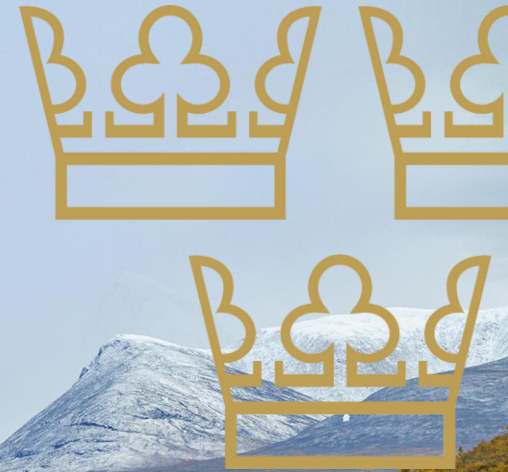


Sweden's sovereign green bond

Investor presentation
24 August 2020



Speakers



Per Bolund
Minister for Financial Markets and Housing



Åsa Knudsen Sterte
Deputy Director,
Ministry of Finance



Hans Lindblad
Director General,
Swedish National Debt Office



Anna Sjulander
Acting Head of Debt Management,
Swedish National Debt Office



Agenda

1. Environmental and climate policy
2. Sweden's sovereign green bond framework
3. Economy and public finances
4. Funding plan and strategy
5. Offering and terms of the green bond

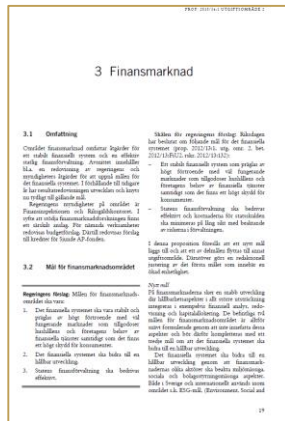


Not the first – but the greenest



Commitment to supporting sustainable finance

Strategic steps in support of sustainable financial market



September 2015

Budget act for 2016 sets holistic direction for future financial market policies

"The financial system shall contribute to a sustainable development"



January 2018

Government inquiry to promote Green Bonds delivers its result

"The single most important promotion measure and the one to receive the strongest impact would be if the Swedish state issued green bonds"

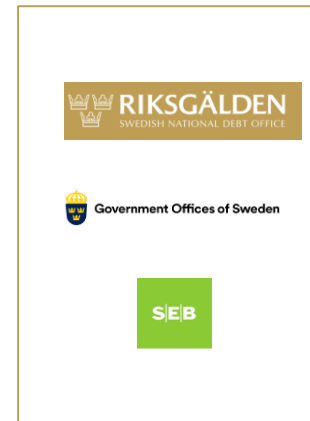


July 2019

Government instruction to the Debt Office

Overarching aims

- Raise the bar
- Promote green bond market
- Increased transparency



October 2019

Debt Office appoints SEB as structuring advisor

A working group with representatives from the Government Offices, the Debt Office and SEB is formed



June 2020

Sweden's sovereign green bond framework and the independent second party opinion from Cicero are announced



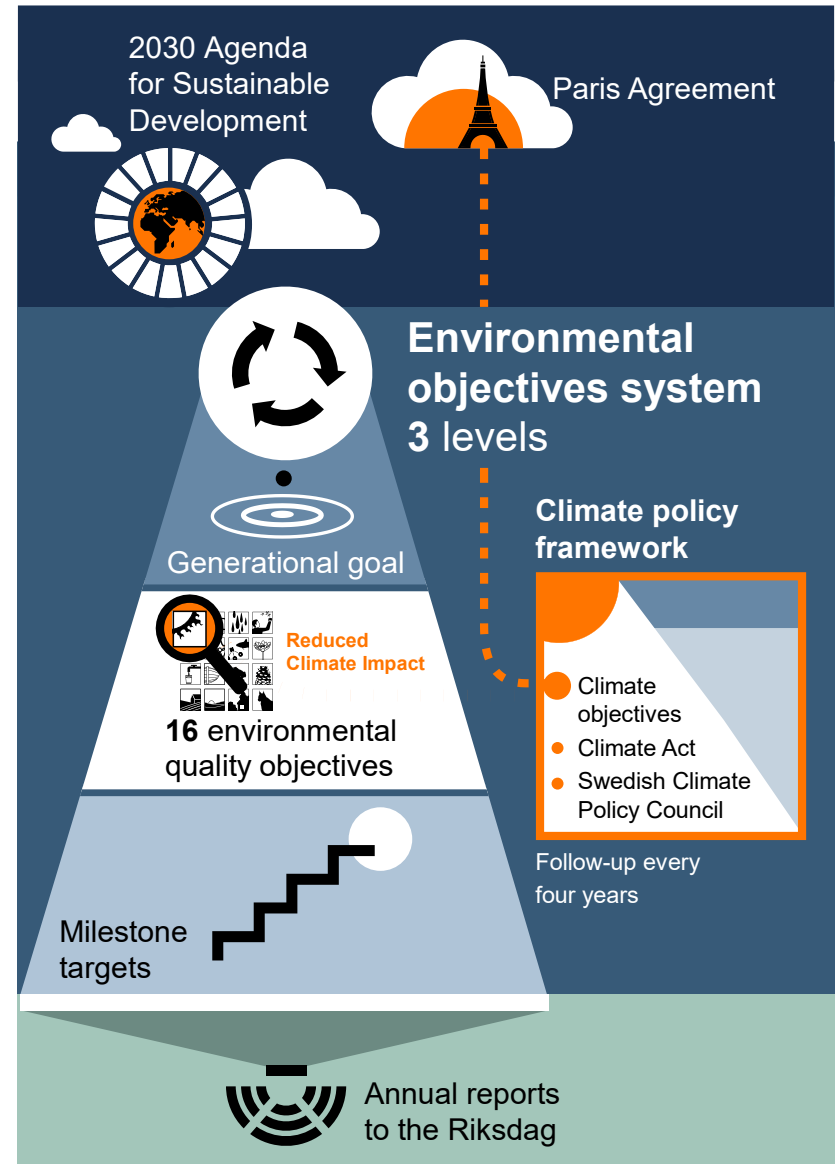
1

Environmental and climate policy



Sweden's environmental objectives system

- 1. Generational goal**
to pass on to the next generation a society in which the major environmental problems have been solved
- 2. Environmental quality objectives**
show the environmental quality that is to be achieved
- 3. Milestone targets**
facilitate progress towards the generational goal and the environmental quality objectives





Fossil Free Sweden

A catalysing force driving climate change action

Created ahead of COP21 to inspire and encourage the private sector to draw up their own carbon roadmaps

The roadmaps describe which obstacles need to be removed, what investments need to be done to become fossil free by 2045



