Report. In case Purmo has green bank loans outstanding, the company may further report certain details directly to lenders, as may be required by loan documentation. Reporting will occur as long as there is green financing outstanding, that is, until the maturity of the bonds. The company has stated that reporting will include the total amount of green debt outstanding, the share of proceeds used for financing and refinancing, the share of co-financing (if any), the share of temporarily unallocated proceeds, types of temporary allocations and the chosen allocation method (portfolio approach or bond by bond). Reporting will also include the expected sustainable benefits of the projects, illustrated through examples and case studies, and may include quantitative indicators, as well as material developments or controversies related to the projects.

In impact reporting specifically, the focus will be on examples and case studies of selected projects and solutions, highlighting the achieved energy efficiency benefits in these particular cases. Impact reporting may also include quantitative environmental impact indicators, such as CO₂ emission reductions, the number of new R&D projects or the number of new eligible green products, but Purmo has not, so far, clearly identified or committed to a set of quantitative reporting indicators. While the ICMA recommends quantitative performance measures where feasible, we understand the challenges of finding overarching metrics that can span multiple types of industrial processes and product categories.

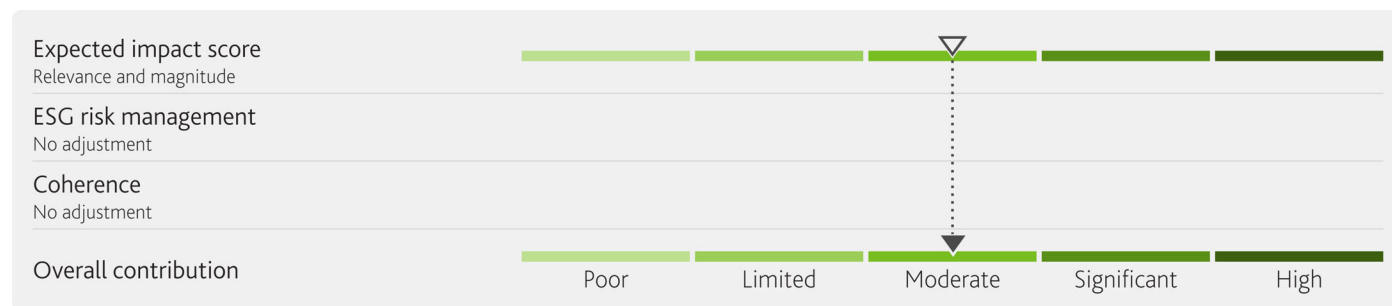
Calculation methodologies and assumptions used for the environmental indicators and impact reporting will be published. The company will conduct an independent external audit of the tracking and allocation of funds, but not of the environmental and social benefits, and externalities associated with the financed projects.

Best practices identified

- » Reporting until full bond maturity or loan payback
- » Reporting covers material developments and issues related to the projects or assets
- » Reporting on allocation of proceeds and benefits done at least at eligible category level
- » Exhaustive allocation reporting – balance or % of unallocated funds, types of temporary investments (e.g. cash or cash equivalent) and share of financing vs re-financing
- » Disclosure of reporting methodology and calculation assumptions to bondholders or lenders at a minimum
- » Independent audit of the tracking and allocation of funds at least until full allocation and in case of material changes

Contribution to sustainability

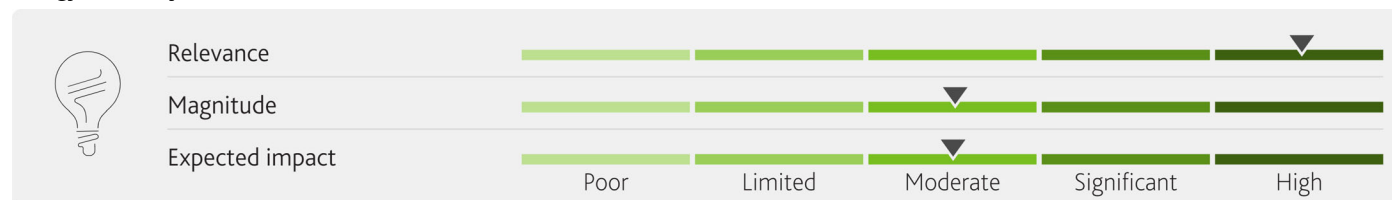
The framework demonstrates a moderate overall contribution to sustainability.



