



Nordic Public Finance Credit Outlook 2024

A Mixed Picture

S&P Global
Ratings

May 16, 2024

Copyright © 2024 by S&P Global.
All rights reserved.

This report does not constitute a rating action

Contents

Key Takeaways	3
Sovereign Overview	5
Overview Of Public Finance Ratings In The Nordics	7
Credit Trends: Nordic Local And Regional Governments (LRGs)	9
Institutional Framework: Norwegian LRGs	14
Public Sector Companies	16
Social And Health Care Reform In Finland	20
Sustainable Finance	22
Related Research	29
Analytical Contacts	30

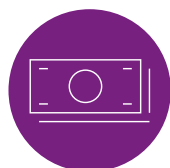
Key Takeaways



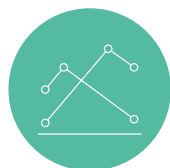
Economic growth in the Nordics is on the road to recovery. Our forecasts indicate a gradual return toward normal growth in the coming years, supported by falling inflation, lower interest rates, and increased spending power. This follows a period of economic stagnation in the Nordic region, with the exception of Denmark's surge in pharmaceutical exports.



Nordic local and regional governments (LRGs) should post larger funding gaps. In the aftermath of the COVID-19 pandemic, during which all Nordic central governments provided extensive support to their subnational governments, we expect that LRGs' funding gaps will generally widen as investment needs in public infrastructure remain sizable.



We see a weakening trend for the Norwegian institutional framework. We observe a persistent mismatch between revenues and total expenditures, particularly in the capital accounts, resulting in notable debt build-up in the sector. If this trend continues, it could negatively affect our assessment of the system's predictability due to uncertainty about the sector's future debt burden in combination with the LRGs' limited autonomy in adjusting revenues.



Swedish public housing providers' margins are diminishing due to elevated interest rates and utility costs. Inflationary pressure has dented profitability in the sector. It has also contributed to a higher share of stranded negotiations as stakeholders fail to agree on how to share the burden of increasing expenditures. Rent negotiations have been difficult in recent years, with more cases ending up at the rent tribunal (*Hyresmarknadskommittén*).



Green, social, sustainability, and sustainability-linked bond issuances reached record-high levels in 2023. After a drop in issuances in 2022, the public finance sector's demand for sustainable funding increased in 2023, with Swedish entities accounting for just above half of the Nordic issuances. On April 15, 2024, S&P Global Ratings published a second party opinion on Norwegian public sector funding agency Kommunalbanken's green bond framework.

Sovereign Overview

Nordic Economies

Climbing out of a mild recession

Denmark – Health care company Novo Nordisk balances weaknesses in other industries.

The growth outlook remains solid--and better than in most other EU countries--since strong demand for pharmaceutical exports more than offsets weaker activity in most other sectors, especially this year.

Finland – Falling inflation and a strong labor market will support domestic demand.

We anticipate that the recession will end this year thanks to the moderation of factors such as high interest rates, which currently drag on growth. We expect that increasing wage growth, combined with lower inflation, will boost disposable income and consumption.

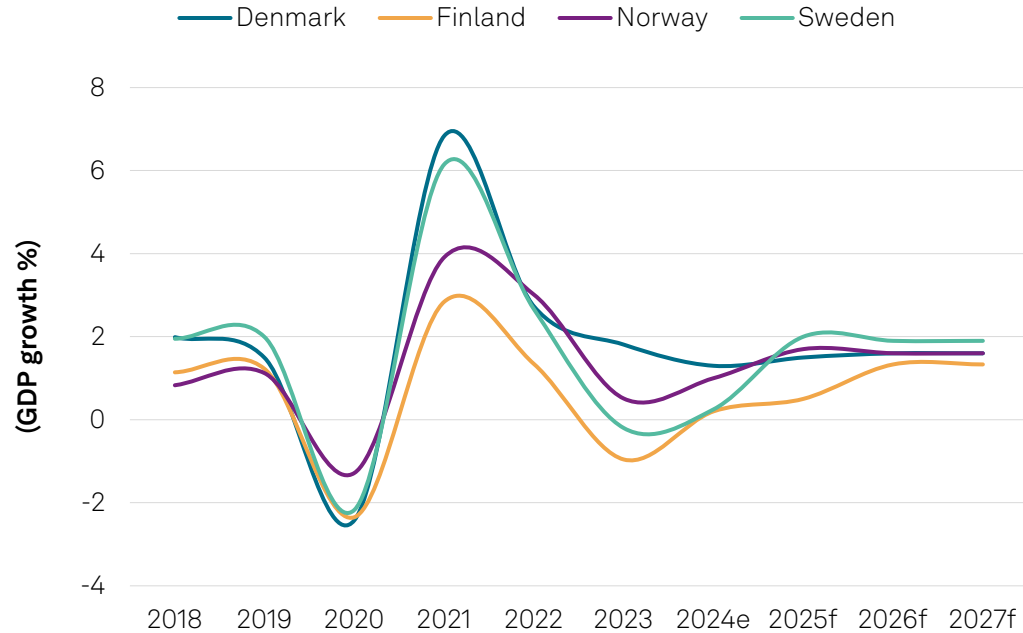
Norway – Consumption is recovering and investments are increasing.

We expect an economic rebound on rising household consumption, easing rates, and lower inflation. Increased oil and gas capital expenditure (capex) will drive overall investment activity.

Sweden – The central bank's easing monetary policy points to better times ahead.

We anticipate a soft landing, with lower rates imminent. Strengthening real wages and a recovery in consumption and investment will also support a progressive economic expansion.

Real GDP growth



e--Estimate. f--Forecast. Sources: S&P Capital IQ; Sovereign Risk Indicators, April 8, 2024.

Overview Of Public Finance Ratings In The Nordics

41 Public Finance Ratings In The Nordics*

Kingdom of Sweden - AAA (33)				
Borås	AA+		Sundsvall	AA+
Göteborg	AA+		Täby	AAA
Helsingborg	AAA		Trelleborg	AA+
<u>Huddinge</u>	AA+	Positive	<u>Uppsala</u>	AA+ Positive
Jönköping	AA+		Västerås	AAA
Linköping	AA+		Vellinge	AA+
Lund	AAA			
Malmö	AAA		Specialfastigheter Sverige AB	AA+
Nacka	AAA		Akademiska Hus AB	AA
Norrköping	AA+		Lejonfastigheter AB	AA-
<u>Norrtälje</u>	AA+	Positive	AB Stångåstaden	AA-
<u>Örebro</u>	AA+	Positive	Fastighets AB Förvaltaren	AA-
Östersund	AA+		<u>Förvaltnings AB Framtiden</u>	AA- Negative
Region Skåne	AAA		SKB	AA-
<u>Region Stockholm</u>	AA+	Positive		
Region Västra Götaland	AAA		Kommuninvest i Sverige AB	AAA
Södertälje	AA+		Linköpings Stadshus AB	AA+
Stockholms stad	AAA			

Kingdom of Norway - AAA (4)		
<u>Oslo</u>	AAA	Negative
<u>Stavanger</u>	AA+	Positive
Kommunalbanken AS	AAA	
Fjellinjen AS	AA	

Kingdom of Denmark - AAA (2)	
Kommunekredit	AAA
Oresundsbro Konsortiet§	AA+

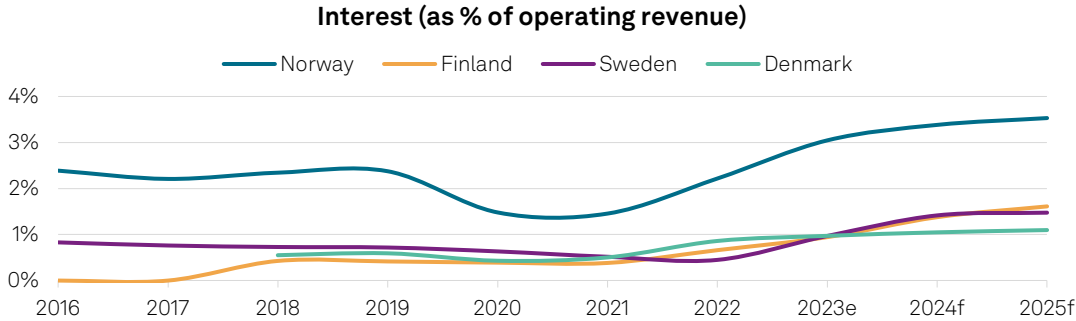
Republic of Finland - AA+ (2)	
Municipality Finance	AA+
Municipal Guarantee Board	AA+

*Public ratings as of May 13, 2024. §Jointly owned by the Danish and Swedish governments. Access the latest publications for the underlined entities by clicking on the names.

