WA3RM Green Bond Framework

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Introduction to the Green Bond Framework

WA3RM develops investment opportunities in industrial circularity enabling a step change in resource efficiency in production, thereby delivering outsize results for environmental sustainability. Important elements to WA3RM's work are a three-link causal chain of circularity to resource efficiency to impacts and the requirement that each link in the chain represents a significant system change, rather than an incremental change.
The purpose of this Green Bond Framework ("GBF") is to enable the company to finance investments through issuance of Green Bonds. The GBF describes WA3RM's business and how WA3RM uses proceeds from green bond issuances, evaluates and selects projects to be financed with proceeds from green bond issuances, manages proceeds, and reports information.

Background

WA3RM is a Swedish infrastructure development company founded in 2015. WA3RM's projects are inspired by a background in cyclical systems and the key principles: Responsible, Renewable, and Recyclable. WA3RM develops regenerative infrastructure in the form of production facilities which reutilize industrial waste or byproducts such as surplus heat, carbon dioxide emissions, sludge, chemical waste, and more. WA3RM brings waste to life by connecting industries that want to put their solid, liquid, gas, and heat waste streams to better use, with entrepreneurs that benefit from accessible energy and raw materials in different forms. This circular system also offers other attractive possibilities, such as more local jobs, self-sufficient food production, and various contributions to mitigating and adapting to climate change. This model can be used anywhere in connection with existing industrial production.

About WA3RM

The WA3RM business concept is to reuse waste streams from industrial facilities for regenerative, often food-producing businesses where circularity is a key focus. Climate change and sustainability-related challenges require real, rapid, and decisive action in the form of industrial-scale solutions. WA3RM is focused on turning waste streams into a profitable and long-term business, where projects are based on proven technologies, established solutions, and byproducts on a large scale. We strive to create positive impacts for the climate, our partner industries, our investors, and society.

Figure 1. Organizational diagram of WA3RM entities

Vision and purpose of WA3RM

WA3RM aims to build a world where progress is based on sustainable circularity. Our vision is about physical buildings and structures, but also a new way of thinking. We design and construct regenerative production facilities which offer profitable circular business opportunities and focus on improvements for people, businesses, societies, and our planet. We strive for optimal circularity where nothing goes to waste and there are no harmful emissions. WA3RM's projects aim to create new jobs, increase local production of food and other resources, reuse waste, abate greenhouse gas emissions, and reduce demands for virgin resources, imported resources, and transport. Figure 2 displays the concept of WA3RM.

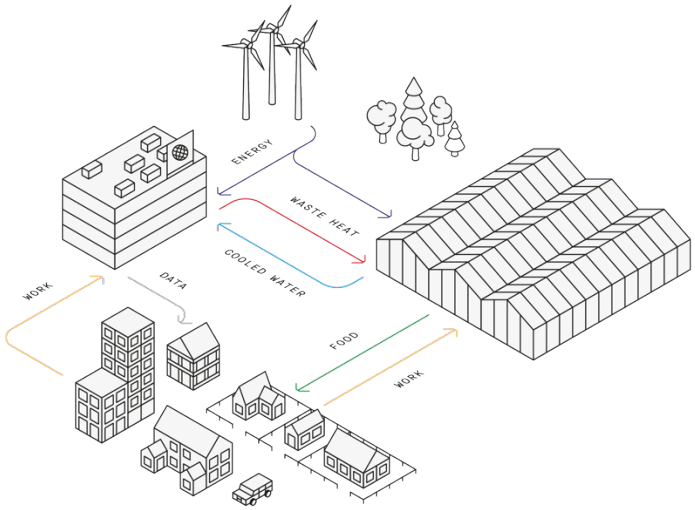

Figure 2. The concept of WA3RM and how it works.

