



# Arion Bank

## Green Finance Second Opinion

July 02, 2021

**Arion Bank is an Icelandic universal bank that operates mainly in Iceland.** The bank is made up of three business sections: Retail Banking, Corporate & Investment Banking, and Markets. Arion Bank's largest loan categories are real estate and construction, mortgages, and fishing.

**The main eligible assets under this green finance framework are green buildings (approx. 46-50%) and sustainable fishery and aquaculture (approx. 40-44%).** The framework also includes the categories clean transportation, renewable energy, energy efficiency, pollution prevention, and control and sustainable forestry and agriculture. The investments will solely be in Iceland. Investments in livestock, fossil fuel heating, and equipment such as vessels and vehicles are excluded. The exclusion criteria also apply for general corporate loans, where at least 90% of the turnover of the corporation needs to be attributable to an eligible sector while the remaining 10 % doesn't need to be specified. There is a risk that this 10% might be in non-green activities.

**While the framework covers a range of different sustainability projects which can provide a high degree of environmental benefit, Arion Bank includes projects that could have substantial associated risks.** Especially aquaculture with unspecified feed sources and fossil fuel-based fishing activities with the widely used MSC certification in combination with a lack of relevant impact indicators constitute a weakness. In addition, data centres dedicated to energy-intensive cryptocurrency mining, commercial buildings, and zero-emission heavy-duty vehicles that could be dedicated to emission-intensive industries. However, Arion Bank informed us it will consider, e.g., commercial buildings/electric vehicles for a fossil fuel intensive customer on a case-by-case basis.

**It is a strength that Arion Bank has commissioned a research project to identify the most emission efficient residential buildings (top 15% in a life cycle perspective) for eligibility and combines this with recycling and public transport access and maximum energy consumption of 300 kWh/m<sup>2</sup>.** Wood buildings currently comprise 35 percent of the top 15% due to a lower expected construction material impact and can have relatively high energy demand (average is 277kWh/m<sup>2</sup>) and could be associated with uncertified wood shipped to Iceland. While the issuer informed us that wood is mostly certified, we encourage the issuer to only include buildings with sustainably sourced timber. In order to increase ambitions, the 15% threshold should be tightened over time and focus on individual best practices (e.g., combining energy efficiency ambitions with ambitions on embodied materials).

**The Bank is starting to implement the TCFD recommendations and analyzing the effect of climate-related risk on their loan portfolio and made their initial TCFD disclosures public in the latest annual report (2020).** However, Arion Bank is not yet using climate scenarios and is only starting to implement climate resilience considerations for project selection. Arion Bank is developing a methodology to carbon footprint its credit portfolio which it intends to roll out by the end of 2022.

Based on the overall assessment of the project types that will be financed by the green finance, governance, and transparency considerations, Arion Bank's green finance framework receives a **CICERO Medium Green** shading and a governance score of **Good**. The framework would benefit from requiring climate risk assessments, life cycle and rebound assessments for larger projects, as well as clearer selection and reporting criteria, e.g., with regards to the 90% turnover threshold, fishing, aquaculture, and commercial vehicles/buildings.

### SHADES OF GREEN

Based on our review, we rate Arion Bank green finance framework **CICERO Medium Green**

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in Arion Bank's framework to be **Good**.



### GREEN BOND and LOAN PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.





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# 1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated June 2021. This second opinion remains relevant to all green bonds, loans, commercial papers, repurchase agreements, and deposits issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

## Expressing concerns with 'shades of green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

### CICERO Shades of Green



**Dark green** is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



**Medium green** is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



**Light green** is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.

### Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green finance framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



## 2 Brief description of Arion Bank's green finance framework and related policies

Arion Bank is an Icelandic universal bank founded in 2008. Arion Bank is listed on the main lists of Nasdaq Iceland and Nasdaq Stockholm and has numerous locations throughout Iceland. Arion Bank is made up of three business sections: Retail Banking, Corporate & Investment Banking, and Markets. A significant part of Arion Bank's assets comprises of loans to companies/individuals: individuals (52%), real estate and construction (15%) and fisheries (10%). This, along with their subsidiaries in the fund management (Stefnir) and insurance sectors (Vörður) bring Arion Bank a broad revenue base. Their loan portfolio is well diversified which distributes their risk.

Arion Bank operates in Iceland, but also provides services to companies linked to the seafood sector in Europe and North America.

### Environmental Strategies and Policies

Arion Bank recognises its role in acting as a role model in sustainable business practices and this is reflected in their high ESG ratings as well as their sustainability commitments. For example, Arion Bank has developed a methodology to assess investments in listed companies in its portfolio against ESG criteria. It also has differentiated lending terms for specific eco-friendly activities (Eco-friendly vehicles, green mortgages, and a green deposit account) and is developing a methodology to carbon footprint its credit portfolio which it intends to roll out by the end of 2022.

Arion Bank has a Sustainability policy and an Environment and Climate Policy. Their Environment and Climate Policy sets the goal for reducing their footprint by 2030 by at least 40% of their own operations (2015 baseline year) to align with the Paris Climate Agreement and this is restated in their Sustainability Report (2020) and Green Finance Framework. It also sets out its commitment to supplier sustainability, requiring its suppliers to account for their environmental and climate impacts and to strongly weigh this in decision making. According to the issuer, this requirement applies to all suppliers with the budget over ISK 1 million (e.g., suppliers of software, advisory services, and IT services and hardware). Arion Bank also carbon offsets all of their Scope 1 and Scope 2 emissions and partially Scope 3 emissions (emissions from flights, taxi, waste and employee commuting) using Kolviður, Iceland carbon fund. From 2020 onwards, Arion Bank is in the process of evaluating its loan portfolio against green criteria, developing a policy for specific sectors, and collecting data from main suppliers about their climate and environmental policies and performance by the end of 2020. Arion Bank will then set Paris-aligned targets for its loan portfolio related to its green criteria. According to the issuer, Arion Bank is starting to implement the TCFD recommendations and analyzing the effect of climate-related risk on their loan portfolio. The initial TCFD disclosures were made in Arion Bank's 2020 annual report. These disclosures only included first steps. Arion Bank aims to develop its TCFD disclosure further in its next annual report in 2021.

