Swedish Export Credit Corporation (SEK)

Sustainability Bond Framework Second Opinion

December 07, 2021

Public finance institutions such as SEK play an important role in setting the tone as the finance sector prepares to decarbonise portfolios and promote the achievement of the Sustainable Development Goals. The Swedish Export Credit Corporation ("SEK") provides funding for Swedish export-related transactions, including helping non-Swedish buyers with financing to buy Swedish goods and services and lending money to Swedish exporters. The corporation has lending activities in around 65 countries and often works jointly with the Swedish Export Credit Guarantee Board (EKN).

SEK's Sustainability Bond Framework ("the framework") is an umbrella framework, under which SEK can issue green bonds, social bonds or sustainability bonds (a combination of green and social bonds). SEK will issue these bonds to support Swedish government policy, including its goals under the Paris Agreement and Agenda 2030.

The framework includes social and green project categories and all aim for impact although benchmarks may vary depending on the region. Thresholds for green projects are intended to be aligned with the EU Taxonomy, although in some geographies outside of the EU SEK will adapt to the local market provided relevant OECD and IFC standards are upheld.

The sustainability bond framework contains reasonable procedures for selecting and reporting on projects but places a lot of responsibility on SEK staff to carry out additional due diligence. SEK's diverse markets with different standards and a set of EU requirements which are currently undergoing changes mean that there remains a risk that projects occasionally do not fully conform. The broad list of eligible project categories means that great responsibility is placed on the issuer's selection process to ensure consistency and sufficient due diligence.

Investors should be aware that social projects are only subject to a light environmental screening, which may not be conducive to the achievement of the Paris Agreement goals. And since some areas of overlap exist between the social and green project categories (buildings, transportation) this opens up for the possibility that less environmentally

SUSTAINABILITY BOND GUIDELINES

Based on this review, the framework is found to be in alignment with the green bond principles, the social bond principles and the sustainability bond guidelines.

Included in the overall shading is an assessment of the governance structure of the sustainable bond framework. CICERO Shades of Green and IISD find the governance procedures in SEK's framework to be **Excellent**

SOCIAL ASSESSMENT

Based on our review, the eligible social projects credibly aim for enabling sustainable development in target countries, although a lack of key project ownership and flexibility in target population definitions introduce elements of uncertainty.

SHADES OF GREEN

Based on our review, we rate SEK's green bond issuances under this framework as **CICERO Medium Green.** CICERO Green does not assign an overall shading for social bond issuances.

ambitious projects are classified as social projects. A BAT approach opens up for considerable room for interpretation and we are concerned with the lock-in of fossil fuel use in particular. In order to deliver on the Paris Agreement, it is important that all projects aim for the highest environmental ambition possible and we encourage SEK to implement their framework stringently.

SEK is committed to increasing disclosure on climate risk and has committed to full TCFD alignment from 2022 onward. Since 2015, SEK has calculated financial climate related risks and have reported on these to its board, using scenario analyses based on IEA/WEO outlooks. The organisation has recently set goals on emissions and decarbonisation trajectories. We encourage SEK to continue to be ambitious and focus its attention on reporting and reducing exposure to Scope 3 emissions from the lending portfolio.

Based on the overall assessment of the green and social project types in this framework, and governance and transparency considerations, SEK's sustainability bond framework receives a **CICERO Medium Green** shading for green bond issuances. CICERO Green does not assign an overall shading for social bond issuances. The CICERO Green shading for combined issuances will depend on the relative weight of the relevant green and social project categories for the issuance. The Sustainability Framework receives a governance score of **Excellent**.

Contents

1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated November 2021. This second opinion remains relevant to all sustainable financing 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	Examples
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.	Wind energy projects with a strong governance structure that integrates environmental concerns
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.	Bridging technologies such as plug-in hybrid buses
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.	Efficiency investments for fossil fuel technologies where clean alternatives are not available

Assessment of social benefits and risks

The Second Opinion for the client's sustainability bond framework also accounts for social dimensions of the framework in total and of eligible social asset categories in particular. IISD provides expertise on social benefits and social risks to be considered for the financing of infrastructure and other projects with environmental and social targets.

The social benefits, consistency and effectiveness of eligible social asset categories of this framework are reviewed against the client´s overall social targets and the United Nations Sustainable Development Goals (SDGs). SDGs highlighted by the client are assessed by clarifying which specific SDG targets are supported by each eligible social asset category. Moreover, the assessment points to relevant SDGs and targets that may not have been identified by the issuer. This reference framework for analyzing the benefits of social asset categories was chosen because SDGs are increasingly accepted and applied within the (impact) investment community, and many countries are working actively on implementing the SDGs. The International Capital Market Association (ICMA) encourages paying attention to the SDGs as they published an updated 2020 version of their high-level mapping on the alignment between the SDGs and green/social asset categories of Green/Social/Sustainability Bond Frameworks.

Social risks of eligible green and social asset categories are assessed based on IISD´s extensive experience from infrastructure sustainability assessments as well as best practice guidelines and safeguards (such as the Environmental and Social Performance Standards of the International Finance Corporation). The assessment covers the bond issuer´s capacity for anticipating and assessing adverse social risks when selecting eligible green and social projects. It is also reviewed whether the issuer has implemented policies that require project beneficiaries to have systems in place to avoid, reduce or minimize adverse social impacts.

Governance assessment

Sound governance and transparency processes facilitate delivery of the client's climate, environmental and social ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the sustainable finance framework. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the sustainable 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 SEK's sustainability bond framework and related policies

The Swedish Export Credit Corporation ("SEK") is a government owned credit corporation. SEK facilitates export deals by providing funding for Swedish export-related transactions, including helping non-Swedish buyers with financing to buy Swedish goods and services and lending money to Swedish exporters. SEK's mission is to ensure access to financial solutions for the Swedish export industry on commercial and sustainable terms.