Sustainability approach at WA3RM

WA3RM places urgent emphasis on sustainability and takes a holistic approach, aiming to embed sustainability thinking throughout all stages of our value chain. The building development and production industries are characterized by various sustainability impacts related to raw materials, construction, operations, energy use, and water consumption. Therefore, WA3RM places focus on a selection of key areas including partner selection, land selection, building material selection, energy sourcing and efficiency, and type of resource being produced. To support decision-making in these key areas, WA3RM uses standardized internal tools such as our Code of Conduct, partner criteria, and project screening, along with external tools such as public greenhouse gas emission factors, biodiversity maps, green building certification systems, and relevant guidance from the UN, ILO, and OECD. Furthermore, our sustainability focus areas and targets are well-anchored in the UN Sustainable Development Goals, the EU environmental objectives, and the Swedish Environmental Goals from the Swedish Environmental Protection Agency.

Sustainability objectives

Sustainability focus areas and targets at WA3RM

The sustainability targets established by WA3RM lead our daily work and are based on the key activities related to our business model. See Figure 3 for a summary of our targets. Progress towards the targets will be regularly monitored and regularly communicated to WA3RM's stakeholders. The sustainability targets are subject to change from time to time, if necessary. Such changes to the targets would be driven by and based on WA3RM's identification, approval, execution of projects and their respective project timelines. WA3RM aims to develop infrastructure projects which are also at minimum fulfilling requirements to be included in Article 8 funds, but preferably are fulfilling requirements to be included in Article 9 funds.

*Table 1: WA3RM sustainability targets and indicators 11 April 2025 (targets in **bold**)*

Name	Project	WA3RM	Indicator
1. Volume	€ invested	Attract **5 b€** investment by 2030	b€ invested production capacity with materially better sustainability performance than current
2. Transition	High taxonomy alignment (**>50%**)	High average taxonomy alignment **(>50%)**	Taxonomy alignment in design at the moment of investment
3. Recirculation	% major input supplied by recirculation	Total established annual circularity by type	Total established annual circularity (tons or MWh) by type
4. Climate	Avoided tons CO_2-equivalent	Avoid **8 million** tons CO_2-equivalent by end of 2030	GHG emissions avoided scope 1, 2, and 3 in design at the moment of investment, compared to current industry standards, over the estimated lifetime of the facility
5. Pollution	Avoided emissions (other than GHG) and effluents to air, water and land	Avoided emissions (other than GHG) and effluents to air, water and land	Metric tons for each pollutant in design at the moment of investment, compared to current industry standards, over the estimated lifetime of the facility
6. Jobs	Create new decent sustainable jobs	Create **4.000** new jobs by latest 2030	Number of decent, sustainable full-time jobs created, according to project specifications at the moment of investment

Figure 1: Relevant UN Sustainable Development Goals (SDGs)

Rationale for WA3RM Green Bond Framework

The WA3RM Green Bond Framework is aimed to summarize WA3RM's general vision, approach, and goals related to sustainability in addition to how WA3RM uses proceeds, evaluates, and selects project assets, manages proceeds, reports data, and obtains external review. This Green Bond Framework is non-prescriptive for assets, since WA3RM's projects can vary by type of facility, geographic location, and size, and other factors. The Green Bond Framework aims to display what type of general projects WA3RM aims to finance and develop, as well as what type of criteria are applied to projects for them to be considered eligible.

The WA3RM Green Bond Framework is applicable for issuance of Green Finance Instruments including Green bonds, hybrid bonds and similar instruments. Green eligible projects as defined subsequently in this framework can be owned by WA3RM as parent company, subsidiaries as well as joint ventures, associated companies, SPV's or projects managed by WA3RM.

WA3RM's Green Bond Framework has been developed together with stakeholders in the company to fit a wide range of sustainability targets. The framework and its alignment with the applicable green bond principles (as published by the International Capital Markets Association, ICMA) shall be independently verified to further increase transparency towards all stakeholders in the company.