In its Annual Sustainability Report (non-financial information), Arion Bank reports on Scope 1, 2 and partly Scope 3 emissions, as well as (unverified) carbon offsets, and other environment key performance indicators since 2015. Arion Bank also reports according to the GRI Core, using also the ESG reporting guide for the Nasdaq Nordic and Baltic exchanges and the 10 principles of the UN Global Compact as a reference.



At Arion Bank, environmental risk is headed by a team which includes the CEO and other managers. Arion Bank has been a signatory to the Principles for Responsible Investment (UN PRI) since 2017, the UN Environment Programme Finance Initiative (UNEP FI) and the UN Principles for Responsible Banking (UN PRB) since 2019, which are aligned with SDG and Paris Climate Agreement. Furthermore, it is aligned with numerous other networks and has been active locally as one of the founding members of a joint business and government forum on climate issues and green solutions, Green by Iceland since 2019.

### Use of proceeds

Arion Bank will issue 'Green Financing Instruments', which include, but are not limited to (Covered) Bonds, Loans, Commercial Papers ('CPs'), Repurchase Agreements ('Repos') and Deposits. The proceeds of Arion Bank Green Financing Instrument will be used to finance or re-finance loans and investments which support the transition to a low-carbon economy and the SDGs. Arion Bank strives to reach full allocation of proceeds within one year after each issuance. In the case of general corporate loans, at least 90% of the turnover of the corporation needs to be attributable to Eligible Sectors and fulfil the respective requirements.

The main eligible assets under this green finance framework are expected to be mainly green buildings (approx. 46-50%) and sustainable fishery and aquaculture (approx. 40-43%). Other categories include clean transportation, energy efficiency, pollution prevention and control as well as renewable energy, energy efficiency and sustainable forestry and agriculture. Arion Bank informed us that all investments are expected to be in Iceland.

In green buildings; sustainable fishery and aquaculture; sustainable forestry and agriculture; and eco-efficient and circular economy adapted products, production technologies and processes, Arion Bank's framework utilises various standards, such as the Verra VCS, Gold Standard, FSC, PEFC, MSC, ASC, and Nordic Swan Ecolabel. In terms of the EU taxonomy, Arion Bank is carefully monitoring the developments and will take them into account when feasible. However, full application is not envisaged.

Arion Bank specifically excludes from Eligible Assets unfunded and non-performing exposures and loans to business or projects in the following areas: fossil fuel related energy generation and related infrastructure; environmentally negative resource extraction (such as metals, mining, rare-earth elements or fossil fuels); nuclear and nuclear related technologies; weapons, alcohol, tobacco, gambling, and adult entertainment; deforestation and degradation of forests; operations which practice shark finning or trade in shark fin products; operations which practice drift net fishing or deep sea bottom trawling where prohibited; fishing with the use of explosives or cyanide; and illegal unreported and unregulated fishing, or use of vessels known to have conducted such unreported and unregulated fishing.

### Selection

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Eligible assets are pre-screened by the respective business units for inclusion in the Green Asset Pool according to the criteria set out in the GFF. The Green Asset Pool is then reviewed to confirm compliance by the Green Financing Committee (GFC) on a quarterly basis. An external reviewer evaluates the Green Asset Pool annually prior to the publication of the Green Financing Report. The Green Financing Committee will then vote on any issues raised by the reviewer (if any), which can lead to the exclusion of the respective assets from the Green Asset Pool. The reviewed Green Financing Report stating among others the allocation at the cut-off date will be



published annually on Arion Bank's website. In addition to voting on the Green Asset Pool, the GFC also performs quarterly monitoring and managing of the Green Asset Pool and corresponding Green Finance Instruments; follows developments in Green Financing instruments and the market and approve updates to the GBF accordingly. -Driving forward changes with regards to loan documentation and/or policies in connection with the asset identification process under this Framework the GFC is made up of representatives from various units, including the Group Sustainability Office, Treasury, Investor relations, relevant business units and the bank's risk function. While the GCF does not necessarily include environmental or climate science background, according to the issuer, it will include someone knowledgeable about climate and environmental issues. The GFC votes unanimously.

The screening criteria, as set out in the GFF, include life cycle assessment and supply chain consideration when this is implicit in the standards that are used as criteria (e.g., Green Building category, Nordic Swan Ecolabel uses LCA). However, these issues are not covered by every standard listed. Furthermore, life cycle impacts are accounted for explicitly as a part of the thresholds for renewable energy. In the case of general corporate loans, a company will be eligible for green corporate loans if at least 90% of its turnover is attributable to Eligible Sectors and fulfils the respective requirements.

The issuer will also increase their level of client engagement by asking for more in-depth information from companies that qualify for a green loan. These changes will be reflected in loan documents and include, but are not limited to:

- Development in oil consumption from fishing vessels
- Revenue per fish type
- Feed sourcing policies
- Yearly PUE

### Management of proceeds

CICERO Green finds the management of proceeds of Arion Bank to be in accordance with the Green Bond Principles. Arion Bank manages the proceeds of any Green Financing Instrument on a portfolio basis, meaning that the amount corresponding to the net proceeds of any Green Financing Instrument outstanding will be used to finance Arion Bank's Green Asset Pool. The net proceeds will be placed in the general funding accounts and earmarked for allocation only and without segregation.