As a government owned corporation with a high credit rating, SEK can offer loans to facilitate export deals with both shorter and longer repayment periods. Examples of products SEK offers are export credits, project financing, contract guarantees and direct lending.

The corporation was established in 1962 and is active in around 65 countries SEK often works together with the Swedish Export Credit Guarantee Board (EKN).

SEK's Sustainability Bond Framework ("the Framework") covers export credits and other types of financing solutions that contribute to sustainable development targeting environmental and social benefits. The Framework is an umbrella framework, including different types of bonds. Under this Framework, SEK can issue green bonds, social bonds or sustainability bonds (which is a combination of green and social bonds). SEK will issue these bonds to support Swedish government policy, including the goals under the Paris Agreement and Agenda 2030 (which aims to achieve the Sustainable Development Goals)

Environmental and Social Strategies and Policies

Environmental policies

SEK generally follows the Swedish Government's overall targets and policies related to the climate and SEK and EKN work jointly on environmental strategies for the Swedish export credit system. In 2019, EKN adopted a new sustainability policy which requires EKN to contribute to the realization of the UN Sustainable Development Goals (the 2030 Agenda) and the Paris Agreement's 1.5 °C goal. SEK has in recent months formalised the climate targets for its lending activities: its ambition is to have a climate neutral (net-zero carbon emissions) lending portfolio at the latest in 2045 (with 'straight line' intermediary goals) and for 50% of the lending portfolio to consist of green assets at the latest by 2030. Offsets are not currently a part of the strategy and SEK will follow international guidelines (for banks) in this area. In 2021, EKN and SEK established a Scientific Climate Council consisting of external experts which will provide advisory support to EKN and SEK to assist aligning the Swedish export finance system with the Paris Agreement's 1.5°C goal.

SEK has undertaken a mapping of its activities in relation to the UN Sustainable Development Goals. Know-your-customer and sustainability assessments are conducted for all transactions prior to granting credit. Sustainability risks are identified and managed according to a risk-based approach, using materiality analysis, stakeholder consultations and mitigating actions. In 2019, social and climate related risks identified as having high materiality included climate change, environmental considerations, labour conditions and human rights.

SEK's sustainability work is based on the following international guidelines:

- Equator Principles and the OECD's Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence. Accordingly, project-related finance is evaluated against IFC performance standards to mitigate potential negative environmental or social impacts[1].

- UN Global Compact, the UN Guiding Principles on Business and Human Rights and the UN Convention on the Rights of the Child

- OECD Guidelines for Multinational Enterprises, the OECD's Conventions and Guidelines within Anti-corruption and the OECD's Recommendation of the Council on Sustainable Lending Practices and Officially Supported Export Credits.

SEK's immediate carbon footprint is essentially limited to business trips and the head office in Stockholm, and the organisation has travel and other policies in place to reduce this footprint. In line with other financial institution, SEK's Scope 3 emissions (covering its lending portfolio/customers' activities) are likely to be significantly larger than its Scope 1 or Scope 2 emissions (but are currently not measured).

As a member of the Equator Principles, SEK is committed to screening projects for climate and other types of risk and has recently finalised a policy on sustainability risk management. All transactions are screened to identify those with high risk for environmental impact, which are then subjected to in-depth examination and the introduction of mitigating actions. When necessary information is not provided, transactions are declined.

The Swedish government has resolved that Swedish export finance for the extraction and exploration of fossil fuels will cease after 2022. At the end of 2020, as a milestone in the phase out, EKN and SEK are ceasing to finance transactions pertaining to the extraction and transportation of coal. There are restrictions on (e.g. the application of CCS or 'exceptional needs/circumstances' in LDCs) on all other fossil fuel activities. SEK decided that as of 2019 it would follow the TCFD recommendation of disclosing "fossil fuel assets": currently SEK provides project-related financing of three natural gas projects and one petrol refinery. No other fossil power project is part of SEK lending portfolio.

SEK already has a green bond framework in place since 2014 and to date it has issued two green bonds of USD 500 million and Skr 1billion respectively. In 2019, SEK made nine green loans under the framework.

Social policies

By being a state-owned company, SEK is obliged to follow the Swedish state's ownership policy and guidelines for state-owned companies. This implies that SEK has to incorporate key sustainability topics into their business strategy and corporate governance as well as work towards achieving them. SEK highlights a variety of social sustainability elements as essential for their strategy and operation, including anti-corruption, business ethics, labor conditions and human rights. The materiality analysis conducted in 2019 highlighted that anti-corruption is the key sustainability topic to be addressed by SEK, followed by other social issues among the top 6 sustainability topics such as labour conditions, business ethics and human rights. Potential investees or potential borrowers covered by SEK´s financing need to have the capacity to manage sustainability risks. This is in particular the case if investees or borrower engage in so called complex markets, which are defined as countries with a high risk of corruption or high risk of human rights violations. In case a heightened sustainability risk is identified in SEK´s lending activities, SEK performs a detailed sustainability risk review. Measures to mitigate social risks might be required. Categorizing countries as complex markets is determined by SEK's Head of Sustainability. The categorization is updated at least annually, informed by an overall risk assessment (money laundering, corruption,

[1] The IFC Performance Standards encompass eight topics: risk management, labor, resource efficiency, community, land resettlement, biodiversity, indigenous people, cultural heritage.

human rights) and based on Maplecroft indices on global risk and country risk analytics as well as a screening tool that serves to *know your customer*.