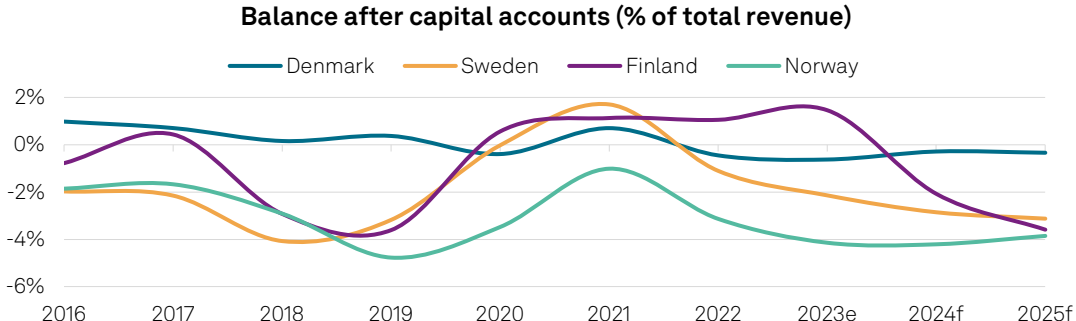
Credit Trends: Nordic Local And Regional Governments

A Mixed Picture For Nordic LRGs

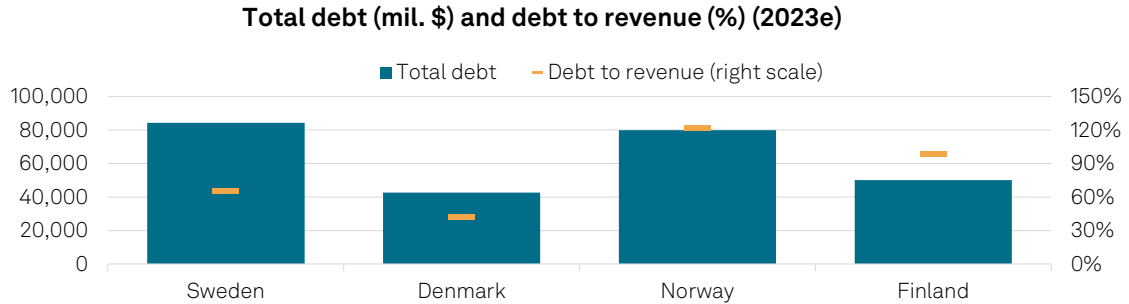
Interest expenditures are set to rise as LRGs refinance existing fixed-term debt at higher interest rates



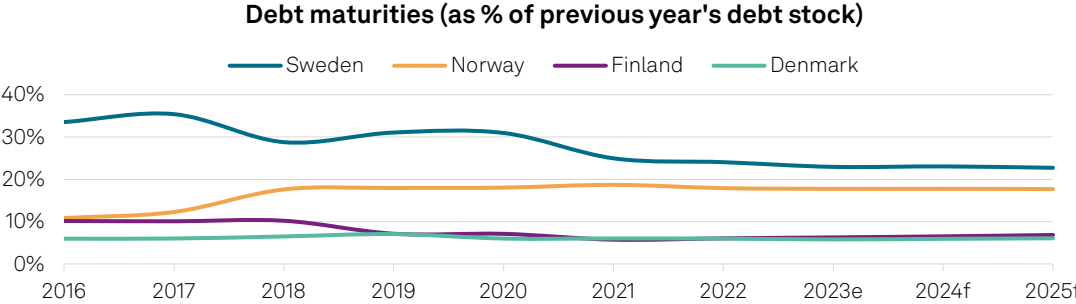
Funding gaps should widen after temporary surpluses during the pandemic



Norwegian LRG debt will remain comparably high on the back of high investments



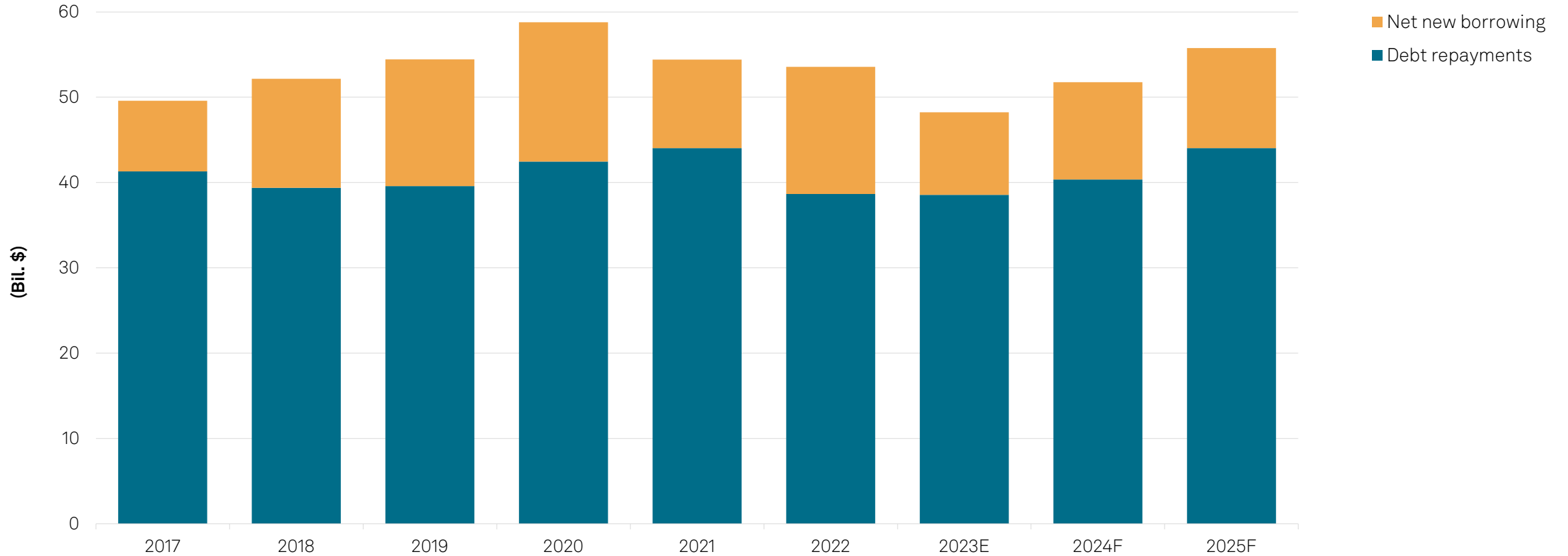
We expect that Swedish LRGs will rely less on short-term debt compared to a few years ago



e--Estimate. f--Forecast. Source: S&P Capital IQ, S&P Global Ratings.