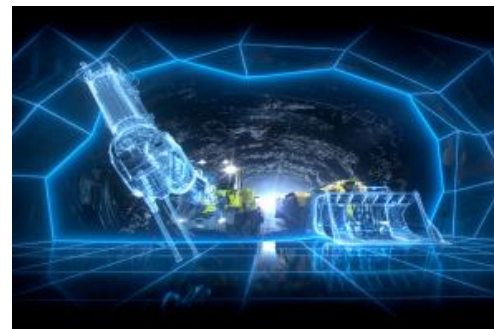
Steel industry

Fossil-free steel using hydrogen instead of coal



Concrete industry

Climate-neutral concrete available 2030, all concrete climate neutral 2045



Mining and minerals

Mining operations fossil free by 2035 through electrification and biofuels

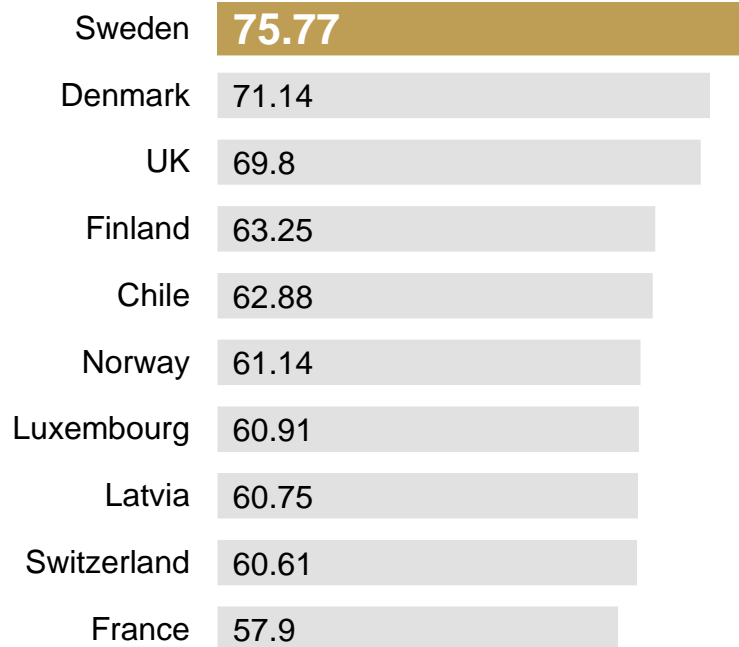


Swedish sustainability work is well grounded



Climate Change Performance Index 2020

Overall results (OECD)



SDG Index

Sustainable Development Report 2020



Rank	Country	Score
1	Sweden	84.72
2	Denmark	84.56
3	Finland	83.77
4	France	81.13
5	Germany	80.77

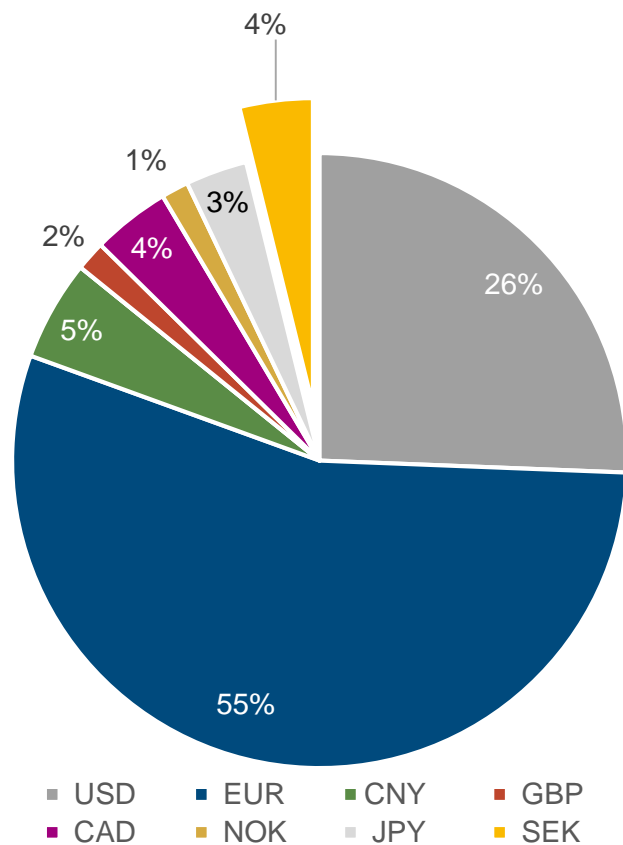
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Sweden's sovereign green bond framework



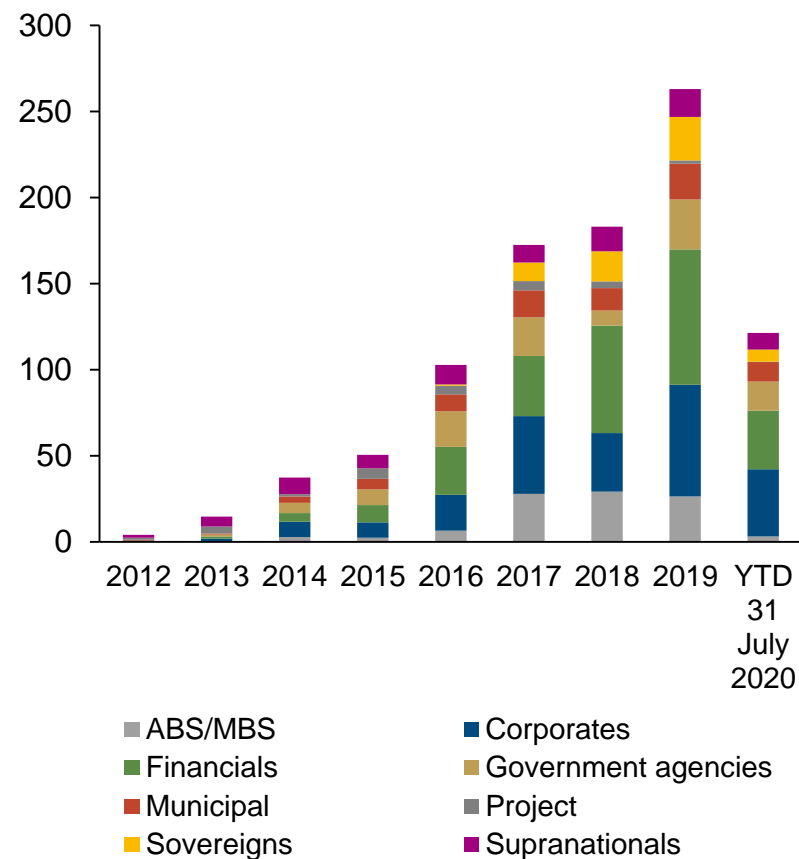
Growing market with more sovereigns entering

SEK bonds have an outsized share of the market



Source: SEB
Note: Data as of 31 July

Green bond issuance in USD billion



- ABS/MBS
- Corporates
- Financials
- Government agencies
- Municipal
- Project
- Sovereigns
- Supranationals

Strategic considerations for the green framework



Greenest of the green



Expenditures vs foregone tax revenue



Cost efficient reporting



Selection process vs definitions

Use of proceeds and eligible green expenditures (1)


































The environmental quality objectives are the foundation for the selection of eligible green expenditures



Illustration: Tobias Flygar/Swedish Environmental Protection Agency




Use of proceeds and eligible green expenditures (2)

Eligible green expenditures shall contribute to at least one environmental objective

Green Bond Principles category	Environmental Quality Objectives – a selection	Sustainable Development Goals
Clean transportation	<ul style="list-style-type: none">  Reduced climate impact  Clean air  A good built environment 	   
Pollution prevention and control	<ul style="list-style-type: none">  Reduced climate impact  Clean air  A non-toxic environment 	         
Environmentally sustainable management of living natural resources and land use	<ul style="list-style-type: none">  Good-quality groundwater  A varied agricultural landscape  A rich diversity of plant and animal life 	      
Renewable energy and energy efficiency	<ul style="list-style-type: none">  Reduced climate impact 	 