Arion Bank has established an internal Register for tracking the proceeds which is reviewed by the GFC on a quarterly basis. If assets are sold, or exposures mature, or if an asset no longer meets the eligibility criteria, they will be excluded from the Green Asset Pool.

Arion Bank will strive, at any point in time, to maintain a Green Asset Pool that is larger than the total net proceeds of all Green Financing Instruments outstanding. In the case that there are any covered bonds in the green format outstanding, Arion Bank will make sure that the Green Asset Pool will include enough assets in the category "Green Buildings" to cover the respective amount over the tenor of the transaction.

There is a monitoring and escalation process in place to detect and react to any shortfalls in the Green Asset Pool within a reasonably short amount of time. For example, in the case of a shortfall, Treasury will direct the shortfall amount towards its liquidity portfolio, consisting of cash and/or cash equivalents, and/or other liquid marketable instruments. Arion Bank aims to reach full allocation of proceeds within a year of issuance. However, in their reporting, they will disclose the amount of unallocated funds. According to the issuer, exclusion criteria in the GFF also apply for unallocated proceeds.



## Reporting

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

The Green Financing Committee, with support from Risk and Finance, is responsible for publishing the reporting. Arion Bank will report at least annually on both Green Financing allocation and impacts and available online on the investor relation website. In terms of allocation reporting, Arion Bank will report on a portfolio basis, disclosing the amount allocated per Asset Category, the share used for financing and refinancing, the total amount outstanding, the amount of covered bonds outstanding (if any) and its share of the Green Asset Pool, as well as the geographical distribution. Arion Bank will also provide examples of financed projects to illustrate financing of Eligible Assets. In terms of impact reporting, Arion Bank has established a list of example impact indicators per subcategory which they will report on a “best effort basis”. The impact reporting is done on a per Asset Category using data from clients, expert-based calculations or standard datasets (e.g., related to vehicle emissions). Data and methodologies will be transparently disclosed in reporting. The report on the allocation of proceeds will be externally verified starting one year after the first issuance. According to the issuer, they aim to take the recommendations of the ICMA and Nordic Position Paper on Green Bonds Impact Reporting (2017) into account whenever possible, subject to data availability and feasibility. According to the issuer, portfolio level reporting is more informative for investors, given that they are a financial institution.



### 3 Assessment of Arion Bank’s green finance framework and policies

The framework and procedures for Arion Bank’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where Arion Bank should be aware of potential macro-level impacts of investment projects.

#### Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Arion Bank’s green Finance Framework, we rate the framework **CICERO Medium Green**.

#### Eligible projects under Arion Bank’s green finance framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Sustainable fishery and aquaculture 	<p>Eligible Assets related to sustainable fishery/aquaculture, including investments in the areas of decarbonisation of offshore/onshore operations and supporting infrastructure as well as the protection of marine fauna, waste avoidance, or the development of more selective fishing methods.</p> <p>Sustainable fishery (i.e., fishing, processing, preserving, storing, transporting, marketing and selling fish and fish products) certified by:</p> <ul style="list-style-type: none"><li>• Marine Stewardship Council (MSC), accompanied by the Icelandic Sustainable Fisheries (ISF)</li></ul> <p>Sustainable aquaculture certified by:</p> <ul style="list-style-type: none"><li>• Aquaculture Stewardship Council (ASC)</li><li>• Arion Bank engages with clients from the industry regarding their feed sourcing policies and encourages the adoption of</li></ul>	<p><b>Light Green</b></p> <ul style="list-style-type: none"><li>✓ Direct financing for fossil fuel equipment/vessels/infrastructure will be excluded under the framework.</li><li>✓ There is a risk regarding aquaculture in that soy used for feed may drive up demand for deforestation.</li><li>✓ The Aquaculture Stewardship Council (ASC) is regarded as the strictest voluntary certification scheme on environmental criteria. The scheme has no criteria on GHG emissions. Moreover, certification schemes are no guarantee for sustainability, and criticisms raised against the schemes include lack of stringency on supply chain certification (of soy) and fish escapes. Arion Bank will also require clients to provide them with information</li></ul>



standards like ProTerra or Round Table on Responsible Soy

Certification schemes, confirming good management practices have been identified by the Climate Bonds Initiative working group on sustainable fisheries to be able to serve as a potential proxy for low emissions.

In addition, Arion Bank requires to be provided with key non-financial criteria relevant to the operation of each client to assess the scope and impact of these aspects. For fisheries, this includes any potential information on the development of fossil fuel consumption related to equipment or vessels.

Direct financing for fossil fuel equipment / vessels / infrastructure will be excluded under the framework.

about their feed sourcing policies which will be used in decision making.

✓ According to the issuer, around 50% of their portfolio would be eligible for funding under their MSC criteria and not all fish species have the MSC certification. There is a risk that funded projects might not create a large improvement over existing practice.

There is lack of hard criteria in the framework related to sourcing and emissions reductions (e.g., fossil driven vessels or infrastructure), which can be the largest source of GHG emissions for aquaculture.

✓ RTRS (Identity Preserved or Segregation<sup>1</sup>) and ProTerra are the most robust certification regimes globally. However, there is room for improvement: in particular, Arion Bank could require certification and consider encouraging its aquaculture client base to enter into dialogue with soy suppliers to encourage them to avoid deforestation in all of their operations. According to the issuer, this is part of their engagement process.