We Expect Gross Borrowings To Reach Pre-Pandemic Levels Again

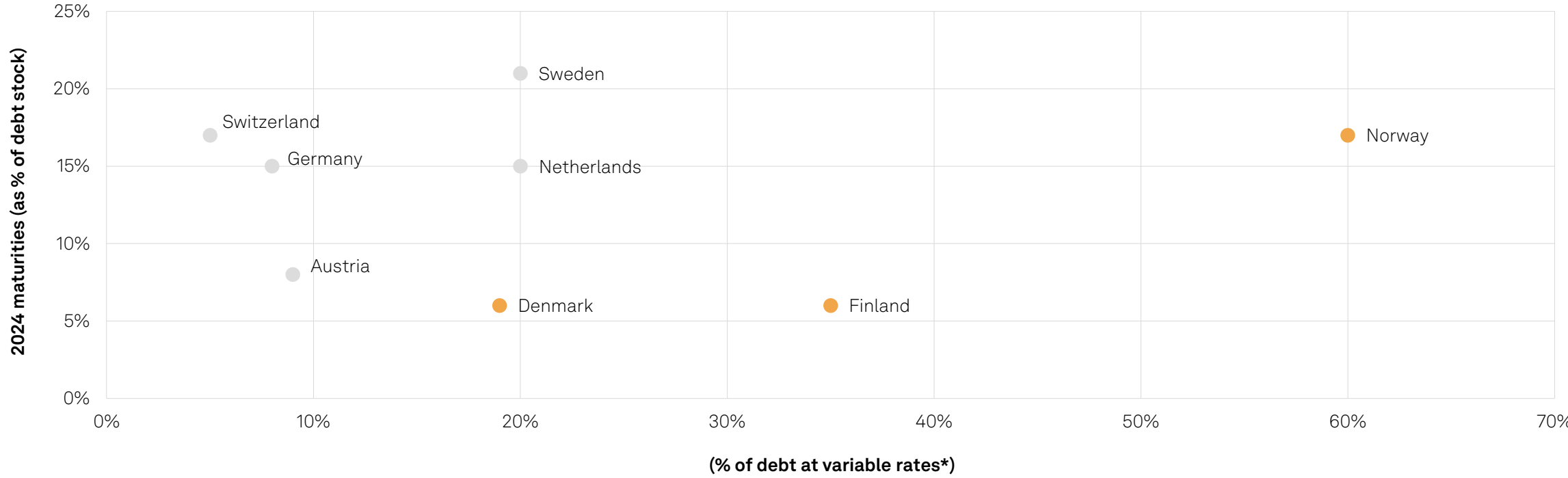
Aggregated subnational gross borrowings in the Nordics



e--Estimate. f--Forecast. Source: S&P Capital IQ, S&P Global Ratings.

Norwegian LRGs' Interest Expenditures Will Increase Fastest Due To A Higher Share Of Variable Rates

Debt structure: Country comparison



*Percentages are based on our estimates for 2023 and aim to capture post-hedging exposures. Data is based on our estimates for 2023. Source: S&P Global Ratings.

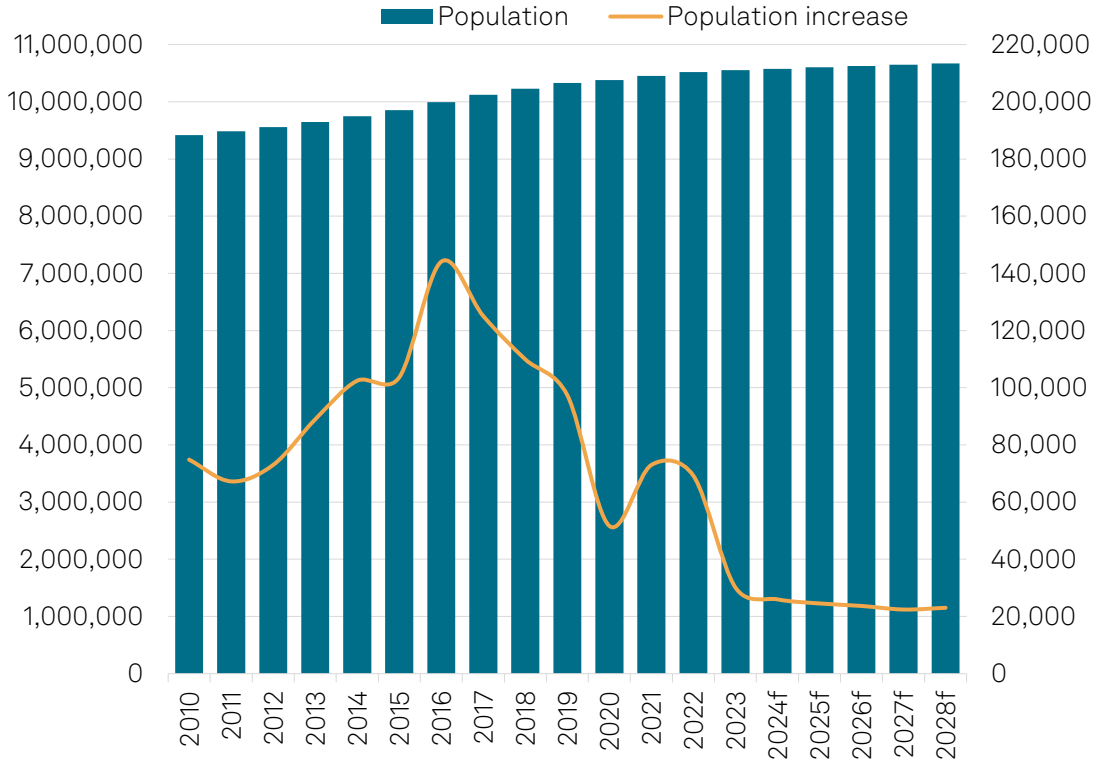
Weaker Population Growth Could Dampen Swedish LRGs' Investments

- Lower population growth will affect the demand for new public services properties, such as pre-schools, and we expect LRGs to revise their medium- to long-term investment plans to reflect this. On the other hand, investments in water and waste facilities are set to increase due to the need for infrastructure renewal, more capacity, and adaptations to new environmental standards.
- We expect population growth in Sweden to remain low in the coming years. Population growth in 2023 was the lowest in absolute terms since 2001. A lower fertility rate, more restrictive immigration policies, and more emigrants are the driving forces behind the slowdown.

Source: Statistics Sweden & S&P Global Ratings.

Population of Sweden

We forecast that the yearly population increase will stay low beyond 2024



f--Forecast.