Green Bond Principles

The WA3RM Green Bond Framework is based on the four core components for alignment and the two key recommendations for heightened transparency from the internationally recognized ICMA Green Bond Principles 2021, listed below:

- Core components for alignment:
    1. Use of proceeds
    2. Process for asset evaluation and selection
    3. Management of proceeds
    4. Reporting

- Key recommendations for heightened transparency:
    (i) Green Bond Framework
    (ii) External review

Use of proceeds

An amount equivalent to the net proceeds from WA3RM's green bond issuances shall be used to finance or re-finance, in whole, or in part, a portfolio of green eligible projects (referred to as an "**Eligible Project**"). Eligible Projects include projects with capital expenditures ("**CAPEX**"), either reported directly in the income statement or capitalized on the balance sheet, including project-related development expenditures. It should be noted that financing is done to the project SPVs, which do not have operating expenditures ("**OPEX**") and the cost for WA3RM are covered by development fees that are capitalized to each balance sheet of the SPV. Each project is developed in an SPV (as shown in Figure 1) but upon completion of projects WA3RM will not operate the facilities but rather rent the facilities to users who will manage the operations, thus OPEX are not included.

Eligible Projects aim to enable climate change mitigation and climate change adaptation, as well as provide distinct environmental benefits without causing any significant harm. The definition of "significant harm", according to Art. 17 of Regulation (EU) 2020/852, is any activity which leads to: a) significant greenhouse gas emissions; b) increased adverse impacts of the current climate and the expected future climate, on the activity itself or on people, nature or assets; c) detrimental impacts to surface, marine, or ground water; d) significant inefficiencies in the use of materials or resources, significant increase in the generation, incineration or disposal of waste, or long-term disposal of waste which may cause significant and long-term harm to the environment; e) significant increase in the emissions of pollutants into air, water, or land, as compared with the situation before the activity started; f) significant detrimental impacts to the good condition and resilience of ecosystems or to the conservation status of habitats and species. Eligible Projects must rely predominantly on renewable electricity and display circularity of one or more waste resources. Examples of Eligible Projects could include food-producing greenhouses heated with waste heat, food-producing aquaculture facilities heated with waste heat or where sludge waste is reutilized, or facilities processing fertilizer chemical waste for reuse in battery production facilities. Eligible Projects must demonstrate substantial environmental improvements compared to an equivalent conventional production facility in the following areas:

- Industrial circularity: Circulation of one or more waste resources or byproducts within or between facilities at an industrial scale. Such waste resources or byproducts include but are not limited to waste heat, waste CO2, biological waste, waste sludge, and chemical waste.

- Resource efficiency: Optimal efficiency of resource use in a production system as a result of the circularity, concerning both primary and secondary resources.

- Sustainability impact: Positive effects for multiple facets of environmental sustainability as a result of the circularity, resource efficiency, localized production, and long-term financial stability.

- Sustainability plan for execution: A plan for sustainability in the project execution, including but not limited to how the project will do no significant harm as a result of

groundwork, site development, sourcing, construction, community engagement and other execution activities.

The Company will continuously exercise its professional judgement, discretion, and sustainability expertise when identifying Eligible Projects. WA3RM will align its Eligible Project selection with the project categories of ICMA. WA3RM also strives to align the use of proceeds to the extent possible with relevant EU Taxonomy activities, including but not limited *to 4.25 Production of heat/cool using waste heat, 4.20 Cogeneration of heat/cool and power from bioenergy, 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings, and 4.16 Installation and operation of electric heat pumps.*

The WA3RM Green Bond Framework also refers to the eligible Green Project categories from the ICMA Green Bond Principles 2021. In *Figure 4*, Eligible Project categories have been mapped to the relevant ICMA Green Project categories. Eligible Projects shall also avoid significant harm to any of the EU environmental objectives or to the UN Sustainable Development Goals.