Sustainable forestry and agriculture



Eligible Assets related to sustainable forestry, agriculture or horticulture in the areas of sustainable forest management and sustainable forestry assets, or the promotion of measures to reduce GHG emissions in the respective sectors

Sustainable forestry and certified forest carbon projects, including acquisition, maintenance and management of

- forests certified either by the Forest Stewardship Council (FSC) or the Programme for Endorsement of Forest Certification (PEFC)
- forests certified with Verra VCS approval or Gold Standard carbon certificate

**Medium to Dark Green**

✓ Fossil fuel equipment is excluded from this category.

✓ No expenses are currently considered under this category.

✓ Certification via FSC, PEFC ensures compliance with internationally recognised standards of sustainable forestry management. Verra VCS and Gold Standard are carbon certifications.

✓ Restoration of wetlands in Iceland is a significant opportunity for reducing carbon emissions.

✓ While direct investments in roads, fossil fuel equipment and vehicles as well as

<sup>1</sup> RTRS Credits and Mass Balance are less meaningful certification modules.



Sustainable agriculture including expenditures for

- new / improved drainage, soil carbon sequestration and reduced or delayed tiling

Cross-sectoral measures to reduce GHG emissions including by at least 30% including

- the promotion of the use of renewable technologies (such as geothermally heated greenhouses or electricity from renewable sources)
- reclaiming natural wetlands and biodiversity by actions such as refilling drainage canals
- projects in line with governmental initiatives and Iceland's commitments in the Paris Agreement to reduce GHG emissions in the agriculture sector

Direct financing of (i) fossil fuel equipment / vehicles / infrastructure, (ii) livestock and (iii) road development will be excluded under the framework.

in livestock are excluded, active forest management usually entails some fossil fuel emissions.

Renewable energy



Eligible Assets related to renewable energy projects, including geothermal, bioenergy, wind, solar and hydro power (<10 MW) and biogas used for transport, heating and industrial purposes

Over-arching, technology-agnostic emissions threshold of 100g CO<sub>2</sub>e / kWh declining to 0g CO<sub>2</sub>e/kWh by 2050 for all sorts of electricity production (CO<sub>2</sub>e impact for producing 1 kWh of electricity).

- Geothermal: above threshold applies
- Hydropower: above threshold applies for hydropower, we additionally screen for controversies and the impact on the local environment before assets are included in the Green Asset Pool
- Wind and solar: above threshold applies.
- Manufacture/utilization of biogas: criteria as set out in the Nordic Swan Ecolabel for 'liquid and gaseous fuels' criteria document apply, requiring among others that biogas must be made from

### Dark Green

- ✓ Iceland's electricity matrix is already 100% renewable.
- ✓ Life cycle emissions are considered.
- ✓ All construction projects can have adverse local environmental impacts.
- ✓ Hydropower can have adverse impacts on the ecosystem, biodiversity, and society.
- ✓ Be aware of the complex environmental impacts related to biogas. If such projects should be implemented, material sourcing options and safeguards should be considered.
- ✓ Utilisation of high amounts of biogas can encourage generation of more waste.



100% renewable materials and that it must reduce GHG emissions in the entire production chain by 70% compared with the corresponding fossil fuels (reference value of 83.8g CO<sub>2</sub>e /MJ applies). Renewable raw materials from palm oil, soybean oils and sugar cane are explicitly excluded.

- ✓ Methane leakage during production of biogas can occur.
- ✓ Impacts of feedstock and digestate storage and treatment need to be taken into account for biogas production.

Clean  
Transportation



Eligible Assets related to equipment, technology and processes towards clean transportation infrastructure, including but not limited to, stations and rolling stock for passengers/freight transportation (e.g., busses or electric vehicles)

While zero tailpipe emission vehicles (including hydrogen, fuel cell, electric) are automatically eligible, the following criteria apply to vehicles with tailpipe emissions:

- Passenger cars and light commercial vehicles: eligible if they have zero CO<sub>2</sub> emissions
- Public transport: eligible if that have zero direct (tailpipe) CO<sub>2</sub> emissions
- Heavy commercial vehicles: eligible if they have zero CO<sub>2</sub> emissions
- Two- and three-wheel vehicles and quadricycles: eligible if they have zero CO<sub>2</sub> emissions

Infrastructure for zero tailpipe emission vehicles such as electric charging points for electric vehicles and installation is eligible.

**Medium to Dark Green**

- ✓ Electric vehicles and other zero emission transport solutions incl. charging infrastructure are part of a 2050 solution.
- ✓ Batteries and raw materials production can have substantial climate and environmental impact.
- ✓ Arion Bank has not specified any limitations on heavy duty and commercial vehicles deployment which possibly allows for utilizing zero emission technology in heavy emitting industries, such as the aluminium industry in Iceland. However, Arion Bank informed us it will consider inclusion on a case by case basis and also take into account customers transition strategies.