Institutional Framework: Norwegian LRGs

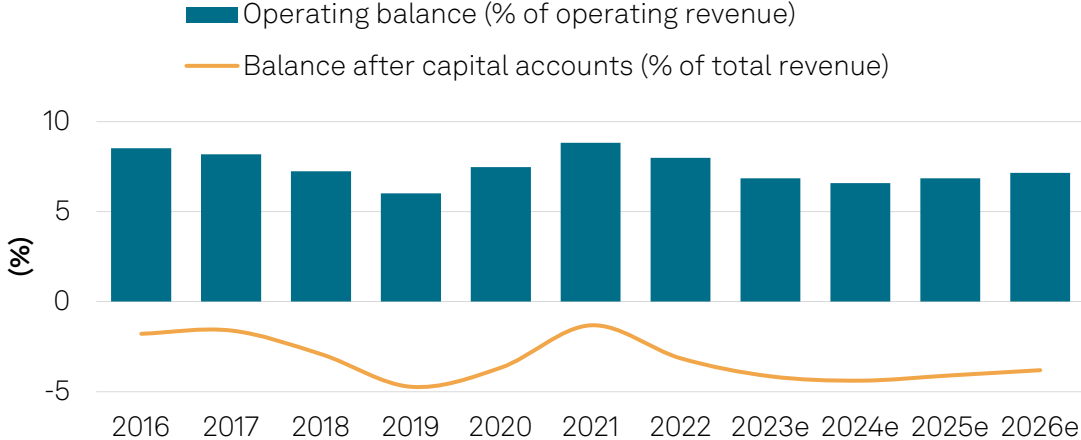
Norwegian LRGs

A weakening trend for a very strong institutional framework

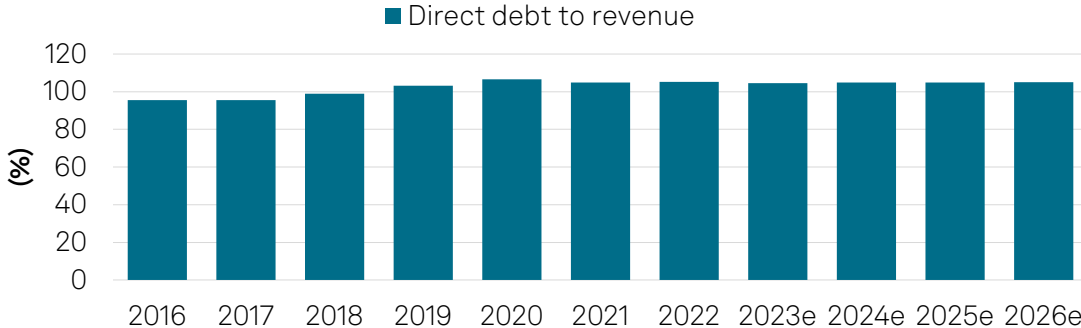
- We regard Norwegian LRGs' institutional framework as extremely predictable and supportive, underpinned by a comprehensive equalization system and automatic operating revenue stabilizers in the central government grant framework.
- However, debt in the Norwegian LRG sector continues to rise, which could negatively affect our view of Norwegian LRGs' institutional framework.
- The growing debt burden results from insufficient grant coverage of LRGs' investments, and it undermines our view of the predictability of the sector's financial position.

Source: S&P Capital IQ: "Rising Debt Points To A Weakening Trend For Norwegian LRGs", March 21, 2024.

Strong operating balance, with deficits after capex



Continued debt uptake will cement debt ratios at high levels



e--Estimate.

Public Sector Companies: Recent Developments

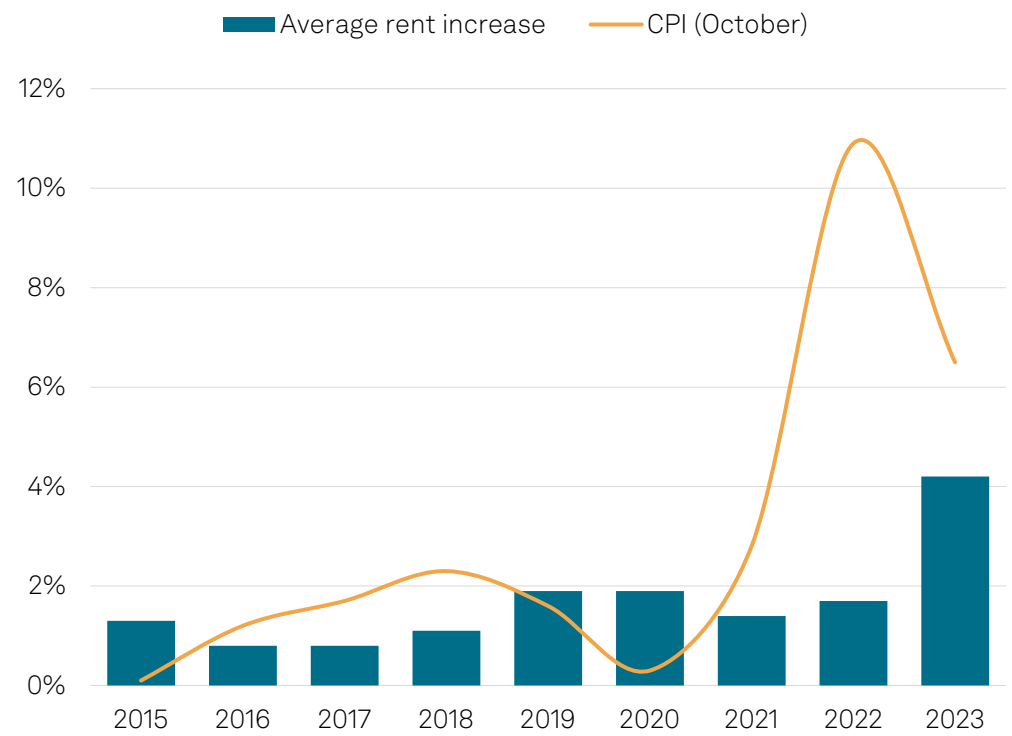
Falling Margins In Public Housing

High inflation and stranded negotiations

- Rent negotiations have been difficult in recent years, and a growing number of cases end up at the rent tribunal (*Hyresmarknadskommittén*).
- Public housing providers are seeing their margins diminish as utility costs and interest rates increase sharply, despite funding through municipalities.
- In 2022, three major stakeholders--Public Housing Sweden Association, Tenants' Association, and Property Owner Association--signed an agreement to establish common ground for rent-setting.
- Since the agreement, high inflation has led to a higher share of stranded negotiations as stakeholders fail to agree on how to share the burden of increasing expenditures.
- However, we believe that the three-party agreement is still positive if it remains in place in the longer term.

Rent levels do not fully reflect higher inflation

Average rent increase compared to inflation



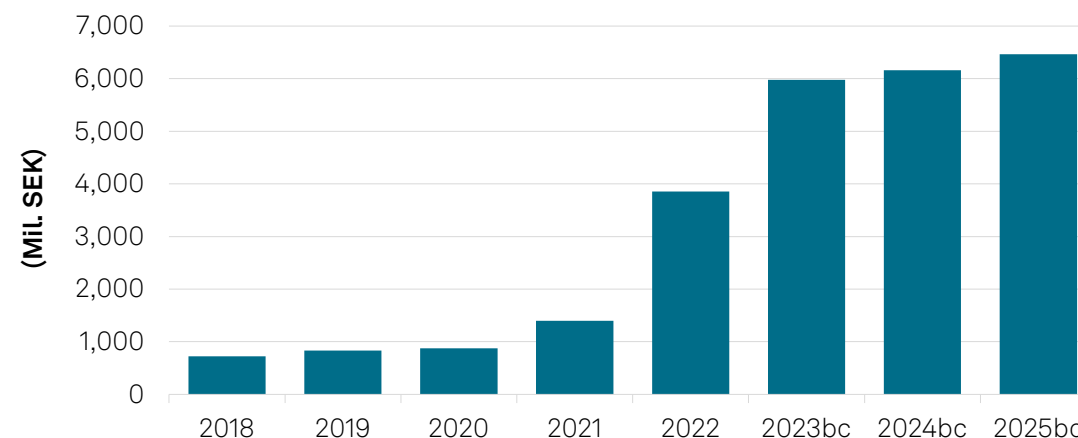
CPI--Consumer Price Index. Sources: Statistics Sweden, S&P Global Ratings.