Sustainability policies informing SEK's governance and operations are the Equator Principles, the Ten Principles in the UN Global Compact, the UN Guiding Principles on Business and Human Rights (including the Core Conventions of the International Labour Organization), the UN Convention on the Rights of the Child, the OECD Guidelines for Multinational Enterprises, the OECD's Conventions and Guidelines within Anti-corruption, the OECD's Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence, and the OECD's Recommendation of the Council on Sustainable Lending Practices and Officially Supported Export Credits.

In addition to this, SEK applies a strict anti-corruption and anti-bribery policy.

Use of proceeds

The net proceeds from green, social and sustainability bonds issued under SEK's framework will be used to finance or refinance green and social loan portfolios according to the following principle:

- The net proceeds from SEK Green Bonds are used to finance Eligible green projects.

- The net proceeds from SEK Social Bonds are used to finance Eligible social projects.

- The net proceeds from SEK Sustainability Bonds are used to finance Eligible green projects and Eligible social projects.

The different loan portfolios are managed separately and reported to investors accordingly. Eligible green and social projects are further defined in tables 1 and 2 below. Projects will be considered in the social project categories only if SEK consider the project to have 'a real social purpose', otherwise it will be considered in the green categories.

For social project categories, SEK has confirmed that only the direct (re-)financing of social projects is considered eligible, not the (re-)financing of equipment manufacturing. Further, SEK aims to define a target population for each of the (re-)financed social project where the target population can vary depending on the local context and the project category[2]. In circumstances where there is a broader need for one of the eligible social projects, SEK considers the general public as an important beneficiary in addition to targeted population groups. This could typically, but not exclusively, occur in developing countries such as DAC recipient countries.

SEK expects most of the proceeds from bonds issued under this framework to go towards new projects. SEK has informed us that investments in projects involving natural gas are excluded.

Selection

The selection process is a key governance factor to consider in CICERO Green's and IISD's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether

[2] Target population can include people living below poverty line, excluded or marginalized populations (or communities), vulnerable groups, people with disabilities, people with health problems, migrants and/or displaced persons, undereducated persons, underserved persons, people with a lack of quality access to essential goods and services, and/or unemployed persons.

projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Eligible projects are evaluated and selected according to the Sustainability Bond Framework and SEK's Methodology for classifying SEK green loans. SEK´s classification methodology for social loans is under development and was not available at the time of this review. According to SEK, it will be finalised in the first half of 2021. Additionally, eligible projects are subject to Exclusion Criteria (no lending provided to activities related to cultivation and processing of palm oil, defense, or any potential environmentally negative resource extraction, fossil fuel extraction, coal power generation, gambling and betting, tobacco and alcohol) and to SEK's Environmental, Social and Governance due diligence.

The selection process is as follows:

1) The Client Relationship Management team identifies and proposes possible Eligible Projects.

2) Independent sustainability analysts assess if a project qualifies as an Eligible Project according to the criteria specified in this framework and using the latest version of SEK's Methodology for classifying SEK green loans (and social loans, when that methodology is ready). The sustainability analyst evaluates if:

- ✓ Green projects and economic activities are in line with EU Taxonomy Regulation.
- ✓ Social projects are in line with criteria specified in the framework and the environmental, social and governance due diligence of SEK
- ✓ Green and Social projects comply with EU taxonomy "do no significant harm" and "safeguard policy" principles.
- ✓ Exclusion criteria are not violated.

3) Final decision is taken by SEK's sustainability department together with either SEK's Credit Committee or SEK's Vice President.

4) Eligible Projects are identified and flagged in either the SEK Green Portfolio or the SEK Social Portfolio.

Projects approved, based on the most updated criteria of the EU Taxonomy at time of approval, will remain eligible and in the portfolio notwithstanding the future updates to the criteria.

SEK will check the eligibility of eligible projects on an annual basis. If, for any reason, a project ceases to meet the eligibility criteria, it will be excluded from the eligible portfolio. SEK's Head of Sustainability is in charge of the Sustainability bond framework. SEK keeps documentation of the decision making process and publishes it on the institution's intranet.

Management of proceeds

An amount equivalent to the net proceeds of any SEK Green, Social or Sustainability Bonds issued under this Framework will be managed by the Finance Department on a portfolio basis. The net proceeds of issuances will be placed in a sub-account. As long as bonds are outstanding and proceeds from issues are available SEK will, at the end of every fiscal quarter, deduct funds in an amount equal to disbursements for the financing of Eligible Projects made during such quarter. Until disbursement to eligible projects, the balance will be placed in the liquidity reserve and managed accordingly.

Pending the allocation of an amount equivalent to the net proceeds of SEK Bonds to the Eligible Projects, the balance of the net proceeds will be held in cash, other Green, Social or Sustainability bonds, or municipality and/or government risk with a minimum credit rating of AA-.

Reporting

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

SEK will provide an annual Impact Report which will include:

a) The total amount of Green, Social and Sustainability Bonds issued and outstanding.

b) A list of Eligible Projects financed with proceeds from Bonds, including allocated and disbursed amounts to each Eligible Project, as well as a brief description of the projects and their main environmental or social impact.

c) Expected or actual environmental and social outputs and impacts from Eligible Projects when relevant and feasible. The Framework contains a list of possible indicators for each category.

d) For green projects, information to investors will include if projects:

a. are near zero carbon or contribute to the transition

b. contribute directly or if they enable others

e) The distribution of allocation between different eligible project portfolios and categories.

f) A description of the allocation between financing of new projects and re-financing.

g) The amounts held as part of the liquidity reserve (if any).

SEK's reporting on Eligible Projects will aim to implement the guidelines of "Handbook - Harmonized Framework for Impact Reporting" of the Green Bond Principles[3] and the Social Bond Principles version once available. In the meantime, SEK will make use of the ICMA's "Working Towards a Harmonized Framework for Impact Reporting for Social Bonds" (2020) document. SEK aims to collect and report on as much relevant impact data as possible, including gender disaggregated data where appropriate and feasible.