Green buildings



Eligible Assets related to the construction of new buildings, operation of existing buildings or renovation of existing buildings (with a minimum energy efficiency upgrade) in the commercial (including industrial and logistics) or residential restate sector

A. New construction/ownership of existing buildings:

Public/commercial/residential buildings:

- Required to have, or are designed and intended to receive (i) a design stage certification, (ii) a post-construction certification or (iii) an in-use certification

**Medium Green**

100% renewable energy consumption is a standard in Iceland, and only buildings with renewable energy can qualify under the framework according to the issuer

Currently, according to the issuer, there is no consistent building regulation and minimum efficiency requirements in Iceland and according to Arion Bank most of the GHG emissions are a result of embodied emissions. Arion Bank uses life cycle approach incl.



in any of the following building certification schemes at the defined threshold levels or better:

- BREEAM “Excellent” or above
- LEED “Gold” or above
- Nordic Swan Ecolabel

Residential buildings:

- Arion Bank worked with a local engineering consultant to develop a robust methodology for selecting green buildings from its residential mortgage pool. The selection process takes into account the specific Icelandic background, i.e., that buildings almost fully run-on renewable energy and as such, from a life-cycle perspective, embodied carbon emission makes up a bulk of the total GHG emissions. The criteria document and a summary are published separately to the framework. Based on the results of the report, all of the following selection criteria need to be met.:

- Buildings are required to be among the top 15% carbon efficient buildings in Iceland from a life-cycle perspective which is taking into account the building material used and the operational energy demand of the use stage
  - Threshold: CO<sub>2</sub> emissions  $\leq 6.84$  kgCO<sub>2</sub> /m<sup>2</sup>/year
- High energy intensity buildings with an energy use of >300kWh/m<sup>2</sup> per year are excluded even though they might form part of the top 15% carbon efficient buildings in Iceland from a life-cycle perspective as described above
- Buildings are required to be in proximity to public transportation

assumptions for building materials, assess distance to public transportation for the residential and informed us it will regularly update these information for their mortgage database. Arion Bank informed us that as environmental building standards in Iceland improve the threshold will change favourably in future iterations of the framework (i.e. become lower)

Buildings do not necessarily have to show substantially lower carbon impact if they achieve, e.g., a LEED Gold in-use certification. The issuer confirmed however, that the 15% methodology would be applied also to certified residential buildings. For certified commercial buildings Arion Bank informed us they will need to verify the GHG performance of the building separately (e.g. with Mannvit) as no data or broader methodology is available yet.

- ✓ Arion Bank informed us that it currently only has almost no residential or commercial buildings that are certified and therefore nearly exclusively relies on the top 15% definition for residential buildings. While not required, the bank expects that in the future buildings will fulfil also the top 15% definition.
- ✓ Arion Bank is aware of climate risk exposure of its buildings but currently the issuer informed us there is not enough information available to address climate risk exposure in their selection process.
- ✓ According to the report commissioned by Arion Bank, all wood buildings that use traditional local energy sources (i.e. geothermal according to the issuer) are included in the top 15% even though they can use more energy in comparison to concrete buildings where the embodied carbon emissions is estimated 6,1 kgCO<sub>2</sub>/m<sup>2</sup>/year. While it is a strength to focus on building materials, energy demand should be managed as



- Threshold: a maximum distance of 750 meters applies
- Buildings built in areas that do not require recycling are excluded

Major renovations:

- Energy efficient retrofit or renovation of existing buildings, reducing energy use (kWh/heated m2/year) by at least 30%
- Individual measures such as addition of insulation to external walls/roofs, replacement of windows or doors, installation of efficient LED lighting, upgrade of heat pumps, etc.

- even renewable energy has environmental impacts. Wood buildings represent 11.6% of Arion Bank’s entire portfolio and therefore represent 35 % of the top 15%.
- ✓ There is a concern that wood buildings could be associated with deforestation or unsustainable forestry practices. According to the issuer, all wood buildings that are built in Iceland today are almost exclusively built with certified wood while for older buildings it is harder to assess the origin of the timber. However, the issuer assumes that the majority is from Scandinavian timber.
- ✓ According to the report commissioned by Arion Bank, average timber house energy use equals 277kWh/m<sup>2</sup> per year resulting in 1.28kg CO<sub>2</sub>/m<sup>2</sup> per year – while material impact could be low we encourage the issuer to screen out high energy intensity buildings and improve energy efficiency over time. The issuer has currently set a limit of 300kWh/m<sup>2</sup> per year. In addition, wood could be uncertified wood shipped to Iceland.
- ✓ The energy efficiency criteria of 30% improvements in major renovations is in line with IEA recommendations.
- ✓ While Arion Bank informed us it currently has no commercial buildings that qualify under this category these buildings could potentially be dedicated for fossil fuel intensive customers. However, Arion Bank informed us it will consider inclusion on a case by case basis and also take into account customers transition strategies.

Energy efficiency



Eligible Assets related to the construction, implementation, maintenance and operation of facilities, infrastructure or appliances that reduce the use of energy, including but not limited to, energy efficient data centres or lighting solutions.

**Medium Green**

- ✓ Improvements are calculated per installation, not for the whole building, with the exception of data centres.



Decisions will be made on a case-by-case basis depending on the activity-specific background. Only electrically powered projects, components, or processes are eligible, along with all clean fuels defined under the clean transportation category in this framework.

- Projects are deemed eligible when they achieve: Increase in the energy efficiency of the respective process or product by at least 30% compared to the status prior to the upgrade
- For data centres specifically, a power usage effectiveness (PUE)<sup>2</sup> less than 1.25

Any fossil fuel related projects are not eligible even if they meet the efficiency threshold due to potential lock-in effects.

✓ According to the issuer, mainly data centres will be considered under this category. Data centres could be utilized for mining crypto-currency. Crypto-currency mining is globally a significant emissions concern because the mining process is energy intensive and often relies on fossil fuels. Data centres in Iceland should have lower GHG emissions due to their reliance on hydro power but are connected to a global industry of mining. Lock-in risks therefore exist if capacity is designed in order to serve such unsustainable business practices.

Pollution prevention and control and wastewater management



Eligible Assets related to technologies, processes and associated infrastructure supporting waste prevention, waste reduction, waste recycling as well as wastewater management.