Use of proceeds and eligible green expenditures (3)

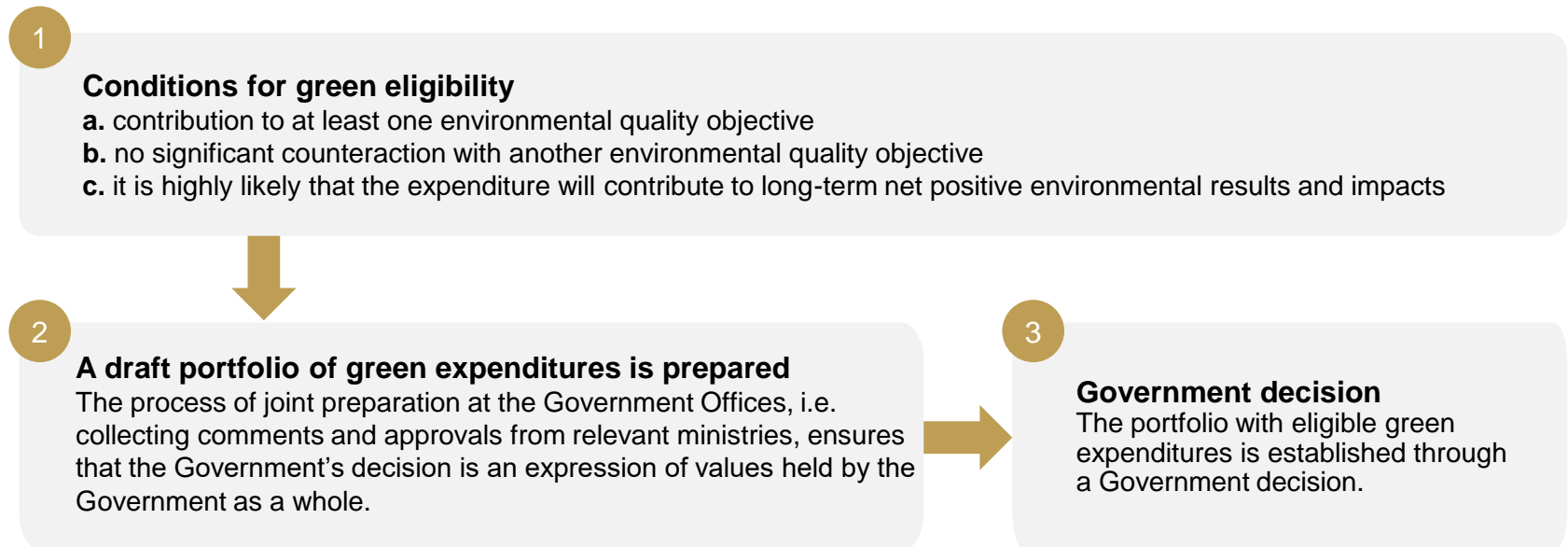
Eligible green expenditures shall contribute to at least one environmental objective

Green Bond Principles category	Environmental Quality Objectives – a selection	Sustainable Development Goals
<p>Terrestrial and aquatic biodiversity conservation</p>	<ul style="list-style-type: none"> Thriving wetlands A rich diversity of plant and animal life Sustainable forests 	
<p>Sustainable water and wastewater management</p>	<ul style="list-style-type: none"> Good-quality groundwater Flourishing lakes and streams A balanced marine environment, flourishing coastal areas and archipelagos 	
<p>Green buildings</p>	<ul style="list-style-type: none"> Reduced climate impact A good built environment A non-toxic environment 	

Evaluation and selection process

Rigorous and robust process – selected expenditures highlight Sweden’s high environmental aspirations

- The framework stipulates that only the expenditures from the current and previous budget years are eligible.
- Selection is carried out at the Government Offices and, when necessary, in consultation with relevant expert agencies.
- The selection process ensures that only eligible green expenditures are linked to the proceeds from the green bonds.
- Each measure implemented within the framework of the environmental quality objectives has been preceded by an overall assessment. In this, a life-cycle perspective is an important starting point, as is the risk of possible lock-in effects.



Selected expenditures

Top GBP categories by volume

- Clean transportation
- Pollution prevention and control
- Environmentally sustainable management of living natural resources and land use

Appropriation		2019 Outcome ¹	2020 Central government budget ²
20	Measures for valuable natural environments	862	1 115
	Climate bonus	1 280	1 760
	Measures for marine and aquatic environments	1 151	1 390
	Protection of valuable natural environments	977	876
	Climate investments	569	1 955
	The Industry Leap	41	600
21	Energy technologies	730	835
22	Maintenance of state transport infrastructure, Railways	9 779	10 152
23	Measures to improve the environment in agriculture	180	50
	Authorised green expenditure 2019	15 567	
	Green appropriations in the central government budget for 2020		18 733
	Safety margin for 2020 ³		-3 600
	Authorised green expenditure 2020		15 133
	Maximum amount to be issued (sum 2019 and 2020)		30 700

¹ The amounts are rounded off and do not always equate to the overall sum.

² Allocated by the Riksdag for 2020 following a proposal by the Government in the Budget Bill for 2020.

³ The safety margin ensures that the issued amount falls below the final outcome for 2020.

Example 1: Protection of valuable natural environments

Overview

- EPA compensates land owners if permanently refraining from forestry or other land use.
- Highlights from 2019:
 - Established 181 new nature reserves protecting 45 000 hectares of valuable natural habitats
 - Torups beech forest in Skåne – habitat for beetles and bats
 - Kallfjärden – Norrbotten’s first marine nature reserve
 - Kålabro – Halland – habitat for giant moth
 - Restoration of 376 hectares of wetlands, creation of 670 hectares of new wetlands

GBP category	Environmentally sustainable management of living natural resources
Sector	Natural capital
Type of assets	Land and forestry
Operator	Swedish EPA



Potential output indicator	Potential impact indicators
-----------------------------------	------------------------------------

Hectares of land protected*

N/A

*The output indicator will vary with the distribution of appropriation

Example 2: Industry Leap

Overview

- The Industry Leap provides support to investments aiming to cut green house gas emission from the process based industry
 - Emissions from the industry account for 1/3 of Sweden's domestic emissions
 - Of total industry emissions 1/3 is related to combustion and 2/3 related to process emissions that is focus for the Industry Leap
 - Grants support research and pilot plants, thereby increasing the likelihood of commercialisation of innovative and climate friendly solutions
 - Example: Funding of Hybrit project, including a pilot plant for fossil-free steel production.

GBP category	Pollution prevention and control
Sector	Industry
Type of assets	R&D/Pilot plants
Operator	Companies



Potential output indicator	Potential impact indicators
-----------------------------------	------------------------------------

Number of projects funded

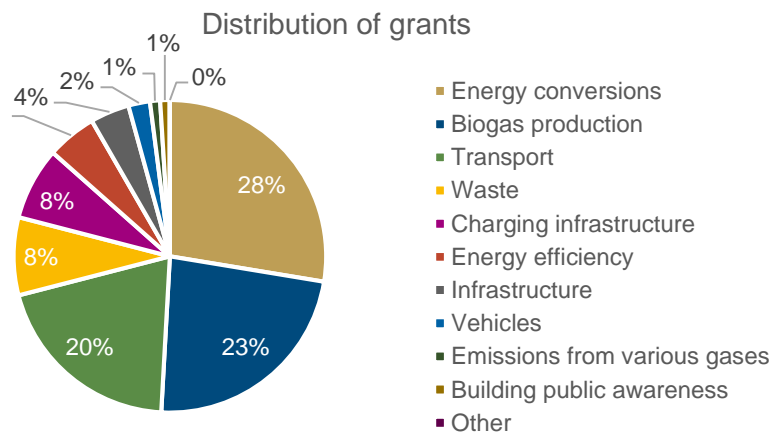
Avoided CO₂ emissions

Example 3: Climate investments (Climate Leap)

Overview

- Provides funding for local and regional investments which reduce CO₂ emissions
- Cost-efficiency key, CO₂ reduction: 300 SEK/tonne. Swedish CO₂ tax 1 190 SEK/tonne.