SEK is a signatory of the Nordic Position Paper on Green Bonds Impact Reporting[4] and will aim to follow the reporting guidelines and recommendation of that paper. Qualitative performance indicators and, where feasible, quantitative performance measures from eligible projects will be reported to investors and other stakeholders, with indicators and metrics that capture positive impacts for the fulfillment of the SDGs as outlined in ICMA's SDG

[3] Created in 2019 and updated in 2020: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Handbook-Harmonized-Framework-for-Impact-Reporting-220520.pdf
[4] https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf

mapping. This reporting will be subject to data availability as well as competitiveness and/or confidentially considerations.

The impact reporting on eligible projects will be disclosed at www.sek.se and updated on an annual basis. An independent auditor's assurance report will confirm asset allocation.

3 Assessment of SEK's sustainability bond framework and policies

The framework and procedures for SEK's green, social and sustainability 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 SEKs should be aware of potential macro-level impacts of investment projects.

Green shading

Based on the overall assessment of the green and social project types in this framework, and governance and transparency considerations, SEK's sustainability bond framework receives a **CICERO Medium Green shading** for green bond issuances. CICERO Green does not assign an overall shading for social bond issuances. The CICERO Green shading for combined issuances (sustainability bonds) will depend on the weight of social vs green assets in the use-of-proceeds section of such bonds**.**

Eligible projects under the SEK's sustainability bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental and social benefits. Through selection of project categories with clear environmental and social benefits, the bonds aim to provide investors with certainty that their investments deliver environmental and social returns as well as financial returns.

The following two tables provide an assessment of the eligible green and social asset categories. SEK expects to allocate approximately 75% of proceeds to the (re-)financing of green assets and 25% to social assets respectively.

Green category	Eligible project types	Green and Social considerations
Renewable energy	• Wind • Solar • Hydro with power density > 5W/m² • Wave • Bioenergy with carbon intensity < 100gCO2/kWh • Manufacturing of hydrogen with the life-cycle GHG emissions savings requirement of 73.4%.	**Dark Green** ✓ SEK's eligibility criteria aim to be in line with the EU Taxonomy and/or the Climate Bonds Initiative's criteria. CICERO Green may in some cases have additional comments or screening criteria which we may recommend ✓ The cutoff for hydropower of 5W/m2 is intended to avoid projects with potentially high GHG emissions ✓ There are no restrictions on the size of hydropower plants, but by applying the EU Taxonmy's DNSH criteria, the negative impacts from large hydropower will be mitigated

	• Geothermal with carbon intensity < 100gCO_2/kWh	✓ Hydropower projects may imply land-use conflicts, resettlement and disturbance of livelihoods and negative health effects for affected communities and households. In addition to applying IFC performance standards in their own due diligence process, SEK confirms that large hydropower projects are only eligible if they comply with one of the following in order to avoid or at least mitigate adverse impacts: • Hydropower Sustainability Protocol: assessment report published by borrower and score of 3 or above on all relevant pillars; or • IFC Performance Standards: publicly stated commitment by borrower to meet the requirements outlined by all eight IFC performance standards. ✓ The category covers both equipment production and projects. In both cases, care should be taken to minimize the impact on the environment, e.g. from the construction phase of projects and by choosing renewable energy to power equipment manufacturing. ✓ Palm oil has been excluded as a feedstock for the bioenergy category (biofuel). SEK has clarified that both biomass for electricity as well as biogas for transport are eligible project types and that feedstock should be 'sustainably sourced according to EU standards and using certification where relevant'. ✓ CICERO Shades of Green notes that best practice bioenergy sourcing requires feedstock which is waste-based and does not compete with other uses (e.g. food crops or logs for timber). Moreover, transportation should be kept to a minimum and capturing and storing GHG emissions should be considered in the future when such technologies become commercially viable. ✓ SEB is applying a widely used screening criteria for geothermal and bioenergy (life-cycle GHG emissions lower than 100gCO2e/kWh) which ensure that it is aligned to the EU Taxonomy criteria. However, emission intensities vary by country and applying the criteria would in some countries imply an increase in emissions ✓ Hydrogen production delivering a 73.4% reduction in GHGs could be based on fossil fuels. However, SEK has explicitly excluded hydrogen based on fossil fuels (i.e. 'grey' hydrogen) so in practice this framework only allows for 'green hydrogen'. ✓ Geothermal projects can be a source of heavy metal and other pollution. Investors should also be aware that in contrast to other renewable technologies such

		as wind and solar, geothermal can have material GHG emissions, especially during malfunctions or abnormal operation periods.
Green buildings	• Green buildings demonstrating Primary Energy Demand resulting from the construction, at least 10 % lower than the threshold set for the nearly zero-energy building requirements in national measures. Consideration will be given to site selection and land use issues • Building standards such as BREEAM and LEED (at least BREEAM level Outstanding or LEED level Gold or similar) are required • Retrofitted buildings providing at least 30% of energy savings or an energy performance in line with the EPBD after refurbishment.	**Light-Medium Green** ✓ SEK has imposed energy efficiency thresholds, and is thus targeting the most important climate change impact of buildings. ✓ However, the ambition level of the target is uncertain because few countries have defined 'nearly zero' at this stage. In some countries it may represent no more than current regulations. If so, a 10% improvement over that cannot be said to be at the level of ambition required by the Paris Agreement. In a long term perspective, Passive or plus house technologies should become mainstream and the energy performance of existing buildings greatly improved. ✓ By requiring LEED or BREEAM certification, additional screening criteria related to building materials (low-carbon), access to public transport etc. are included. ✓ Investors should be aware that SEK's criteria do not include screening for fossil fuels (e.g. for heating) or climate resiliency considerations ✓ The issuer has clarified that for retrofitted buildings, only renovation expenditures (and not the value of the building) will be eligible – this is as per the EU Taxonomy
Energy efficiency	• Storage systems and electricity transmission where more than 67 % of newly connected generation capacity in the system or the average system grid emissions factor is below the generation threshold value of 100 gCO2e/kWh measured on a life cycle basis. • District heating compliant with the EU	**Medium Green** ✓ SEK will aim for efficiency improvements of at least 30% (which would be in line with limiting global warming to a 2C scenario) but the criteria stops short of requiring this. ✓ Investors should be aware that transmission and district heating assets can contain fossil fuel components. To reach the aims of the Paris Agreement, electricity and heating sectors need to rapidly decarbonise. ✓ Efficiency improvements in fossil fuel assets represent important short-term emission reductions, but do not ultimately transition to alternative fuel sources, and