Specialfastigheter Sverige AB Will Ramp Up Investments Significantly

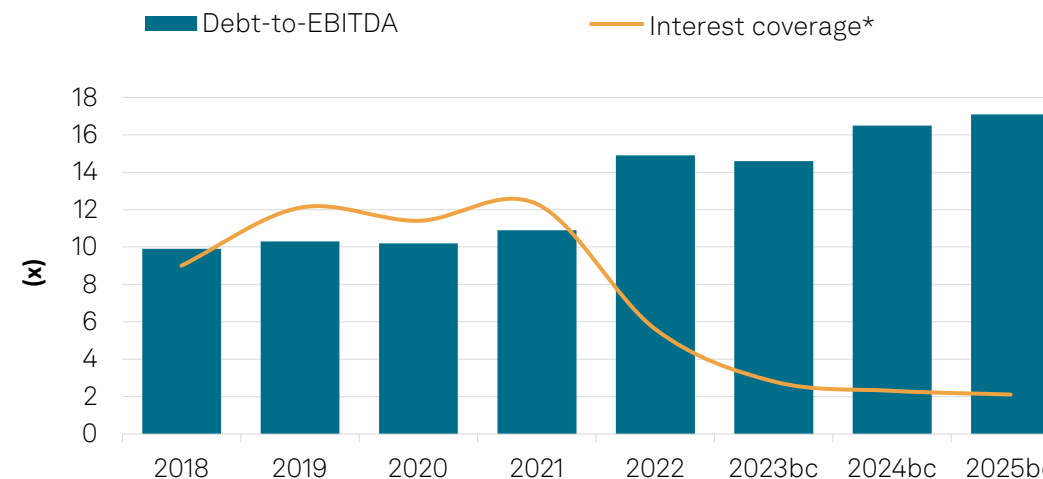
AA+/Stable/A-1+/K-1

- We expect that real estate company Specialfastigheter's debt metrics will weaken due to its ambitious debt-funded capex program to increase prison capacity.
- However, all Specialfastigheter's tenants are state agencies, and its contracts are linked to the consumer price index.
- In addition, Specialfastigheter is fully owned by the Swedish government, and we believe that the two will maintain a close dialogue, keeping the solvency rate within its target range of 25%-40%, debt to EBITDA below 20x, and EBITDA interest coverage above 1.75x.
- We continue to consider the likelihood of extraordinary support from the owner as very high.

Capital spending is set to increase materially...



...and weigh on debt metrics



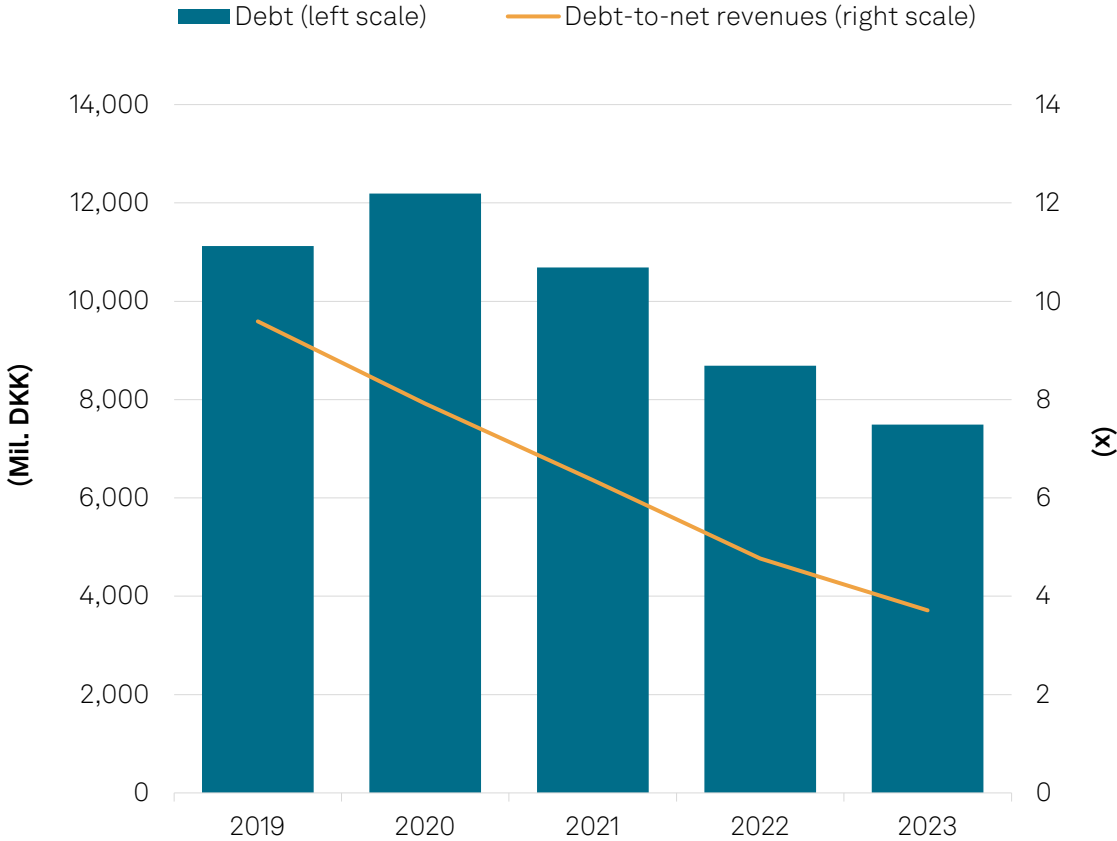
*Nonsales-adjusted EBITDA to interest coverage. bc--Base case. SEK--Swedish krona. Source: S&P Global Ratings.

Limited Risks To Our Oresundsbro Konsortiet Ratings Following The EU Commission's Decision

AA+/Stable

- We see limited risks to our ratings on Oresund Bridge owner and operator Oresundsbro Konsortiet following the EU commission's decision on state aid on Feb. 13, 2024.
- At this point, we don't expect the decision to materially change the propensity of Oresundsbro Konsortiet's owners, the Swedish and Danish governments, to support the company, although we don't rule out the possibility that the decision could have adverse implications for the company's stand-alone creditworthiness.
- If the Commission's decision does have repercussions for the owners' ability to support Oresundsbro Konsortiet, it could affect our view of the likelihood of extraordinary support and have a negative effect on the rating.

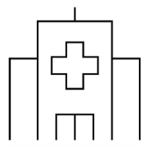
In contrast to past years' deleveraging, we expect debt to increase as the company pays out the dividends that it suspended pending the EU court's decision



DKK--Danish krone. Source: S&P Global Ratings.

Social And Health Care Reform In Finland

The Social And Health Care Reform (SOTE) In Finland



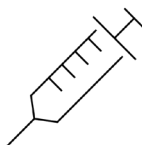
The SOTE reform has created a new tier of government in Finland

- On Jan. 1, 2023, the SOTE reform was formally implemented, creating a new tier of government comprising 21 wellbeing services counties plus the city of Helsinki.
- The wellbeing services counties have assumed responsibility for health, social, and rescue services.
- The primary objective of the reform is to improve the availability and quality of health care services throughout the country.



The wellbeing services counties are facing financial challenges

- For now, the counties' primary source of funding is central government transfers, which should take into account factors such as differences in needs and population density.
- Inflationary cost pressure and lingering effects from the pandemic contributed to the sector's budgetary deficit in 2023.
- At this point, it is difficult to assess whether the reform has brought about any clear efficiency gains.



An aging population will add to the pressure on the counties' financial position

- In line with many other developed countries, Finland has an aging population that will spur operating expenditure and investment costs for the counties in the years to come.
- In response, many counties have announced the need to streamline their operations and find new ways to cut costs in order to address budgetary deficits.
- At the same time, we expect the central government to remain supportive, promoting a functioning and stable financing framework that ensures budgetary sustainability in the long run.