ICMA Green Project categories	**WA3RM Eligible Project descriptions**	**WA3RM Eligible Project criteria**

• **Energy efficiency** • **Pollution prevention and control** • **Environmentally sustainable management of living natural resources and land** • **Climate change adaptation** • **Circular economy adapted products, production technologies and processes** • **Green buildings**	**WA3RM considers Eligible Projects to be production facilities which (as applicable):** • Re-utilize predominantly waste-heat and/or other solid, liquid, or gas waste streams • Utilize predominantly electricity produced from renewable energy sources • Are characterized by energy efficiency and resource efficiency • Obtain BREEAM green building certification[1] • Are not built on land with environmental, social, or historical significance (see *Exclusions* section)	• **Energy efficiency:** Reuse of waste heat to highest extent possible; Utilization of best available technologies for heating insulation, lighting, heat pumps; Utilization of renewable electricity to highest extent possible. • **Pollution prevention and control:** Utilization of best available technologies for control of wastewater, nutrients, air emissions, and solid waste. • **Environmentally sustainable management of living natural resources and land:** Construction of production facilities which use a minimal land footprint; Minimization of input resources such as fertilizers, freshwater, heat, and lighting; Preference for use of land void of forest, wetland, mangroves, or other natural carbon sinks. • **Climate change adaptation:** Construction and operation of production facilities which offer production of resources in highly controlled indoor environments, with minimized vulnerability to acute and chronic climate change impacts. • **Circular economy adapted products, production technologies and processes:** Construction and operation of production facilities which reuse waste heat and/or solid, liquid, chemical, or gas wastes to produce new valuable resources. • **Green buildings:** Construction of production facilities which obtain a green building certification according to the BREEAM standard for new construction.[1] • **Do no significant harm:** Each project developed by WA3RM should avoid significant negative social and environmental impacts.

Figure 4. Table linking ICMA Green Project categories and WA3RM Eligible Project descriptions and criteria 1 Effective after completion of first WA3RM project in Frövi Sweden.

Project Spotlight

Proceeds aim to be used for investments in Eligible Projects, which satisfy the criteria described in the Use of proceeds section above. For example, WA3RM Eligible Projects currently in various stages of execution include but are not limited to:

- Regenergy Frövi: A 10-hectare tomato greenhouse located in Frövi Sweden, which will function predominantly on industrial waste heat from a nearby pulp and paper factory and electricity from renewable resources. The project aims to reuse a significant amount of waste heat per year (50 GWh/year), avoid significant greenhouse gas emissions related to reuse of waste heat and renewable electricity, create new local jobs, and produce a significant volume of tomatoes for domestic consumption.

- Regenergy Östersund: A 60-hectare vegetable greenhouse located in Östersund Sweden, which will function predominantly on industrial waste heat from a nearby data center facility and electricity from renewable resources. The project aims to reuse a significant amount of waste heat per year (200 GWh/year), avoid significant greenhouse gas emissions related to reuse of waste heat and renewable electricity, create new local jobs, and produce a significant volume of vegetables for domestic consumption.

- Regenergy Gällivare: A 100-hectare vegetable greenhouse located in Gällivare Sweden, which will function predominantly on industrial waste heat from a nearby green steel production facility and electricity from renewable resources. The project aims to reuse a significant amount of waste heat per year (600 GWh/year), avoid significant greenhouse gas emissions related to reuse of waste heat and renewable electricity, create new local jobs, and produce a significant volume of vegetables for domestic consumption.

- Other additional WA3RM Eligible Projects under consideration include but are not limited to land-based aquaculture production facilities of shrimp or fish which reuse waste heat, and chemical recycling facilities to repurpose fertilizer waste for use in vehicle battery production.