Expected impact

The expected impact of the eligible projects on environmental objectives is moderate. A detailed assessment of the single eligible category in the framework is provided below.

Energy efficiency



Under this category, the company plans to finance investments related to products, solutions and associated expenditures, as well as energy efficiency improvements in manufacturing processes. The products covered include radiators, cooling and ventilation systems, heat pumps and smart controls for heating (e.g., zoned thermostats). In general, according to the International Energy Agency (IEA), energy efficiency improvements need to average around 4% a year this decade to align with its net zero emissions by 2050 scenario.¹ The products implicated here are all to be used for the heating and cooling of buildings. The buildings and buildings construction sectors combined are responsible for 30% of total global final energy consumption, and to align with the IEA Net Zero Scenario, carbon emissions from building operations need to more than halve by 2030.² Globally, heating is the largest end use of energy, accounting

for 50% of final energy consumption in 2018; although half of this is industrial heating, almost the entire remainder (46%) is used for the heating of buildings. Globally, fossil fuels continue to be a dominant source of heat, with renewables (excluding biomass) meeting only 10% of global heat demand as of 2018.³ Energy efficiency is highly relevant for Purmo for two reasons. Firstly, because of the high proportion of energy used for the heating and cooling of buildings globally, there is an increased need to reduce energy usage and improve energy efficiency — this is the ultimate end use of Purmo's eligible products. Secondly, given the sector the company operates in, production of heating and cooling equipment, and improving the energy efficiency of both products and production lines address the most significant sustainability issue of the sector.

This category has a moderate magnitude, reflecting its combination of positive impact, expected negative lock-ins, adequate management of risks and use of best available technologies. One of the most important products for Purmo are radiators, which in and of themselves are passive elements for transmitting heat from a water-based piping system into ambient room air. They can be attached to any kind of heating system using heated water (whether a gas boiler, oil boiler, district heating, geothermal heat pump etc.), some of which have significant GHG emissions footprints and environmental impacts. Purmo, as the radiator manufacturer, has no control over the end use of its radiators. However, some radiators are likely to be installed in GHG-intensive heating systems causing significant lock-in effects. Indeed, Purmo designs its radiators to be compatible with conventional fossil fuel boilers, as well as with environmentally friendly heat pump systems.

We recognize that Purmo is taking measures under its direct control to quantify and mitigate its negative impacts. Purmo is committed to conducting life-cycle analysis (LCA) for all new products by 2025 through a voluntary scheme called the PEP Ecopassport. The LCA methodology used is comprehensive, covering materials, packaging, installation, operational use and end-of-life disposal. However, this PEP Ecopassport is meant primarily for business-to-business disclosure and does not guarantee that Purmo products necessarily have the lowest life-cycle impact of all radiators. The company also aims to minimize waste generation and water consumption in the manufacturing process (having committed to 30% water use reduction by 2030 and to 100% recycled, recyclable or biodegradable packaging, with zero waste sent to landfill, by 2030) and refuses to source conflict minerals. This is in addition to the company's ESG risk monitoring and management in place to manage externalities (see ESG risk management section).

Finally, the technologies being developed are the best available as the company does not manufacture fossil fuel utilizing heating solutions like gas boilers. All types of heating systems, including the most environmentally friendly ones, need radiators or other means (like underfloor heating systems) to distribute heat. In addition, smart thermostats can help reduce energy consumption.

ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. The company appears to have adequate ESG risk monitoring practices in place to manage externalities. Its manufacturing sites currently manage the environmental impact through ISO 14001-certified environmental management systems, and the company aims to achieve ISO 50001 certification for all of its plants by 2025. The company has also implemented a sustainability monitoring system, "Resource Advisor", for internal use and to ensure consistent monitoring and reporting of carbon emissions in its value chain. With regard to human rights and social issues, the company follows the UK Modern Slavery Act and the Bribery Act, and is committed to the UN Global Compact. Although there are some challenges because of the nature of its supply-chain operations, the company commits to engage closely with suppliers and other agents to achieve greater transparency and ethical sourcing. The company also has an anti-corruption and anti-bribery policy in place. The policies and measures apply to all Purmo sites around the world.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. Green proceeds will be allocated toward expenditure, which seems to align with the company's broader sustainability objectives, especially its commitments to achieve carbon neutrality (Scopes 1 and 2) in its production, align with a 1.5 degrees Celsius scenario on global warming, incorporate circularity and end-of-life considerations in all new products, and reduce emissions over the life cycle of its products. For instance, the company aims to have Product Environmental Profiles (PEPs) for all new products by 2025. The company has committed to installing energy monitoring devices by 2025, targeting zero waste to landfill by 2030, and sourcing 100% of its packaging from recycled, recyclable or biodegradable materials by 2030, highlighting its efforts to reduce waste and encourage circular solutions.

Appendix 1 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The single eligible category included in Purmo's framework is likely to contribute to four of the UN's SDGs, namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 7: Affordable and Clean Energy	<i>Energy Efficiency</i>	7.3: Double the global rate of improvement in energy efficiency
GOAL 8: Decent Work and Economic Growth		8.4: Improve global resource efficiency and endeavour to decouple economic growth from environmental degradation
GOAL 9: Industry, Innovation and Infrastructure		9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with all countries taking action
GOAL 13: Climate Action		13.3: Improve awareness and human and institutional capacity on climate change mitigation, adaptation and impact reduction

The mapping of the UN's SDGs in this SPO considers the eligible project categories (or key performance indicators) and associated sustainability objectives/benefits documented in the issuer/borrow/lender's financing framework, as well as resources and guidelines from public institutions, such as the ICMA's SDG Mapping Guidance and the UN's SDG targets and indicators.

Appendix 2 - Summary of eligible categories in Purmo's framework

Eligible Category	Description	Sustainability Objectives	Impact Reporting Metrics
Energy Efficiency	<p>The following products, enabling energy efficiency improvements, and associated expenditure, including energy efficiency improvements in the production lines, may qualify as Eligible Green Assets and Expenditures:</p> <ul style="list-style-type: none"> • Radiators, underfloor heating systems, convectors and other equipment for central heating and for space heating • Cooling and ventilation systems, including heat pumps • Components enabling smart controlling and monitoring of heating and ventilation systems, such as zoned thermostats 	<ul style="list-style-type: none"> - Climate Change Mitigation - Sustainable Cities and Communities - Responsible Consumption and Production - Climate Action - EU environmental objectives in relation to the EU Taxonomy 	<p>The impact report includes metrics related to the environmental impact of the Green Eligible Assets and Expenditures financed under this Framework.</p>

Moody's related publications

Second Party Opinion analytical framework:

» [Framework to Provide Second Party Opinions on Sustainable Debt](#), October 2022

Topic page:

» [ESG Credit and Sustainable Finance](#)

Endnotes

¹ IEA, [Global energy efficiency progress is accelerating, signalling a potential turning point after years of slow improvement](#), 2 December 2022.

² IEA, [Buildings](#), 2022.

³ IEA, [Renewables 2019: Heat](#), 2019.

Moody's assigns SPOs in alignment with the main tenets of the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews and the LSTA/LMA/APLMA Guidance for Green, Social and Sustainability-Linked Loans External Reviews, as applicable; Moody's practices may however diverge in some respects from the practices recommended in those documents. Moody's approach to assigning SPOs is described in its Assessment Framework, and is subject to the ethical and professional principles set forth in the Moody's Investors Service Code of Professional Conduct.

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