	Energy Efficiency Directive. • Smart grids • Heating and cooling • Excess heat • LED Lighting	could have associated lock-in and rebound effects. SEK will rely on the criteria of the EU Taxonomy and TEG Toolbox in order to minimize potentially adverse effects.
Clean transportation	• Electric and biofuel vehicles with carbon intensity <50gCO2vkm, where production facilities typically are located in the Nordic region. • Infrastructure for clean energy transportation. In the case of Buss Rapid Transit (BRT) systems, only infrastructure built separately and specifically for BRT systems are eligible • Electric rail transportation and infrastructure	**Medium-Light Green** ✓ The manufacturing of hybrid vehicles is included if it meets the <50gCO2/km threshold. CICERO Green does not view hybrid vehicles as Medium Green so this introduces a 'Light' element to this category. ✓ 'Biofuel vehicles' are limited to mass transit (buses). The (tailpipe) requirement of <50gCO2/km is from the EU Taxonomy and will decrease to 0 after 2025. ✓ The issuer has clarified that DNSH criteria will be applied for the sourcing of batteries. ✓ Investment will not be screened for Scope 1 or 2 emissions. However, the issuer has clarified that production facilities are likely to be located in the Nordic region, which means that the energy input comes from a majority renewables based grid ✓ Not all types of biofuel are sustainable. However, SEK limits feedstocks to those permitted by Annex IX of EU Directive 2018/2001. The EU Taxonomy's Do No Significant Harm (DNSH) criteria will be used to minimize the risk of deforestation. ✓ Only 'fundamental' rail infrastructure is permitted (as per the EU Taxonomy) and therefore adjacent buildings such as shopping malls are not eligible ✓ Marginalized and/or low-income population groups can benefit from affordable access to transport by rail and mass transit modalities. Potential co-benefits are contributions to gender equality and public health improvement. Such co-benefits should be targeted when providing project finance. ✓ Large infrastructure projects, such as major new railways, may affect low-income, marginalized and vulnerable populations adversely (e.g., noise pollution) and might lead to relocation during project design and construction.
Waste management	• Prevention of waste • Waste reuse and recycling	**Medium Green**

°C	• Waste to energy where incineration emissions are below the emission thresholds of IFC performance standards	✓ Waste collection is positive for the environment, however waste handling in developing countries (and the export of waste from Europe) has been the subject of public debate and controversy. ✓ Reuse and recycling projects may strengthen local employment opportunities. However, waste processing in developing countries is associated with poor labour standards, including severe health hazards. This needs to be addressed if waste reuse and recycling facilities are (re-) financed. ✓ Managing waste within a 'waste hierarchy' framework is crucial and preventing pollution at the source should be a core consideration to prevent incineration of waste and to reduce waste volumes. ✓ The sustainability of waste-to -energy depends on the context. The technology may negatively impact the transition to a circular economy, produce toxic waste, air pollution and GHG emissions, as well as create risk of getting locked into long-term contracts with over-dimensioned waste burning facilities. According to SEK's framework, waste incineration for the purposes of energy generation is permitted provided it follows IFC Performance Standards (which include guidelines to minimise environmental impacts). For comparison, the draft EU Taxonomy excludes such projects. ✓ The efficiency of waste recycling depends on the quality of waste collection and sorting capacity. The export of Swedish technologies would in this respect likely represent a positive contribution.
Water and wastewater management °C	• Wastewater treatment • Preservation of water quality	**Medium Green** ✓ The issuer has specified that to be eligible the project has to conform with EU Taxonomy thresholds concerning energy efficiency. This is positive, however as long as wastewater treatment plants can be powered by fossil fuels (such as diesel generators), emissions still occur ✓ Projects should seek to minimize potential emissions from the construction phase and supply chain (e.g., from cement production) ✓ Any projects related to the water supply should consider potential impacts on local environment, ecosystem services, and biodiversity. ✓ Well-conceived water and wastewater projects can contribute to the sustainable development of regions

		and populations. However, projects that include the construction of large water bodies might change hydrologic regimes and could create breeding grounds for water-borne diseases and parasites. Such impacts may threaten health, safety and livelihoods of local communities.
Sustainable land use / environmental management	• Preservation of air or soil quality • Sustainable forest management • Sustainable biomass materials • Eco-efficient and/or circular economy adapted products and resource efficient packaging.	**Dark Green** ✓ The growth of the bioeconomy – using wood to replace fossil-fuel intensive materials – is generally a climate- positive development, but care should be taken to minimise unintended impacts to ensure truly sustainable products. The sustainability of biofuels, for example, is variable and must be monitored closely. ✓ Sustainable forest management using the EU Taxonomy criteria is likely to lead to sustainable outcomes. However, the construction and use of roads should be kept to a minimum, and the replacement of fossil-fuel with renewable equipment should be considered ✓ SEK has clarified that FSC certification will be sought 'as far as possible' and that additional criteria from the Climate Bonds Initiative on evaluation of climate risks will be applied. FSC certification and deforestation screening will be sought for biomass materials as well ✓ Risks and pitfalls related to forest and forest products are different for temperate and tropical forests. Deforestation risk is a particular concern for the latter and the use of certification scheme is not necessarily a guarantee of sustainability.
Climate change adaptation	• Facilities and installations to manage weather and climate related effects such as floods and rising sea levels. • Information support systems	**Dark Green** ✓ It is important to consider potential emissions from the construction phase and supply chain (e.g., from cement production) for these installations. Likewise, one should consider the potential impacts on the local environment, ecosystem services, and biodiversity. ✓ Whenever possible, 'green infrastructure' (such as green roofs) should be considered as an alternative to grey infrastructure