Exclusions

Proceeds will not be used to finance fossil fuel extraction, fossil fuel production, fossil fuel processing, fossil fuel trade, fossil fuel transport, fossil fuel-based energy generation, nuclear energy, weapons, environmentally harmful resource extraction, gambling, pornography, or tobacco. Proceeds will also not be used to finance projects in Natura 2000 zones, nature reserves, national parks, regional or municipal parks, key biodiversity areas (KBAs), UNESCO areas, or otherwise protected areas or habitats. Proceeds will also not be used to finance projects on confiscated land, historically significant land, or land where removal of relics is required. Preference is also placed on projects located in areas of low water stress and low climate change risks, according to various tools including but not limited to the WRI Water Risk Atlas and the SMHI enhanced climate scenario service.

Process for project evaluation and selection

Project evaluation and selection

The evaluation and selection of projects is a key process in ensuring that the proceeds are allocated to projects which meet the eligibility criteria in the *Use of proceeds* section of this framework and the general objectives of WA3RM. WA3RM's investment committee and executive management meet regularly to make such evaluations and discuss selection of projects. A list of projects is kept by the Project Management function, who is responsible for keeping this list updated. Investments are only approved if they align with the ICMA Green Bond Project Categories and the relevant eligibility criteria outlined in the *Use of proceeds* section of this framework. The project list is updated continuously as additional projects are investigated, initiated, executed, or cancelled.

WA3RM have rigorous project evaluation processes to manage proceeds, including various project "gates" to investigate and assess potential projects. These gates include application assessment, project generation, project development, project execution, and asset management. Each gate includes more detailed checkpoints. These processes document the projects' progress and accreditations to our strategy, such as e.g. fulfilling Article 9 funds criteria. Each gate in the project process consists of various deliverables and are assigned to specific functions. Related documentation is stored both in internal infrastructures and external data rooms.

Application assessment consists of early-stage investigations and screening activities. Project generation consists of deliverables including but not limited to a business case, written agreements with industry and tenant, land acquisition, and validation again fund strategy and sustainability strategy. Throughout the early project gates, potential environmental risks associated with projects are investigated and assessed. Such potential environmental risks include biodiversity assessments of potential project land, forest related assessments of potential project land, freshwater availability assessments, and potential operational impacts that the asset may produce once completed. If significant environmental risks or negative impacts are identified and cannot be avoided, the investment will not be approved. Project development consists of deliverables including but not limited to design and engineering, regular financial monitoring, tendering processes and signed written partner agreements. Project execution consists of deliverables including but not limited to a finalized CAPEX budget, monitoring of cash flow prognosis, groundwork, and construction. Asset management consists of deliverables including but not limited to an asset management plan, a maintenance and re-investment plan, ongoing tenant dialogue and invoicing, and other optimization activities.

Data and methodology

To inform such project decision-making, various data is collected in the early stages of the project evaluation in a standardized approach. First, general data about type, volume, quality, and variability of industry partner waste streams is collected from the industry partner. Waste volume units can vary depending on the waste type, but are commonly in GWh/year for heat, Tons/year for biological solid or chemical waste, or Cubic Meters/year for sludge or liquids. Note that such waste values exclude losses or changes related to transmission. Such losses

may vary depending on the type of waste stream, method of transmission, and distance of transmission; but in the case of waste heat such losses are expected to be in the minimal range of 1-2%. Data about abated greenhouse gas emissions is calculated systematically based on the waste type, waste volume, and up-to-date emission factors from the Swedish EPA. Calculations of abated greenhouse gas emissions related to reuse of waste streams also consider the average current real local market scenario as the baseline. Later in the process other financial, geographic, and technical data is also gathered to establish the business case for each project.

Approach and intentions

WA3RM intends to finance projects which described in the *Use of Proceeds* section of this GBF. The intention of WA3RM is to therefore identify and evaluate a wide range of potential projects using a standardized approach. This standardized approach is owned by WA3RM and driven by data collection from the industry partners, calculation of abated greenhouse gas emissions and other environmental benefits, and subsequent deeper investigations into financial data and the business cases.