Primary GBP category	Pollution prevention and control
Sector	Various sectors
Type of assets	Infrastructure
Operator	Households, private sector/public sector



Source: Swedish EPA

Potential output indicator	Potential impact indicators
-----------------------------------	------------------------------------

Number of approved measures

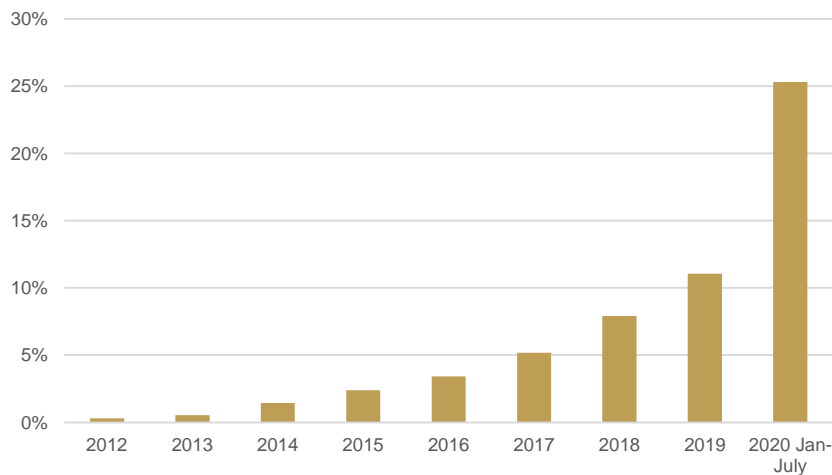
Avoided CO₂ emissions

Example 4: Climate bonus

Overview

- Grants up to SEK 60 000 to be payed out if a zero/low emission vehicle is purchased
- Aim is to cut emissions from transportation sector

Plug-in vehicles share of new cars sold



Source: Transport Analysis

GBP category	Environmentally sustainable management of living natural resources
Sector	Consumer durables
Type of assets	Vehicles

Operator Households/Private sector



Potential output indicator

Number of zero/low emission vehicles sold (eligible for grant)

Potential impact indicators

Avoided CO₂ emissions

Example 5: Maintenance of state transport infrastructure – railways

Overview

- Maintenance of railways – key to reduce transport-related emissions
 - Investments to increase capacity and robustness is a cost-efficient way to move transports from road to rail
 - Maintenance – maintain the full network of 14 000 km of track available and safe
 - Renewals – replace major components to restore functionality and robustness
 - Example of maintenance expenditures in 2019:
 - 57 km of tracks replaced
 - 103 km rail replaced
 - 46 rail switches replaced
 - 70 km of contact wires replaced

GBP category	Clean transportation
Sector	Transportation
Type of assets	Infrastructure
Operator	Swedish Transport Administration



Source: Swedish Transport Administration

Potential output indicator	Potential impact indicators
-----------------------------------	------------------------------------

Km rail track replaced/Km contact wire replaced

N/A

Management of proceeds



The proceeds are **monitored and documented by the Debt Office** according to special procedures and administered within the regular liquidity and debt management.



The follow-up involves **allocating an amount corresponding to the proceeds to the portfolio of eligible green expenditures** that has been selected and approved in accordance with this framework.



Once the 'Central Government Annual Report' has been issued for the year the Swedish sovereign green bonds are issued, the Debt Office is to **publish the final balance** of the register/virtual account for the proceeds.

Reporting



The Debt Office will provide an investor report no later than **the fourth quarter of the year following the issuance** and yearly thereafter, if deemed required by the Debt Office.



The investor report will use existing reports which shows that a high degree of transparency, realistic commitments and robust management is sought. The report is compiled in collaboration with the **Swedish Environmental Protection Agency**.



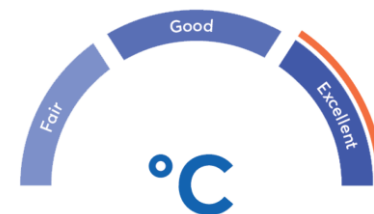
The report will **specify the distribution of the proceeds** from the Swedish sovereign green bonds between the eligible expenditures in the portfolio.

The report will also **include output and impact statements** outlining the positive environmental impacts of the green expenditures, in so far as this information is provided in the existing regular environmental objectives reports or other available reports.

External review



°CICERO
Dark Green



Government Offices appointed Cicero for a second opinion on the green bond framework

Cicero classified the framework as Dark Green and the governance structure is deemed to be excellent. A clear testament to Sweden's ambitious climate and environmental policy and our position as a sustainability pioneer.

Strengths

- Comprehensive and ambitious set of environmental objectives.
- Expenditures do not impede or counteract any other environmental objective.
- Assessment of potential rebound and lock-in effects/ life cycle aspects.

Weaknesses

- Fossil fuel elements in Clean transportation category
 - inclusion of PHEV
- Potential fossil fuel use related to:
 - railway maintenance
 - management of ecosystems

Pitfalls

- Broad scope of the framework creates some uncertainty regarding future projects. Although intention of GB programme is excellent.
- Inclusion of some administrative costs, impact is difficult to assess.

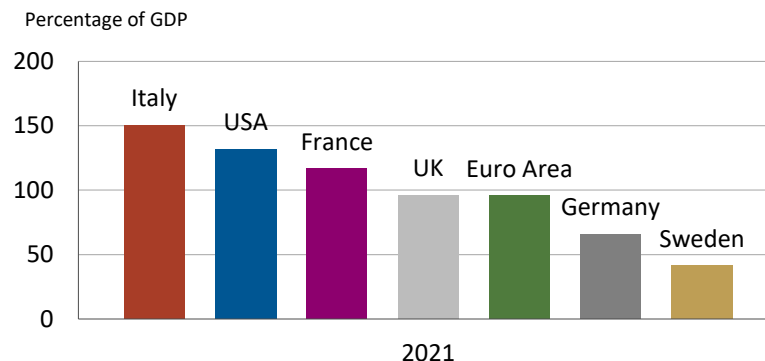
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Economy and public finances

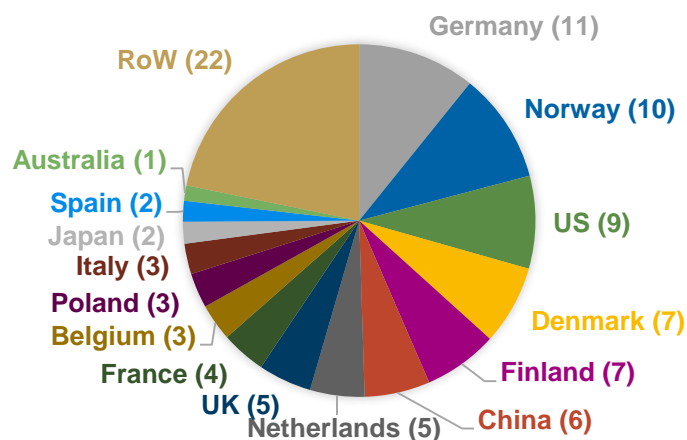
Swedish economy and public finances in brief