	✓ Investors should be aware that adaptation projects may be protecting carbon intensive assets, although this will not be the primary purpose of any installations.

Table 1. Eligible green project categories

The following table provides an assessment of the eligible social asset categories:

Social category	**Eligible project types**	**Green considerations**	**Social considerations**
Affordable basic infrastructure	• Clean drinking water • Sewage • Sanitation • Public transportation -Bus Rapid Transit (BRT) run by diesel is only acceptable if Euro standard represents significant environmental improvements in comparison to local standards and applied technique allows for renewables, typically in contexts where there is a plan to improve supply of biogas or equivalent in the local market. • Energy grid -Electricity transmission and storage systems where more than 33 % of newly connected generation capacity in the system or the average system grid emissions factor is below the generation threshold value of 100 gCO2e/kWh measured on a life cycle basis. • Waste management -No incineration of waste • Information technologies	**Light Green** ✓ Sanitation, sewage, energy grid and most of the project types in this category can be fossil fuel based. Fossil-fuel run public transportation is an improvement over private transportation but not as ambitious as, say, electric rail. ✓ SEK has applied some environmental thresholds, which is positive, however a substantial presence of fossil fuel is still possible in many categories. ✓ The ambition of SEK is to support modern Swedish technologies. This ambition mitigates (but does not eliminate) concerns related to the presence of fossil-fuels, lock-in and lack of thresholds ✓ We encourage SEK to raise the environmental ambitions of social projects and require thresholds whenever feasible. The Light Green shading reflects the fact that SEK screens projects in all the social categories for climate risk and applies IFC's Performance Standards - as a minimum requirement for climate ambition	✓ Access to affordable basic services is a crucial element in achieving the Sustainable Development Goals. Depending on the specific project(s) financed, they include: • SDG 1: No poverty • SDG 3: Good health and well-being. • SDG 6: Clean Water and sanitation • SDG 7: Affordable and clean energy • SDG 11: Sustainable cities and communities ✓ Definition of target population is crucial for determining how basic infrastructure services become accessible and affordable to those. SEK defines these target populations: underserved people, undereducated persons, unemployed persons or people living below the poverty line. ✓ SEK assures that affordability will be evaluated per project by SEK or by an Environmental & Social consultant. Affordability levels may vary depending on context but constitutes an eligibility criteria for financing. ✓ Impact monitoring over project lifetime is crucial. SEK defines some tentative KPIs while not clarifying if impact targets/reference system will be defined.
Access to essential services	• Construction and equipment to public hospitals, clinics and health care centers • Construction, equipment and operation of public schools and universities	**Light Green** ✓ We encourage SEK to require energy efficient building standards for any of its buildings, wherever they may be and whenever they are built. The current criteria of 'top 40%' is a	✓ Access to healthcare and education facilities is crucial for long-term socio-economic perspectives, resilience and prosperity. Eligible projects contribute to achieving several SDGs, depending on the specific project(s) financed: • SDG 3: Good health and well-being • SDG 4: Quality education

	-Energy efficiency in hospitals, school and university buildings belonging to at least the top 40% of local markets for buildings built before 2021. • ICT solutions enabling educational purposes or health care improvements	step in the right direct direction but not ambitious. ✓ We also recommend climate resiliency and broader environmental considerations to be taken into account when selecting building sites- for instance through building standards - something which is not explicitly catered to in SEK's framework.	• SDG 11: Sustainable cities and communities ✓ Target population defined by SEK: people with health problems, underserved population, and undereducated persons ✓ SEK defines KPIs referring to number of people served/reached. We encourage SEK to also set benchmarks/ a reference system per financed project to ensure that satisfactory access numbers are reached. ✓ The quality and reliability of services, even if they are basic, also matters to serve target populations effectively. SEK notes that service quality and standards are evaluated per project. We encourage SEK to do so over the project lifetimes where feasible.
Food security °C	• Food nutrition value improvement • Sustainable food production - Environmental thresholds for food production facilities according to BAT, typically EU standards in developing countries.	**Light Green** ✓ Sustainable food production which follows international standards has the potential to contribute positively to climate change mitigation and adaptation. BAT may or may not be ambitious, depending on the context. ✓ SEK may finance equipment for sustainable dairy production and support to factories that increase the nutrition value. These facilities should be built using sustainable materials, with renewable energy and undergo climate risk screening wherever possible ✓ Livestock is a significant source of GHG emissions and is defined as a transition practice by the EU Taxonomy. SEK notes that if livestock projects were to be considered for financing, they would undergo EU Taxonomy screening.	✓ Food security is essential for health & wellbeing, resilience and socio-economic development. Eligible projects contribute to achieving: • SDG 2: Zero Hunger ✓ Target population defined by SEK: people living below the poverty line ✓ SEK defines a solid impact indicator that covers quantitative and qualitative dimensions of impact: Number of people provided with safe, nutritious and sufficient food