Consideration of environmental and social risks is also included in this standardized approach, where risks related to land, partners, nearby communities, and other stakeholders are evaluated and addressed in cases where such risks are considered significant. The initial data collection from the industry is managed by the Project Management team. The greenhouse gas emissions calculations and other environmental estimations are managed by the Sustainability team. The financial data and business cases are managed by the Finance team and Business Development team. Despite this structured approach, it is important to note project selection can also be impacted by certain external factors such as political environments, geographic characteristics, new or changing regulations, and local communities.

Management of proceeds

The Green Bond can only fund Eligible Projects that comply with the ICMA Green Bond Project Categories and the relevant eligibility criteria outlined in the Use of proceeds section of this framework. Eligible Green Projects must also align with the general strategies of WA3RM and the WA3RM Regenergy Developer Funds. To facilitate transparency in tracking net proceeds from any Green Bond Issuance, the net proceeds will be deposited to a dedicated account managed by WA3RM.

The funds will be used to finance Eligible Projects in accordance with the Use of proceeds section of this framework. WA3RM also uses external accounting software to monitor cash flow and proceeds. Any unallocated proceeds will be kept in a separate account until allocated to an Eligible Project. Such proceeds may, until allocated, be invested into cash-like instruments such as short-term treasury bills.

Reporting

To enable investors and other stakeholders to follow the development of projects which receive funding, WA3RM will update project-related information continuously on our website. WA3RM will also continue to publish annual financial reports. Furthermore, WA3RM and the Fund Management company will publish impact data related to climate and other additional focus areas as required by the EU Sustainable Financial Disclosures Regulation (EU SFDR).

Allocation Reporting

The allocation reporting will be managed on an annual frequency by WA3RM's Finance function and will include the following information:

- Total amount of financing issued.
- Share of proceeds used for financing and re-financing.
- The balance of unallocated proceeds, which may consist of cash or cash-like instruments.
- Eligible Projects financed with the net proceeds.
- Descriptions of Eligible Projects funded.
- Share of CAPEX financed.
- Total amounts allocated to each Green Project category.
- On a best effort basis, information on EU Taxonomy alignment (%) of the underlying Eligible Projects financed by Green bonds.

Impact Reporting

The impact reporting will be managed on an annual frequency by WA3RM's sustainability function and aims to disclose the climate impacts and additional sustainability impacts of projects which receive financing. Note that this reporting will be dependent on data quality and availability from relevant sources such as suppliers, contractors, and vendors. The impact calculations will be on a best effort basis. Avoided GHG emissions related to Eligible Projects will be on a best effort basis and will be based on the latest guidance from the GHG Protocol.

This reporting may include the following information, but may vary based on the project:

- Total amount of financing issued.
- General summary of projects under construction or completed during the year period.
- Heat consumption in MWh/year and source(s).
- Electricity consumption in MWh/year and source(s).
- Water consumption in cubic meters/year and source(s).

- Resource input(s) consumption in tons or cubic meters/year.
- Waste types and volumes in tons/year.
- Greenhouse gas emissions in tons CO_2-equivalent/year.
- Estimated annual greenhouse gas emissions avoided in tons CO_2-equivalent/year.
- Intensity values for production where relevant in tons CO_2-equivalent/unit of product, cubic meters of water/unit of product, MWh of heat/unit of product, MWh of electricity/unit of product.
- BREEAM building certification including the level obtained.
- Land use and change in hectare area of forest removed/year.
- Project distance from protected areas such as regional parks, nature reserves, national parks
- New jobs created/year.

Note that for future planned Eligible Projects, all the above impact reporting will be based on best effort basis and best available estimated data.

External Review

To confirm the transparency, robustness, and alignment to the ICMA Green Bond Principles, WA3RM's Green Bond Framework shall be verified by a reputable external verifier or second party opinion provider.

This framework has been approved by:

Thomas Parker, Chairman of the WA3RM AB Board
Jacques Ejlerskov, Board member and CEO of WA3RM AB
Per Frederiksen, Board member WA3RM AB

WA3RM

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