- Small open economy
 - Diversified exports and floating krona
- Frameworks contribute to stability
 - Low public debt and stable inflation
- Outperformance of main trading partners
 - Reforms led to decades of higher GDP growth

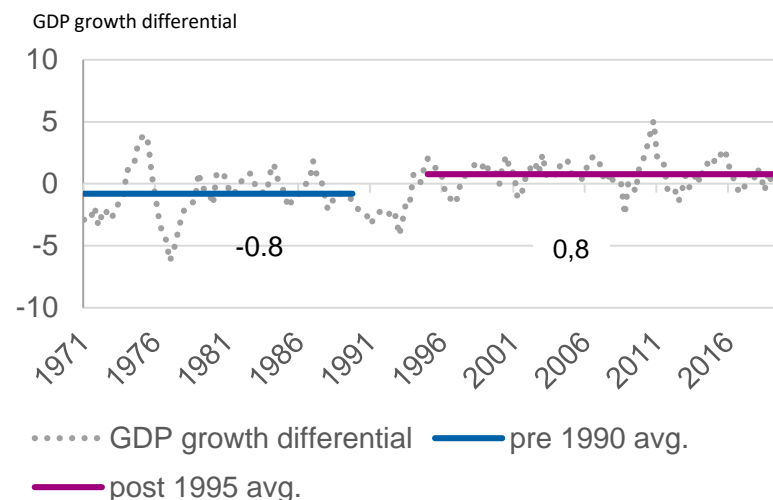
General government gross debt 2021, IMF forecast



Main trading partners (exports, Jan–May 2020)



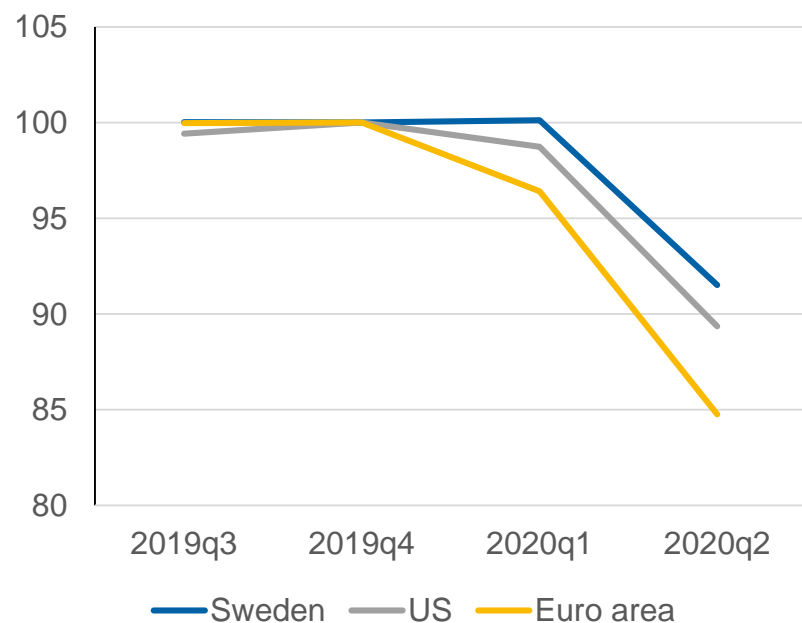
Reforms led to outperformance of trade-weighted peers



Virus-struck economy seen recovering in 2021

Sweden seems to have fared better in onset of crisis

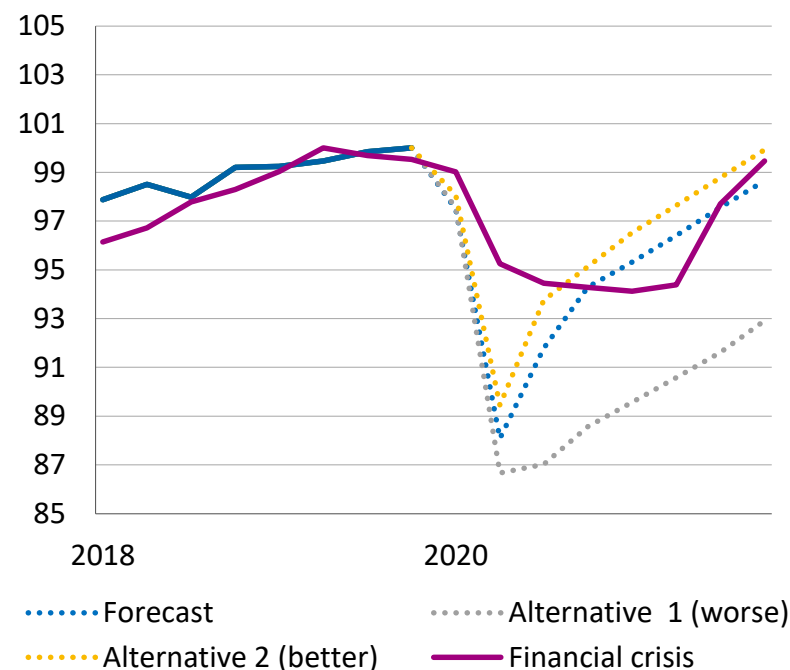
GDP level, index (2019q4 = 100)



Source: Macrobond

Large uncertainty regarding forecasts

GDP level, index (at the peak = 100)

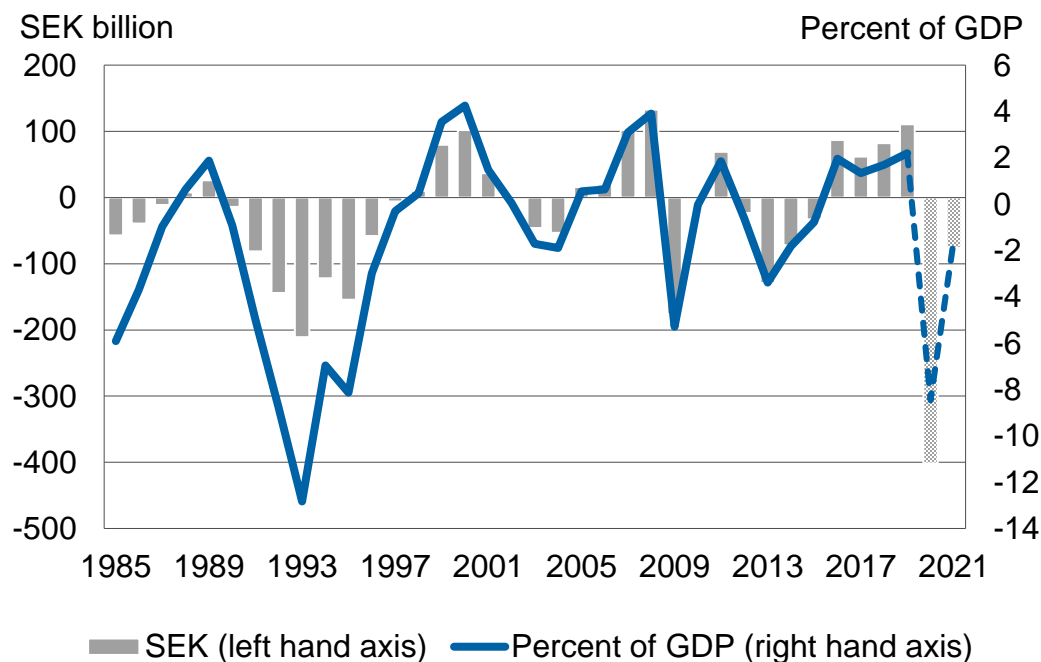


Note: Forecast and scenarios were published on 19 May 2020. Comparison with development during financial crisis 2008-2009. Source: Statistics Sweden and Swedish National Debt Office.