Table 2. Eligible social project categories

Background

SEK forms part of a wider community of international development finance organisations, which together hold total assets worth some USD 3.7 trillion[5]. Development finance institutions (bilateral, multilateral, national) contribute the vast majority of climate related finance (some 84% of the total public finance, with more than USD 250 billion worth of climate finance in 2019, according to one study[6]). The current climate finance commitment, however, is not sufficient: According to the last report by the IPCC, "upscaling of supply-side energy system investments between now and mid-century, reaching levels of between 1.6–3.8 trillion USD [per year] globally with an average of about 3.5 trillion USD [per year] over 2016–2050" or "3.0 trillion USD [per year] over the same period for 2°C-consistent pathway" is required[7]

Public finance institutions, including export credit agencies such as SEK, have a vital role to play in driving the change needed to align the financial sector with the Paris Agreement and the UN Sustainable Development Goals. (SDGs). Public institutions usually have societal aims, high credit ratings and a risk appetite which make them well suited to provide leadership by financing the necessary changes for a green and just transition, which private institutions may struggle to justify purely based on fiduciary responsibility or risk/return considerations. Government backed credit institutions can provide important de-risking instruments and capital which permit private sector partners to join in co-financing. In this way, institutions such as SEK can be key for leveraging other sources of finance.

However, export credit institutions can sometimes find themselves in situations where their mandate to promote exports is in direct conflict with any mandate their government may have to transition to a sustainable and climate-friendly economy. Recent examples of such conflicts include support for LNG projects in Africa, where the consensus on the right balance between development support and climate ambition has changed over the past decade and where there is arguably still a perception of tradeoff between immediate development benefits and climate progress[8].

EU Taxonomy

In 2020, the EU adopted the EU Taxonomy Regulation (Taxonomy) which seeks to create a common framework to classify whether certain activities can be considered environmentally sustainable. In April 2021, the EU published its technical screening criteria (TSC). If an activity complies with these criteria, it is deemed to contribute to one or more of the Taxonomy's environmental objectives and to not cause significant harm to such objectives. In respect of real estate and construction, the TSC require, among others: primary energy demand at least 10% lower than the threshold set for nearly zero-energy building requirements as contained in national measures; the certification of energy performance using EPC certificates; and at least 70% (by weight) non-hazardous demolition and construction waste prepared for reuse, recycling and other material recovery.

Cicero Shades of Green has not been retained by SEK to provide a screening against the Taxonomy. However, SEK has stated that at the corporate level it intends to follow the development of EU sustainable finance regulations and market developments as the standards evolve, updating its strategy accordingly. At the level of the Sustainability Bond Framework, SEK has clarified that all bonds issued under the framework aim to comply

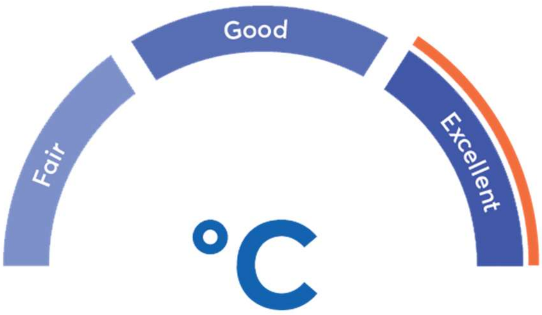
[5] See e.g. https://www.idfc.org/wp-content/uploads/2018/11/rising-sdg-challenge-unique-contribution-idfc.pdf
[6] See https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/
[7] https://www.ipcc.ch/sr15/chapter/chapter-4/
[8] See e.g. https://www.gtreview.com/magazine/volume-18-issue-4/murky-middle-ground-sustainable-export-finance/

with the EU taxonomy requirements surrounding(1) do-no-significant harm to environmental objectives, and (3) minimum social safeguards.

Governance Assessment

Four aspects are studied when assessing the SEK's governance procedures: 1) the policies and goals of relevance to the sustainability bond 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.

SEK has set out a robust process for adhering to the Sustainability Bond Guidelines. The selection process for green loans is detailed and well defined and includes a requirement of approval by the sustainability department, although parts of the selection procedure for social projects is still under development. Planned reporting metrics are aligned with relevant international guidelines and the asset allocation will be subject to external verification, however SEK´s impact measurement and reporting methodology concerning projects´ contribution to the SDGs is still under development. At the corporate level, SEK is a member of various international sustainability and reporting initiatives and shows best practice by integrating its sustainability report in its Annual Report. Climate risk management is anchored in the Board and scenario analysis is carried out routinely. The organisation follows Swedish government targets on decarbonisation, and has recently set targets for its lending portfolio for 2030 and 2045. It will be important for SEK to accelerate its work on reporting exposure to Scope 3 emissions and to ambitiously and without delay implement its policy on reducing support for fossil fuels.



The overall assessment of SEK's governance structure and processes yields a rating of **Excellent**.

Strengths

SEK is following international developments and best practice around climate disclosures closely. It uses TCFD as a reference in its reporting and has committed to full TCFD alignment from 2022 onward[9]. Climate risk analysis using scenarios are carried out on a routine basis.

SEK follows and subscribes to a range of international best practices guidelines concerning environmental and social due diligence which provide strong confidence that Do-No-Significant-Harm objectives as well as compliance with anti-corruption, business ethics, labor conditions and human rights. are taken seriously.

Beyond a Do-No-Significant-Harm approach, SEK is actively engaged in contributing towards achieving the SDGs. SEK is working with other organisations, such as the Swedish Export Credit Agency (EKN) and the Norwegian Export Credit Agency, on advancing and implementing a common methodology to track projects´ impacts on SDGs.