- Waste management solutions such as waste prevention, separate collection sorting, treatment and processing of all types of waste with the purpose to re-use and minimising the amount of waste to landfill
- Prevention, reduction, control and response management of land- or marine based sources of marine pollution
- Sustainable wastewater management and related infrastructure

Waste to energy projects will explicitly not be eligible under this framework.

**Dark Green**

- The issuer informed us that currently only recycling processes are considered.
- The issuer should consider construction emissions. Waste management processes also generate GHG emissions (e.g., transportation of waste, storage etc.)
- Operation of wastewater treatment plants results in direct emissions (NOx, CH4, CO2) and indirect emissions from energy generation.

Table 1. Eligible project categories

**Background**

In October 2020, Iceland published its targets for 2030 to cut emissions by more than one million tons of CO<sub>2</sub>e or 35% from 2005 levels, and achieve carbon neutrality by 2040, and has outlined necessary steps to achieve this

<sup>2</sup> Power usage effectiveness is an industry-recognised ratio describing the efficiency of a computer data centre's energy usage. PUE is calculated by dividing total facility energy by IT equipment energy:  $PUE = \frac{Total\ Facility\ Energy}{IT\ Equipment\ Energy}$



through the ‘Iceland’s 2020 Climate Action Plan’ document<sup>3</sup>. In the plan emphasis is put on a rapid clean energy transition in transport as well as increased efforts in the LULUCF sector, where Iceland has great mitigation potential in afforestation, revegetation and wetland reclamation. The Climate Action Plan covers all major emission sources and sinks, and outlines climate mitigation actions in transport, fisheries, energy, industry, chemicals, agriculture, waste management, and LULUCF.

According to the projections, if Iceland continues business as usual, it will miss its emissions reduction target by 4,5 million tCO<sub>2</sub>e. However, with the Climate Action Plan measures, in addition to measures currently in preparation, Iceland is projected to achieve a reduction in emissions in ESR-sectors (transport, agriculture, fisheries, waste management, etc.) by 40% or even more than is currently demanded by Iceland’s present international commitments.

According to the Climate Action Plan, the emissions reductions measures from energy production, ships and ports, and waste management will make up about the majority (around 84%) of the total Icelandic non-ETS emissions reductions between 2021-2030. This includes the increase of electrification of vehicles which is predicted to increase to 50% in 2024 and 80% in 2028 according to the National Energy Authority.

Restoration of wetlands in Iceland is a significant opportunity for carbon sequestration and reducing carbon emissions. It is estimated that the carbon dioxide emissions from drained wetlands outside cultivated area exceed the sum of all non-LULUCF GHG emissions<sup>4</sup>. The offset capacity is high with over 4,200 km<sup>2</sup> of wetlands that can be restored<sup>5</sup>. Therefore, wetland restoration can lead to sequestration of over than 500% of carbon emissions compared to 2005 levels.

According to the International Energy Agency (IEA), the buildings and buildings construction sectors combined are responsible for 36% of global final energy consumption in 2018 and nearly 40% of total direct and indirect CO<sub>2</sub> emissions. The materials, construction and demolition phase of the building lifecycle constitute additional emissions and are becoming increasingly important as buildings becomes more energy efficient and the electricity and heat supply become ‘greener’. A little over half of all life cycle greenhouse gas emissions in new offices or residential apartment building in the Nordics comes from heat and energy use, while approximately 40% comes from use of materials. Emissions associated with construction and demolition accounts for around 2-5%. Real estate development can incur heavy environmental impacts due to construction emissions. For the Icelandic building sector, the most severe physical impacts will likely be increased flooding and urban overflow, as well as increased storms and extreme weather.

Iceland’s primal energy supply is primarily derived from domestically produced renewable energy sources (85%). In 2016 geothermal energy provided about 65% of primary energy, while the share of hydropower was 20% and the share of fossil fuels (mainly oil products for the transport sector) was 15%. About 85% of all houses in Iceland are heated with geothermal energy.<sup>6</sup> Electricity is derived from almost 100% from renewable resources, with the share of hydropower 73% and geothermal power 27% of generation capacity<sup>7</sup>. In 2019 the total electricity

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<sup>3</sup> Iceland’s 2020 Climate Action Plan. October 2020. <https://www.government.is/library/01-Ministries/Ministry-for-The-Environment/201004%20Umhverfisraduneytid%20Adgerdaaactlun%20EN%20V2.pdf>

<sup>4</sup> Icelandic Inland Wetlands: Characteristics and Extent of Draining. Arnalds O. et al. June 2016. [https://www.researchgate.net/publication/303887446\\_Icelandic\\_Inland\\_Wetlands\\_Characteristics\\_and\\_Extent\\_of\\_Draining](https://www.researchgate.net/publication/303887446_Icelandic_Inland_Wetlands_Characteristics_and_Extent_of_Draining) [accessed J02 June 2021]

<sup>5</sup> Voltlendis Sjódur. Carbon Offset. <https://www.votlendi.is/carbon-offset> [accessed 02 June 2021]

<sup>6</sup> Energy. Ministry of Industries and Innovation. <https://www.government.is/topics/business-and-industry/energy/> [Accessed on 02.06.2021]

<sup>7</sup> Energy Data. Askja Energy. The Independent Icelandic and Northern energy Portal. <https://askjaenergy.com/iceland-introduction/energy-data/> [Accessed on 02.06.2021]



consumption was around 19,5 TWh and is expected to increase to 21,5 TWh by 2030 and to around 23 TWh by 2050.<sup>8</sup> The main consumer of electricity is industry (77%)<sup>9</sup>.