Sustainable Finance

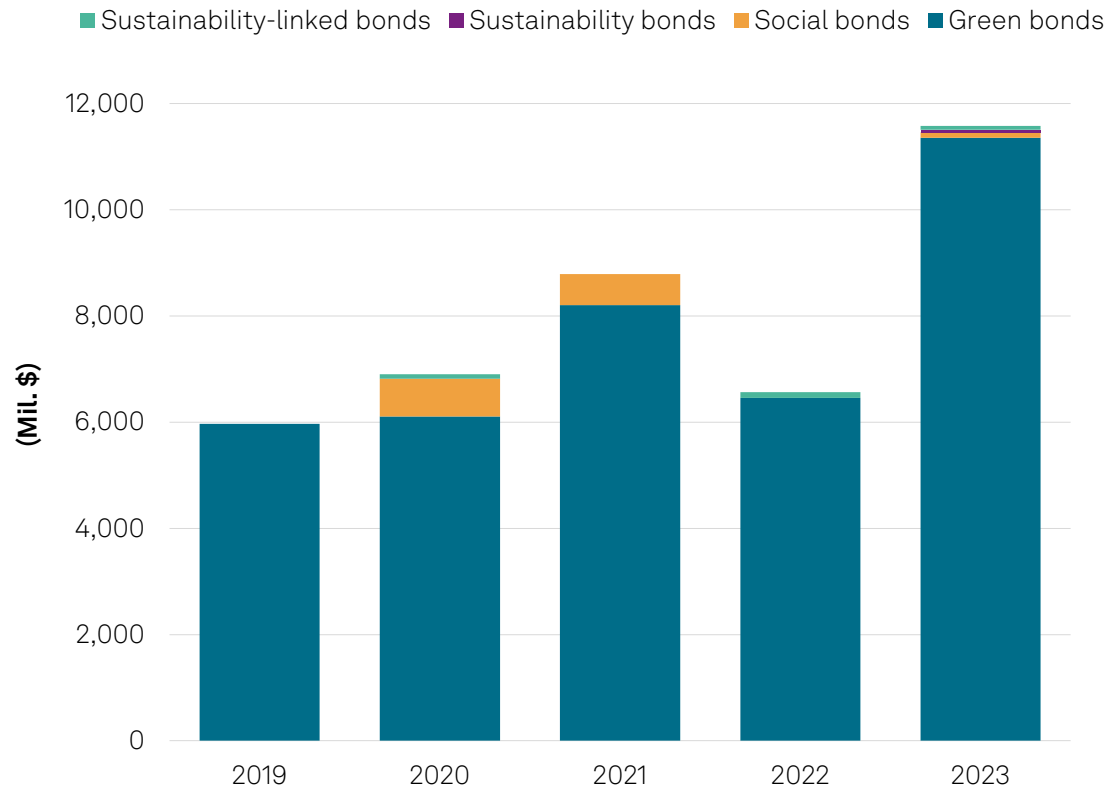
Sustainable Debt Issuance In The Nordic Public Sector

- Green, social, sustainable, and sustainability-linked bond (GSSSB) issuances accounted for 14% of all bond issuances in 2023 in the Nordics, versus 13% globally.
- Public sector entities raised about 19% of all Nordic GSSSB issuances last year.
- This was a record year for the sector, with volumes of GSSSBs exceeding \$11.5 billion, over 30% higher than the previous peak in 2021.
- The Nordic Public GSSSB market remains almost entirely green (97% in 2023). This is an exceptional level for the European public sector (43% average green share), where social (37%) and sustainable (19%) bonds are more common.

Source: Environmental Finance Dataset and S&P Global's 2024 GSSSB Outlook.

GSSSB debt issuance of Nordic public finance entities

2023 Nordic GSSSB volumes reached record levels and were almost entirely green



Note: International Public Finance (IPF) encompasses a broad range of entities operating in the public sector outside the U.S. IPF entities include local and regional governments, social housing providers, universities, hospitals, mass transit companies, and other nonprofit organizations.

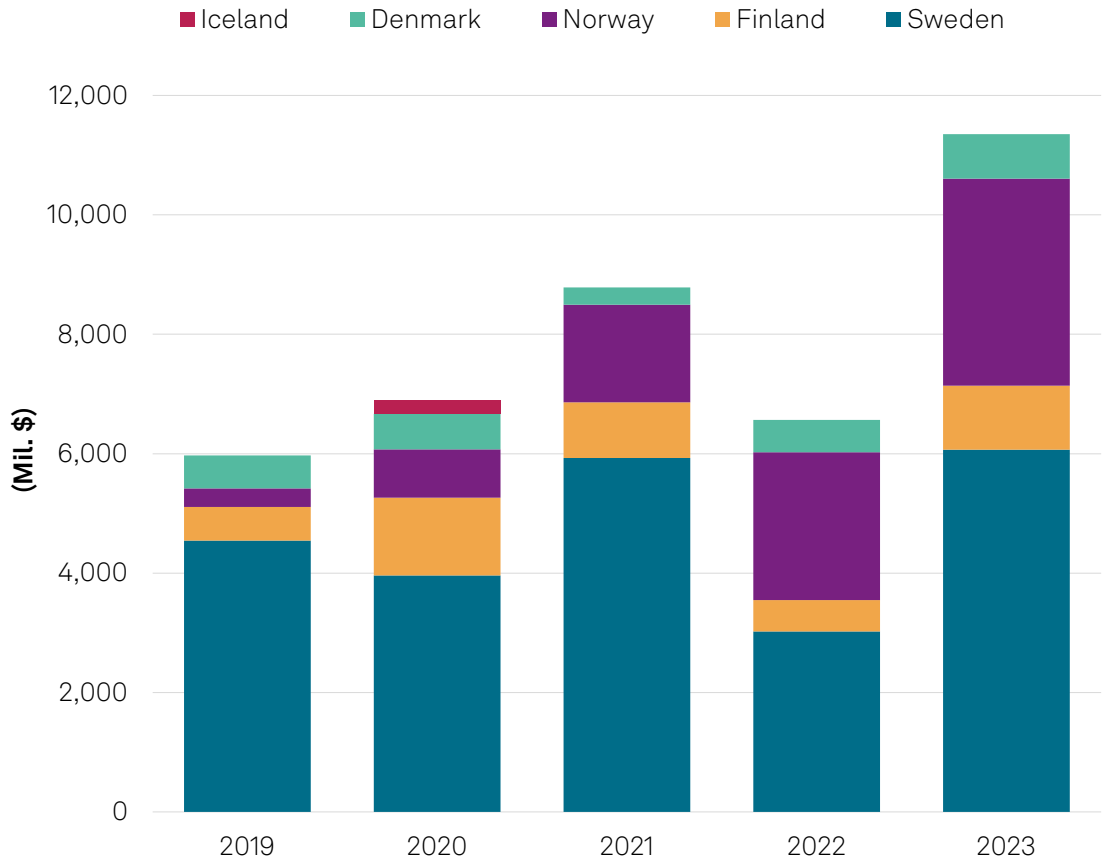
Sustainable Debt Issuance In The Nordic Public Sector

- Sweden remained the largest public sector GSSSB market in 2023, with about 53% of all issuances. LRG lender Kommuninvest issued about 52% of all Swedish volumes, followed by the city of Gothenburg (10%) and Region Skåne (5%).
- Norwegian public entities issued 31% of the region’s GSSSB proceeds, driven by sizable green public utility issuances at Statkraft (47%), Statnett (24%), and Kommunalbanken (14%).
- Finnish and Danish public GSSSB issuances were largely driven by their respective municipal funding vehicles Kommunekredit and Munifin.