[9] Although the annual report for 2019 only lists its exposure to carbon-intensive assets and not other risk classes. For this, SEK uses the classification "carbon asset risks" which focuses on transition risk (and not physical risk), as developed by the World Resources Institute (https://files.wri.org/s3fs-public/carbon-asset-risk-discussion-framework-ghgp_0.pdf)

The issuer shows a genuine desire to be transparent and detailed on reporting: all projects financed via the sustainability bond framework will be listed and details will be shown to the fullest extent possible (within legal/confidentiality limits). The approach for calculating GHG emissions will be published.

SEK has created a broad and forward-looking sustainability bond framework, which creates opportunities for promising new technologies to be financed. By aligning itself with the EU Taxonomy, it commits its lending to a relevant process which other partners may join or analyse easily.

SEK defines social purposes as well as target populations for each eligible social project category while being transparent about the potential that (re-)financed social projects could also serve the wider public depending on the local context.

Weaknesses

We find no obvious weaknesses in the framework.

Pitfalls

SEK explains that the list of eligible projects is not exhaustive and that other projects may be included. Moreover, several of the project categories are broad and lack specified thresholds. SEK will rely on guidance from the EU Taxonomy for more specific criteria. However, the flexible list of categories and link to an EU Taxonomy which is still developing mean that a lot of discretion is left with SEK and its analysts to interpret specific cases

The handling of selection criteria in regions outside the EU is ambiguous in some categories. The EU Taxonomy is developed primarily for an EU context and it is not always clear how criteria will be implemented in other geographies. Some thresholds make more sense in Europe than in some of the other geographies SEK operates in. Conversely, there will be local challenges and conditions which have not been catered to in the Taxonomy which will require SEK to interpret and refine criteria as the framework is applied.

SEK's climate ambition for the social projects could be stronger. Whilst we have sympathy for the issuer's focus on social impact, we are concerned that by mostly relying solely on Do-No-Significant-Harm and Best-Available-Technology (BAT) standards and requiring only minimal green impacts the projects may deploy less ambitious technologies and miss out on opportunities for pushing for green performance. A BAT approach opens up for considerable room for interpretation and we are concerned with the lock-in of fossil fuel use in particular. In cases where social and green categories overlap (infrastructure, transport) this may mean that projects that don't qualify under SEK's green criteria could possibly qualify under the social criteria.

SEK will (co-)finance eligible social project with the intention to enable availability, access and/or affordability of infrastructure services for defined target populations. However, SEK may not be closely involved or have influence over the operational phase of a (co-)financed project. As such, achieving objectives concerning access to and/or availability of (social) infrastructure services for target groups and/or monitoring and collecting data for impact reporting cannot be guaranteed by SEK but will be up to other project sponsors and/or private/public project operators.

SEK defines several quantitative KPIs for eligible social project categories. However, it remains unclear if a baseline and reference system will be established for each KPI in order to enable investors to monitor and benchmark the achieved impacts.

Leakage, rebound and lock-in

Leakage can be defined as a change in greenhouse gas emissions beyond the project boundary. It can result from displacing a source of greenhouse gas emissions offsite or causing an increase in greenhouse gas emissions at a third-party operation. Rebound effects occur when projects result in increased activity levels, partially or fully offsetting the mitigation impacts of the investments. Energy efficiency projects and transport related projects are particularly vulnerable to rebound effects. Lock-in effects occur when projects make it harder at a later date to shift to low carbon climate friendly solutions than it would have been without the project.

SEK has clarified that leakage, rebound and lock in effects will be evaluated according to the EU Taxonomy, other relevant EU legislation, Climate Bond Initiative taxonomy and best practice. In difficult cases, SEK's forthcoming Climate Advisory Group (expected to be in place Q1 2021 and consisting of climate change experts) will guide SEK concerning these matters. Moreover, SEK has noted that in cases with high uncertainty and where risks are not regarded as manageable, it will choose to exclude the project from sustainability bond financing (Precautionary Principle).

Appendix 1:
Referenced Documents List

Document Number	Document Name	Description
1	SEK Sustainability Bond Framework –November 2021	
2	Ett exportfinansieringssystem som bidrar till klimatomställningen	An export finance system that contributes to the climate transition (in Swedish)
3	Summary of the report An export finance system that contributes to the climate transition	Summary of previous document
4	SEK methodology for classifying green loans	Document describing SEK's methodology
5	Instruktion för hantering av hållbarhetsrisk	SEK's policy for managing sustainability risk
6	Policy för hållbart företagande	SEK's sustainability policy (March 2019)
7	Annual-report-2019	
8	Metoddokument för stresstester och scenarioanalyser	SEK's methodology for stress testing and scenario analysis
9	Riskpolicy	SEK's Risk Policy
10	Policy för hållbar finansiering	Policy for sustainable financing

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).

Appendix 2:

About IISD

The International Institute for Sustainable Development (IISD) is an independent think tank championing sustainable solutions to 21st–century problems. Our mission is to promote human development and environmental sustainability. We do this through research, analysis and knowledge products that support sound policymaking. Our big-picture view allows us to address the root causes of some of the greatest challenges facing our planet today: ecological destruction, social exclusion, unfair laws and economic rules, a changing climate. IISD's staff of over 120 people, plus over 50 associates and 100 consultants, come from across the globe and from many disciplines. Our work affects lives in nearly 100 countries. Part scientist, part strategist—IISD delivers the knowledge to act.

The Infrastructure and Sustainable Finance Workstream at IISD provides advisory services to public and private sector clients for the design and implementation of policies, programs and tools to prepare, finance and de-risk sustainable and low-carbon infrastructure. Among others, the Workstream provides second opinions on institutions' green and sustainability bond frameworks in close collaboration with CICERO Green.

IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Province of Manitoba and project funding from numerous governments inside and outside Canada, United Nations agencies, foundations, the private sector and individuals.

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