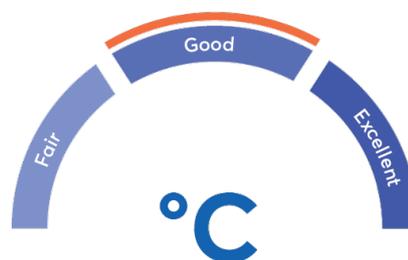
### Governance Assessment

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

Arion Bank has set a target for reducing their footprint by 2030 by at least 40% of their own operations and is developing a methodology to carbon footprint its credit portfolio which it intends to roll out by the end of 2022. The bank has informed us it will exclude controversial projects from their GFF. At this moment, Arion Bank has no specific consideration of resilience or rebound issues. The Bank just conducted a TCFD-guided assessment of industries and sectors exposed to climate risk but are not taking into account the concept of resilience yet. However, the bank plans to continue working on this aspect and engage with banks on risk and resilience in 2021. Their Green Residential Screening methodology includes a threshold for resilience but concludes that sufficient data is not available to apply it. Arion Bank also includes unanimous voting into the selection process and an external review of asset pool pre-issuance. They will also include external review during the screening process of controversial projects if needed.

The proceeds are managed on a portfolio basis to finance Green Asset Pool. Arion Bank has internal registry for monitoring Green Asset Pool which is reviewed quarterly by the Green Financing Committee. Arion Bank reports on the category level and reports allocation and impact. However, they do not mention methodologies or disclosure of methodologies in their GFF. The issuer indicated that impact reporting methodology will be disclosed.

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



### Strengths

CICERO Green is encouraged to see Arion Bank rolling out a methodology for its loan portfolio. Arion Bank sees itself in a position to leverage public support for climate action and their work with customers to reduce emissions in Iceland in alignment with Iceland's Paris Commitments. Initiatives such as their green deposit account and green financing framework reflect this ambition.

Arion Bank worked with a local engineering consultant to develop a methodology for selecting green buildings from its residential mortgage pool based on life cycle emission footprint. The selection process takes into account the specific Icelandic background, as well as public transport access and recycling. The criteria accounts for the carbon emission over the building life cycle from embodied carbon in the production and construction stage and the energy consumption during the use stage.

<sup>8</sup> Electricity forecast 2020-2030. Energy forecasting Committee. November 2020.

<https://orkustofnun.is/gogn/Skyrslur/OS-2020/OS-2020-05.pdf>

<sup>9</sup> Energy Data. Askja Energy. The Independent Icelandic and Northern energy Portal.

<https://askjaenergy.com/iceland-introduction/energy-data/> [Accessed on 02.06.2021]



Arion Bank engages with numerous sustainable finance initiatives, such as the Principles for Responsible Investment (UN PRI), the UN Environment Programme Finance Initiative (UNEP FI), and the UN Principles for Responsible Banking (UN PRB). Furthermore, it is aligned with numerous other networks and has been active locally as one of the founding members of a joint business and government forum on climate issues and green solutions, Green by Iceland since 2019.

Other strengths include the explicit exclusions of fossil fuel related energy generation, related infrastructure, and deforestation, and degradation of forests in all categories. In addition, Arion Bank excludes direct investments in fossil fuel based equipment in the fishery and aquaculture sectors, fossil fuel based transportation investments as well as any fossil fuel related projects in the energy efficiency category, and renewable raw materials from palm oil, soybean oils, and sugar cane are explicitly excluded from biofuel production.

Arion Bank is planning to increase the level of client engagement by asking for in-depth information from companies that qualify for a green loan. This information can refer to oil consumption from fishing vessels, revenue per fish type, feed sourcing policies, etc. These changes will be reflected in the loan documents.

### Weaknesses

Especially aquaculture with unspecified feed sources and fossil fuel-based fishing activities with the widely used MSC certification in combination with a lack of relevant impact indicators constitute a weakness. In addition, Arion Bank has listed a range of reporting metrics but there is a gap of indicators being tracked, e.g., for fishing and aquaculture, such as fish escapes, energy use, emissions, feed types, and feed certification. CICERO encourages Arion Bank to engage with the companies in a transparent dialogue. According to the issuer, Arion Bank is in the process of engaging with its customers on this topic.

For general corporate loans, at least 90% of the turnover of the corporation needs to be attributable to an eligible sector while the remaining 10 % doesn't need to be specified. There is a risk that this 10% might be in non-green activities.

### Pitfalls

Arion Bank includes projects that could have substantial associated risks. As an example, aquaculture-related projects can lead to increased use of soy for feed and no strict requirements of certification. The rise in demand may drive up deforestation. In addition, certification of fisheries does not guarantee that their actions are certification compliant, low-carbon fishing practices and can have broader environmental impacts. In addition, the majority of proceeds invested in the energy efficiency category is expected to be invested in data centres which can also be used for crypto-currency mining, according to Arion Bank. Crypto-currency mining is globally an emission intensive activity as the energy demand of the mining-specific equipment is very high and often based on fossil fuels. Lock-in risks, therefore, exist if capacity is designed in order to serve such unsustainable activities.

Arion Bank's inclusion of aquaculture and fishery projects rely to a large extent on generic and international standards. While these standards can be useful for achieving a common understanding among investors about the concept of 'green', they are not always meaningful in a local context. Since Arion Bank's area of operation is Iceland, where standards and innovation levels are already quite high, the international standards defining this framework occasionally fall short of true ambition.