Source: Environmental Finance Dataset.

Sustainable debt issuance of public finance entities per country

Sweden remains the largest Nordic GSSSB market for public entities



Recent Second Party Opinions (SPOs) On Nordic Public Finance Issuers

In July 2023, S&P Global Ratings published an updated analytical approach for SPOs on use-of-proceeds instruments. Our updated approach combines features of our existing methodologies and those of Shades of Green, acquired from the CICERO climate research foundation in December 2022.

Integrated Use Of Proceeds (UoP) SPOs

- Kommunalbanken, April 2024
- Bane Nor Eiendom, March 2024
- Lyse AS, January 2024
- DSB, January 2024
- Hafslund, January 2024
- Stockholm Exergi, November 2023
- Solör Bioenergi, November 2023

Legacy Shades Of Green UoP SPOs

- Borås Stad, September 2023
- Sydsvatten, April 2023
- Nacka Kommun, February 2023
- Östersunds Kommun, January 2023
- Linköpingsgruppen, December 2022
- Göteborgs Stad, September 2022
- Norrköpings Kommun, September 2022
- Municipality Finance, August 2022
- Region Stockholm, January 2022
- Kingdom of Denmark, November 2021
- Kommuninvest, May 2021
- Kingdom of Sweden, June 2020

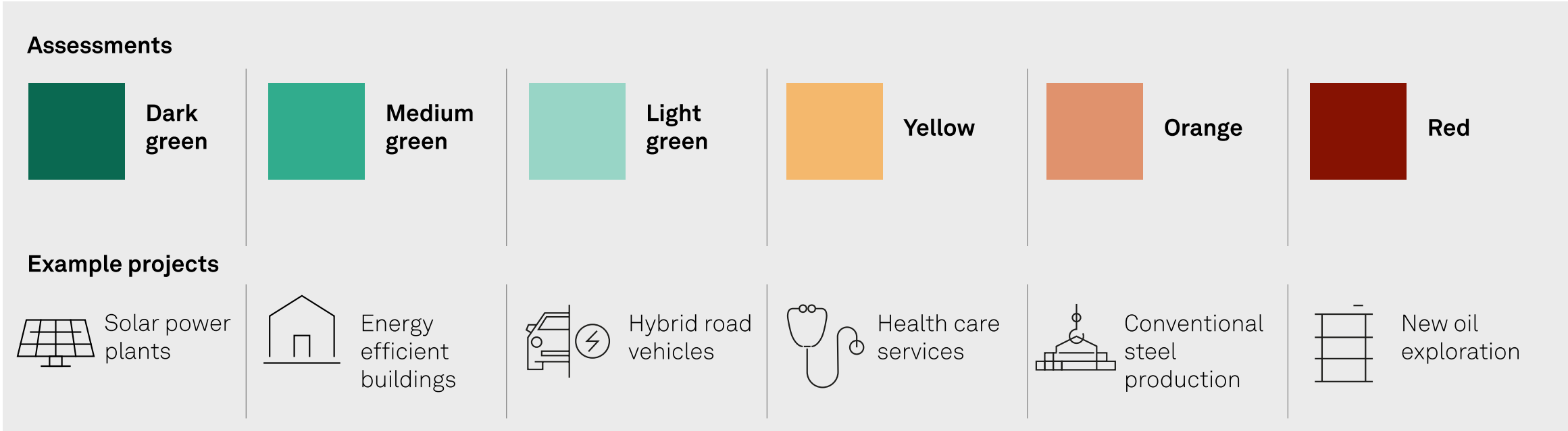
Sustainability-Linked SPOs

- Uppsala Kommun, April 2023
- Västerås Stad, January 2023
- Helsingborgs Stad, January 2022

[Click here for all public SPO reports.](#)

Shades Of Green Definition

A forward-looking opinion of how consistent an environmentally focused activity or investment is with a low-carbon and climate-resilient future.



LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford). Source: [Analytical Approach: Shades Of Green Assessments](#).

Kommunalbanken's Green Bond Framework -- SPO Case Study

- Kommunalbanken (KBN) is the Norwegian state agency for local government funding. KBN grants loans to LRGs or inter-municipal companies in line with its explicit public policy mandate to provide low-cost funding to the Norwegian local government sector.
- As a lending institution, KBN operates in the context of local municipalities' sustainability strategies. The depth of municipalities' environmental, social, and governance (ESG) integration and climate-risk ambitions and progress can vary.
- We assigned a Medium green shade to KBN's 2023 Green Bond Framework, reflecting the broad scope of the different projects that we expect to be financed. We expect the majority of proceeds to go toward green buildings.

Source: Second Party Opinion: Kommunalbanken's Green Bond Framework.

Eligible Green Projects Assessment Summary

Eligible projects under the issuer's green finance framework are assessed based on their environmental benefits and risks, using Shades of Green methodology.

Medium green

Buildings **Medium to Light green**

Measures for existing building stock

New buildings

Other

Renewable energy **Dark to Medium green**

Renewable energy production

Energy storage

Energy infrastructure

Other

Transportation **Dark green**

Cycling and walking

Land transport

Maritime transport


Heavy machinery

Infrastructure

Other

Deep Dive Into The Green Buildings Project Category

This project category is a key contributor to reducing the issuer’s financed emissions. We expect the majority of the proceeds to be allocated to new building projects.

Buildings	 Medium to Light green
Measures for existing building stock	
New buildings	
Other	

Reasoning behind the shading:

- In new construction and renovation projects, improving energy performance and reducing the embodied emissions associated with building materials are key to achieving low-carbon aims. For all buildings, mitigating exposure to physical climate risks will improve climate resilience. Renovations and improvements to existing properties can also help the low-carbon transition.
- The eligibility criteria for buildings address key aspects for decarbonizing the building sector. These include energy efficiency, reductions in embodied emissions, the generation of on-site renewable energy, and emissions-free construction sites. However, as buildings can qualify using only some of the criteria, different projects will have different climate risks and benefits, leading us to assess buildings as Medium or Light green.
- We view as a strength that KBN has included additional nature-protecting requirements to minimize potential environmental risks related to the site selection of construction projects. We also view favourably that if timber-based materials are used, they must be PEFC or FSC certified.

Source: [Second Party Opinion: Kommunalbanken’s Green Bond Framework](#).

Useful Links

Analytical Approach

[S&P Global Ratings website](#)

S&P Global Ratings RatingsDirect®

Analytical Approach: Second Party Opinions: Use Of Proceeds

July 27, 2023

Overview And Scope

This article describes S&P Global Ratings' analytical approach for providing Second Party Opinions (SPOs) on green and sustainable financing where proceeds are allocated to specific environmental or social projects. It also explains how we determine an S&P Global Rating Shade of Green (SPOG) for environmental projects. In addition, we provide context on how the sustainable financing addressees what we consider to be the issuer's most material sustainability factors, as well as our view of the issuer's management of additional sustainability factors that are relevant to the sustainable financing.

SPOs are not credit ratings, do not consider credit quality, and do not factor into our credit ratings. Our SPOs are given in the analysis of a sustainable finance instrument, program, transaction, or framework and the characteristics of the issuing entity that we consider relevant for the implementation of the instrument, program, transaction, or framework. We use the term financing to mean any sustainable finance instrument, program, transaction, or framework that can be assessed under this analytical approach.

Our analysis produces four analytical outputs

An alignment assessment: Our opinion of whether the financing's documentation aligns with certain third-party published sustainable finance principles and guidelines identified by the issuer.

Shade of Green: Our qualitative opinion of how consistent an economic activity or financial instrument is with a low carbon/transition-related future.