From surplus to deficit as coronavirus hits budget

- More than half of the projected deficit in 2020 stems from crisis measures
- Measures with the largest impact on this year's budget:
 - Short-time work allowance
 - Support for loss of turnover
 - Reduction in employer's contributions
 - Grants to local authorities

Central government budget balance



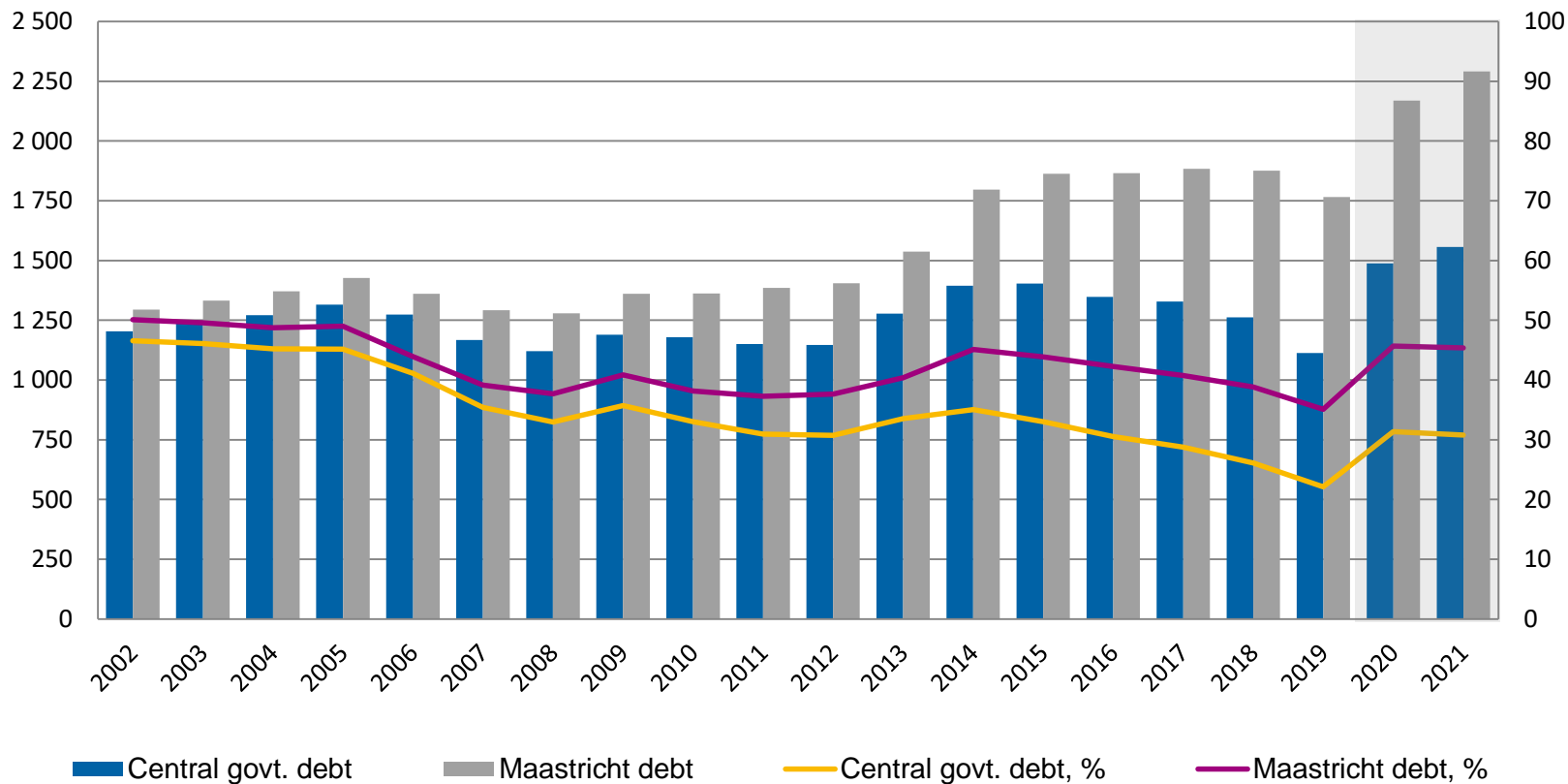
Note: Debt Office's latest forecast was published on 19 May, 2020
Sources: Swedish National Debt Office, Macrobond, Statistics Sweden and the Swedish National Financial Management Authority