While it is a strength that Arion Bank has developed a life cycle emission approach on building criteria, buildings could also qualify if they are certified, e.g., by LEED Gold in-use which does not necessarily lead to emission



reductions. However, according to the issuer, almost no buildings are currently certified. Arion Bank informed us it will calculate the top 15% of most emission efficient buildings regularly going forward, according to the methodology report (new mortgages included and some excluded), and will update the mortgage database. In order to raise ambition, the threshold needs to be substantially improved over time. According to the issuer, the methodology paper including thresholds will be further developed and updated at least every three years. As environmental building standards in Iceland improve the threshold will change favourably in future iterations of the framework (i.e. become lower) according to the issuer. However, with a top 15% approach there is a risk of including buildings that do not increase ambitions compared to business as usual (e.g., if updated based on inaccurate information, if update frequency is not high enough or if ambitions in the housing market outside of Arion Bank's control are more ambitious). The methodology is based on the data of Arion Bank's mortgages which represent 10% of the Icelandic buildings stock only. According to the report commissioned by Arion Bank, average timber house energy use equals 277kWh/m<sup>2</sup> per year resulting in 1.28kg CO<sub>2</sub>/m<sup>2</sup> per year – while the material impact could be low we encourage the issuer to encourage improved energy efficiency over time. In addition, buildings could be built from uncertified wood shipped to Iceland. According to the issuer, all wood buildings that are built in Iceland today are almost exclusively built with certified wood while for older buildings it is harder to assess the origin of the timber. However, the issuer assumes that the majority is from Scandinavian timber.

Arion Bank does not have eligibility criteria related to the end-use of the assets, such as the use of commercial buildings or heavy-duty vehicles which could be used by fossil fuel intensive industries, e.g., in the aluminium industry. However, Arion Bank informed us it will consider inclusion on a case-by-case basis and also take into account customers transition strategies.

The net proceeds of Arion Bank Green Financing Instrument will be used to financing and re-financing eligible projects and loans. In case of general corporate loans, at least 90% of the turnover of the corporation needs to be attributable to Eligible Sectors and fulfil the respective requirements. However, in the framework, it is not clarified how the rest 10% corporation's turnover has to be generated. It may happen that the 10% of turnover is related to projects which do not comply with the eligibility criteria and/or are not considered green.

Arion Bank reports the allocation and impact of the investments and will include the methodologies in the reporting, but the methodologies are not mentioned in the framework. Arion Bank is devising their own carbon footprint methodology for their loan portfolio. It is encouraged that the bank provides full transparency on the assumptions, data sources, and applied methodologies. Biogas production and pollution prevention processes are not clearly defined, as every unique process has different emissions associated with it. A clear framework could include thresholds and regulations to select suitable processes for pollution prevention and biogas supply chain.

Arion Bank lacks specific environmental expertise in the process of reviewing the asset pool. However, the Green Asset Pool is reviewed pre-issuance by an auditor as well as the GFC. The GFC consults with environmental specialist when applicable. The reviews of the asset pool are critical because according to the issuer they are also used to screen company eligibility to receive loans for general corporate purposes. Related to this, the issuer confirms that controversial projects will be assessed particularly strictly, including with external assessment if necessary, according to the issuer. However, there is no pre-screening to identify which projects might be controversial, e.g., wind projects or hydropower with local resistance.

Arion Bank has recently conducted a TCFD-guided assessment of industries and sectors exposed to climate risk but are not taking into account the concept of resilience yet. However, they are planning to engage with clients on risk and resilience in 2021. Their Green Residential Screening methodology includes a threshold for resilience but concludes that currently sufficient data is not available to apply it. CICERO Green encourages Arion Bank to apply climate scenario analysis and conduct in-depth climate risk screenings.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Green Financing Framework (June 2021)	Document that outlines the use of proceeds, project selection, proceed management, and reporting procedures for Green Finance mechanisms issued by Arion Bank.
2	Arion Bank Summary of ESG ratings (09.2020)	Summary of Reitun's ESG rating for Arion Bank highlighting and exemplifying its performance and comparing it to other financial institutions domestically.
3	Arion Bank ESG Rating (09.2020)	Full document reporting the results of the analysis of ESG ratings for Arion Bank.
4	Form for assessment of suppliers at the beginning of agreement	Form for suppliers to fill out which includes general information, as well as questions on environmental, equality and employment law issues.
5	Corporate Governance Statement 2019	Document detailing Arion Bank's governance structure, legal frameworks, also relating to internal controls, auditing and accounting, ethics, and sustainability.
6	Credit rules: Chapter 7. Disclosure by legal entities	Document detailing the disclosure required by legal entities (loan applicants) in general, but also in specific circumstances.
7	Chapter 2 of Arion Bank's Credit Investment Strategy 2020 Corporate and Investment Banking (CIB)	Document outlining the evaluation of non-financial aspects of their investment policy (loans).
8	Arion Bank's Sustainability Policy ( <a href="https://www.arionbanki.is/english/about-targets-t-us/organization/sustainability/">https://www.arionbanki.is/english/about-targets-t-us/organization/sustainability/</a> )	Online policy which details their commitments, its environment and climate policy, including their short-term
9	Annual and Sustainability Report 2019 ( <a href="https://arsskyrsla2019.arionbanki.is/english/sustainability/responsible-banking/">https://arsskyrsla2019.arionbanki.is/english/sustainability/responsible-banking/</a> )	Document providing data from 2019 about non-financial information and the GRI Index, as well as their commitments, certifications and qualifications, and their relevant activities in the area of sustainability.
10	Arion Bank website <a href="https://www.arionbanki.is/english/">https://www.arionbanki.is/english/</a>	General information about the Bank
11	GREEN RESIDENTIAL BUILDINGS – METHODOLOGY PAPER	This report describes the methodologies used to establish a carbon intensity threshold from the current building stock, taking into account operational and embodied carbon emissions



## Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