Government debt increases from low starting point

Government debt development

SEK billion

Per cent of GDP

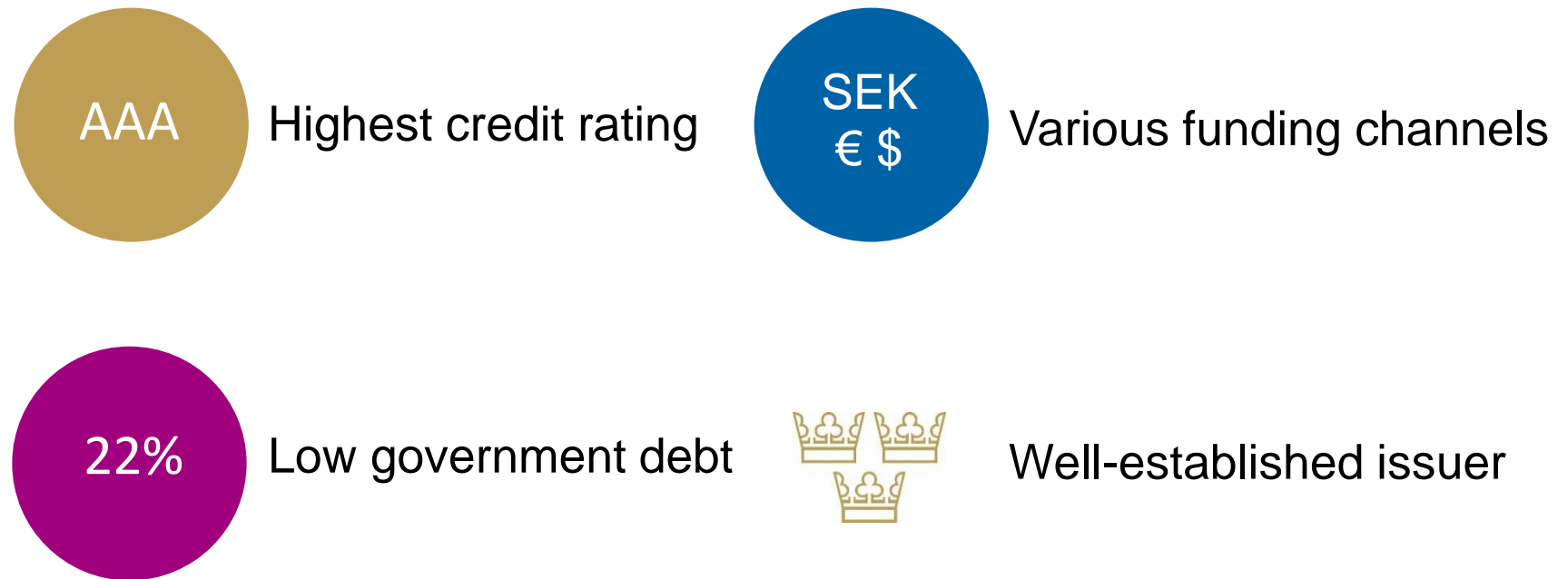


Source: Swedish National Debt Office and Statistics Sweden

4

Funding plan and strategy

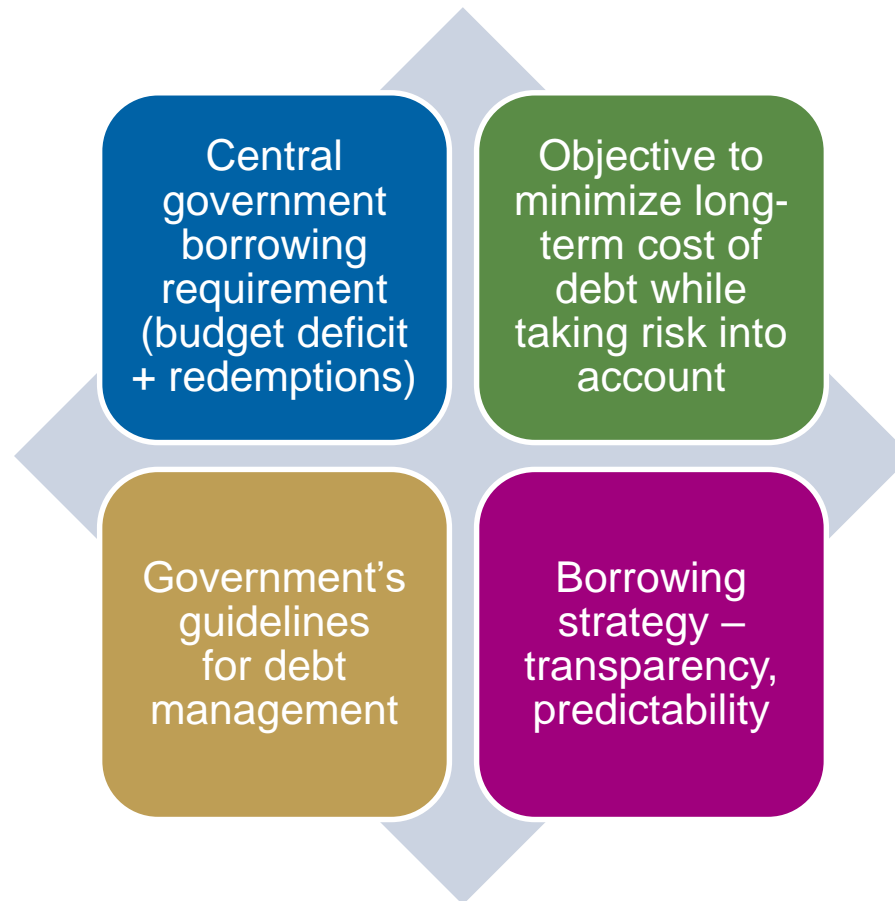
Well-prepared to cope with current uncertainty



Note: The debt figure shows central government debt as a percentage of GDP at the end of 2019. The Maastricht debt (whole public sector) was 35 percent of GDP at the end of 2019.

Transparent and predictable issuance planning

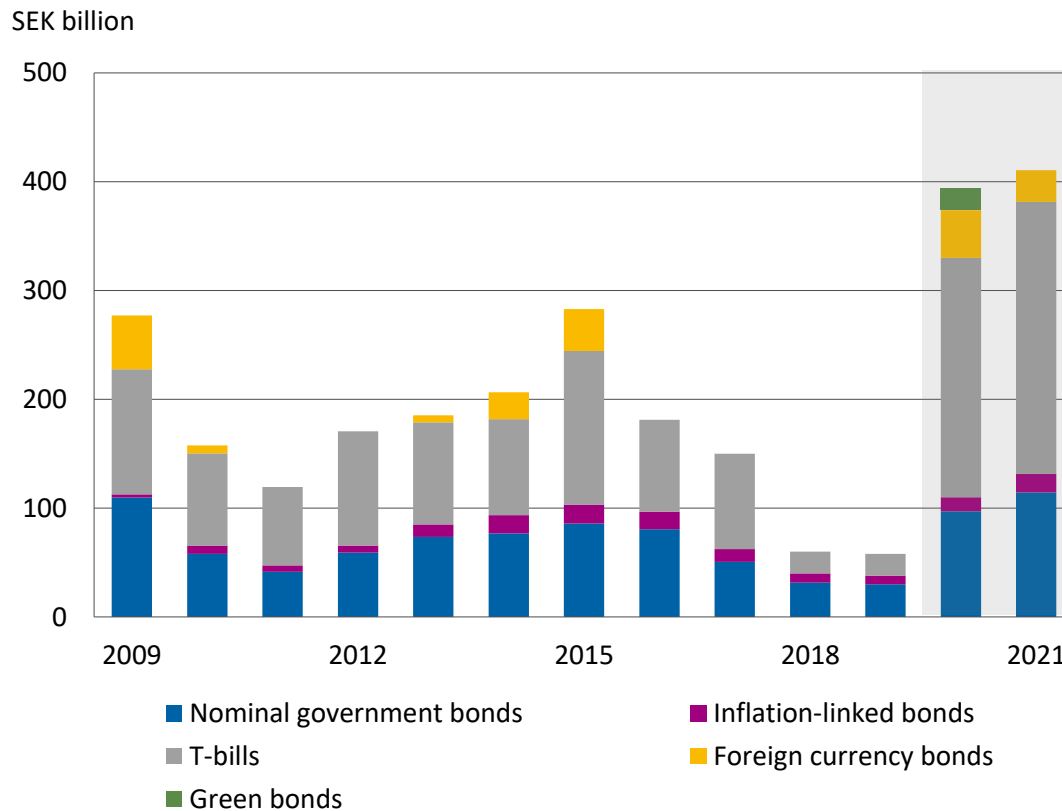
Framework for Sweden's central government borrowing



Issuance increasing from historically low levels

- Increased volumes in all debt instruments – in accordance with borrowing policy
- Short-term increase in T-bill funding
- Gradually raised supply of government bonds
- New 25-year nominal government bond
- Foreign currency bonds used as a complement
- Green bond issued as instructed by the Government

Issuance volumes in plan published on 19 May, 2020



Source: Swedish National Debt Office

Note: Foreign currency bonds exclude on-lending to the Riksbank

5

Offering and terms of the green bond

Strategic considerations for this green issue

Government instruction: one issue (to be evaluated), compliant with debt management objective

EMTN

Type of instrument – differs from regular Swedish government bonds (SGBs)

SEK

Currency – supporting the Swedish green bond market

20
billion

Volume – benchmark size

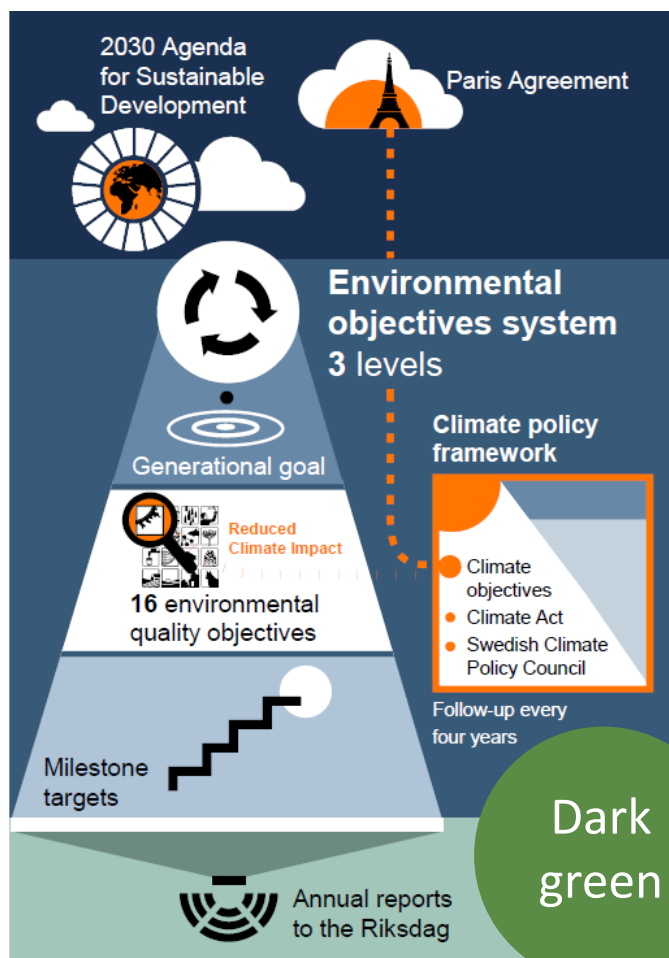
7–10
years

Maturity – well-suited to funding plan and overall debt management

Sweden's sovereign green bond – the offering

Issuer	Kingdom of Sweden
Status of the Notes	Senior unsecured
Issuer rating	Aaa/AAA/AAA (all stable)
Trade date	[]
Settlement date	[] (T+5)
Maturity date	[]
Principal amount	SEK []
Reoffer	[]
Coupon	[]
ISIN	[]
Denominations	SEK []+SEK []
Listing	Nasdaq OMX Stockholm
Governing law	English
Documentation	EMTN
Target Market	Manufacturer target market (MIFID II product governance) is eligible counterparties, professional and retail (all distribution channels)

Low-risk bond with dark green stamp of approval



Sweden's fiscal policy framework

An instrument to ensure that fiscal policy is sustainable and transparent in the long term

- Budget policy targets
 - Surplus target
 - Debt anchor
 - Expenditure ceiling
 - Balanced local government budgets
- A disciplined budget process
- External monitoring
- Openness and clarity

Dark green

AAA

Links to related information

Sweden's sovereign green bond

- [Sweden's green bond framework and selected expenditures](#)
- [Cicero's second opinion on Sweden's green bond framework](#)
- [About Sweden's green bond framework on the Government's website](#)
- [About Sweden's green bond on the Debt Office's website](#)

Environmental and climate policy

- [Sweden's environmental objectives system](#)
- [Sweden's climate policy framework](#)
- [Environmental and climate policy news from the Government](#)

Economy and public finances

- [Sweden's fiscal policy framework](#)
- [Sweden's national accounts \(Statistics Sweden\)](#)

Debt Office forecast, issuance plan and strategy

- [Debt Office's forecast for the economy, budget balance, central government borrowing and debt](#)
- [Debt Office's funding strategy and policy](#)



Important information (disclaimer)

Terms used herein shall be deemed to be defined as set forth in the original offering circular dated 29 December 2016 and supplemental offering circulars 4 January 2018 and 10 August 2020 which together constitute the Offering Circular.

Notes issued as Green Bonds may not be a suitable investment for all investors seeking exposure to green assets

The Pricing Supplement relating to a specific Tranche of Notes may provide that it is the Issuer's intention to apply the proceeds of those Notes for projects that contribute to the fulfilment of the environmental objectives described in the Green Bond Framework. A prospective investor should have regard to the information set out in the section "Green Bonds" and determine for itself the relevance of such information for the purpose of an investment in such Notes together with any other investigation it deems necessary. No assurance is given by the Issuer, or any Manager that such use of proceeds will satisfy any present or future investment criteria or guidelines with which an investor is required, or intends, to comply, in particular with regard to any direct or indirect environmental or sustainability impact of any project or uses, the subject of or related to, the Green Bond Framework. It should be noted that there is currently no consistent definition of what constitutes a "green", "sustainable" or equivalently-labelled project nor can any assurance be given that a clear definition or consensus will develop over time or that any adverse environmental, social and/or other impacts will not occur during the implementation of any projects or the issues the subject of, or related to, any Eligible Projects. Accordingly, no assurance can be given that Eligible Projects will meet investor expectations or requirements regarding such "green", "sustainable" or similar labels. Each prospective investor should have regard to the factors described in the Green Bond Framework and seek advice from their independent financial adviser or other professional adviser the relevance of the information contained in this Offering Circular regarding the use of proceeds and its purchase of the Notes before deciding to invest.

No representation or assurance is given as to the suitability or reliability of any opinion or certification of any third party made available in connection with an issue of Notes issued as Green Bonds. For the avoidance of doubt, any such opinion or certification is not incorporated in this Offering Circular. Any such opinion or certification is not a recommendation by the Issuer, any Manager or any other person to buy, sell or hold any such Notes and is current only as of the date it was issued. As at the date hereof, the providers of such opinions and certifications are not subject to any specific regulatory or other regime or oversight. Prospective investors must determine for themselves the relevance of any such opinion or certification and/or the information contained therein.

In the event that any such Notes are listed or admitted to trading on a dedicated "green", "sustainable" or other equivalently-labelled segment of a stock exchange or securities market, no representation or assurance is given by the Issuer, the Arranger, the Dealer or any other person that such listing or admission satisfies any present or future investment criteria or guidelines with which such investor is required, or intends, to comply. Furthermore, it should be noted that the criteria for any such listings or admission to trading may vary from one stock exchange or securities market to another. No representation or assurance is given or made by the Issuer or any other person that any such listing or admission to trading will be obtained in respect of any such Notes or that any such listing or admission to trading will be maintained during the life of the Notes.

While it is the intention of the Issuer to apply the proceeds of any Notes issued as Green Bonds for Eligible Projects, there can be no assurance that such Eligible Projects will be available or capable of being implemented in the manner anticipated and, accordingly, that the Issuer will be able to use the proceeds for such Eligible Project as intended. In addition, there can be no assurance that Eligible Projects will be completed as expected or achieve the impacts or outcomes (environmental, social or otherwise) originally expected or anticipated. Any such failure will not constitute an Event of Default under the Notes.

A failure of the Notes issued as Green Bonds to meet investor expectations or requirements as to their "green", "sustainable" or equivalent characteristics including the failure to apply proceeds for Eligible Projects, the withdrawal of a third party opinion, the Notes ceasing to be listed or admitted to trading on any stock exchange or securities market as aforesaid or the failure by the Issuer to report on the use of proceeds or Eligible Projects as anticipated, may have a material adverse effect on the value of such Notes and/or may have consequences for certain investors with portfolio mandates to invest in green assets (which consequences may include the need to sell the Notes as a result of the Notes not falling within the investor's investment criteria or mandate).