Issuer sustainability context: This provides our opinion on how the financing contributes to addressing what we consider to be the issuer's most material sustainability factors. We identify and consider which sustainability factors are most material for the issuer and how they are addressed by the financing; we also review the issuer's strategy for the sustainability factors relevant to the financing.

ESG taxonomy assessment: Upon request from the issuer, we provide an assessment of the financing's alignment with the ESG taxonomy.

www.spglobal.com/ratingsdirect July 27, 2023 1

SPO FAQ

[S&P Global Ratings website](#)

S&P Global Ratings RatingsDirect®

FAQ: Applying Our Integrated Analytical Approach For Use-Of-Proceeds Second Party Opinions

July 27, 2023

This report does not constitute a rating.

Since S&P Global acquired Shades of Green from OCDO's climate research foundation, it has been working on integrating the product suite to support transparency in the sustainable debt market. We use these products to analyze sustainable finance instruments, programs, transactions, or frameworks, which we refer to collectively as financing. Our new use-of-proceeds Second Party Opinions (SPOs) combine important features of the existing methodology from S&P Global Ratings and Shades of Green to S&P Global Ratings' full search integrated SPOs Suite, published July 6, 2023.

For additional information, see "Analytical Approach: Second Party Opinions: Use Of Proceeds" and "Analytical Approach: Shades of Green Assessments," both published July 27, 2023.

Frequently Asked Questions

How are SPOs related to credit ratings?

SPOs are not credit ratings, do not consider credit quality, and do not factor into our credit ratings.

What are the components of the integrated SPO report?

Our SPO reports, which are a point-in-time analysis of financing, have four main sections:

- Summary:** On the first page, we provide the entity location and sector, conclusions on alignment with sustainability principles, the Shade of Green for the overall framework of alignment, and key highlights of our analysis framed as strengths, weaknesses, and areas to watch.
- Issuer sustainability context:** This provides issuer sustainability context to show our opinion on how the financing contributes to addressing what we consider to be the issuer's most material sustainability factors. We identify and consider which sustainability factors are most material for the issuer and how they are addressed by the financing; we also review the issuer's strategy for the sustainability factors relevant to the financing.
- Alignment assessment:** This is our opinion of whether the financing's documentation aligns with certain third-party published sustainable finance principles and guidelines (Principles).

www.spglobal.com/ratingsdirect July 27, 2023 1

Public SPOs

[S&P Global Ratings website](#)

S&P Global Ratings Shades of Green Assessment

ABC Corporation Green Bond Framework

July 26, 2023

This report does not constitute a rating.

Entity location: United States
Market: Medium-term debt and sub debt

Alignment With Principles

- ✓ Green Investment Principles (GIPs), 2021
- ✓ Green Investment Principles (GIPs), 2021
- ✓ Sustainability Linked Loan Principles (SLLLPs) (SLLLPs) MA, 2023
- ✓ Sustainability Linked Loan Principles (SLLLPs) (SLLLPs) MA, 2023

ESG taxonomy Fully aligned Partially aligned Not aligned

Strengths

Long term targets, including a clear and credible pathway to net zero, climate change and transition to electric vehicles (EVs).

Weaknesses

The alignment assessment is ABC Corp's alignment assessment.

Areas to watch

Publication use of proceeds for internal development capital (R&D), corporate travel, and other non-eligible activities. In such cases, ABC plans to put more emphasis on reporting on the following emissions: greenhouse gas (GHG).

Large emissions from low-carbon and emerging technologies

Large emissions from low-carbon and emerging technologies are not included in the S&P Global Ratings assessment in Climate and transition to electric vehicles (EVs). Large emissions from low-carbon and emerging technologies are not included in the S&P Global Ratings assessment in Climate and transition to electric vehicles (EVs).

www.spglobal.com/ratings This product is not a credit rating | © 2023 S&P Global July 26, 2023 1

Materiality Maps

[S&P Global Ratings website](#)

ESG Research

ESG Materiality Map Real Estate

July 25, 2023

Climate transition and physical climate risks are the most material factors from stakeholder and credit perspectives. Customer health and safety and access and affordability are examples of factors currently more material for stakeholders than credit.

ESG Research

This report does not constitute a rating.

ESG Research

Climate transition and physical climate risks are the most material factors from stakeholder and credit perspectives. Customer health and safety and access and affordability are examples of factors currently more material for stakeholders than credit.

ESG Research

Climate transition and physical climate risks are the most material factors from stakeholder and credit perspectives. Customer health and safety and access and affordability are examples of factors currently more material for stakeholders than credit.

www.spglobal.com/ratings

ESG Research

[S&P Global Ratings website](#)

S&P Global Ratings RatingsDirect®

Purchased Energy Emissions in Second Party Opinions And ESG Evaluations

March 23, 2023

This commentary was authored by the Sustainable Finance Group of S&P Global Ratings. It relates only to second party opinions and ESG research. It does not relate to credit ratings, unless otherwise noted, or constitute a rating or constitute a rating.

Key Takeaways

In this report, S&P Global Ratings presents its approach to evaluating emissions from purchased energy (Scope 2) in its second party opinions (SPOs) and ESG evaluations. We prefer to both location- and market-based disclosures. In addition to detailed accounting rules, when assessing an entity's Scope 2 emissions performance. We also try to gain insights into the strategies companies use to achieve emission reductions, assess their climate impact on ongoing climate change work.

In terms of energy procurement, we consider the strongest emission-abatement strategies to be those that result in the adoption of renewable energy generation capacity in terms of adjusting demand, the strongest strategies result in the consumption of low energy.

S&P Global Ratings believes that current greenhouse gas (GHG) accounting practices can obscure how effectively companies are contributing to reduce and transition to net-zero goals. The major differentiating climate leaders from the pack difficult. In this report, we present the challenge of measuring and comparing corporate disclosure on Scope 2 emissions, an important source of emissions associated with procured energy. We also lay out how different corporate strategies to reduce emissions can influence emissions reductions, and how we factor these considerations into our SPOs and ESG evaluations. This report discusses Scope 2 emissions in the context of stakeholder materiality and not in the context of our credit ratings.

www.spglobal.com/ratingsdirect March 23, 2023 1

Related Research

- [Institutional Framework Assessment: Rising Debt Points To A Weakening Trend For Norwegian LRGs](#), March 21, 2024
- [Subnational Debt 2024: Fiscal Policy Differences Influence Borrowing In Developed Markets](#), March 4, 2024
- [EU Commission Decision Should Not Affect The Willingness Of Oresundsbro Konsortiet's Owners To Support It](#), Feb. 19, 2024
- [Institutional Framework Assessment: Swedish Municipalities And Regions Have Flexibility To Balance Costs](#), Nov. 29, 2023
- [Institutional Framework Assessment: Danish LRGs Can Rely On Central Government Support](#), Despite Economic Stresses, Feb. 6, 2023
- [Institutional Framework Assessment: Finnish Municipalities](#), Dec. 13, 2022

Analytical Contacts

Carl Nyreröd

Director, International Public Finance

carl.nyrerod@spglobal.com

Dennis Nilsson

Associate Director, International Public Finance

dennis.nilsson@spglobal.com

Erik Karlsson

Associate Director, International Public Finance

erik.karlsson@spglobal.com

Linus Bladlund

Associate Director, International Public Finance

linus.bladlund@spglobal.com

Freja Dobreff

Associate, International Public Finance

freja.dobreff@spglobal.com

Oscar Pålsson

Credit Program Analyst

oscar.palsson@spglobal.com

Pierre-Brice Hellsing

Director, Sustainable Finance Ratings

pierre-brice.hellsing@spglobal.com

Gabriel Forss

Associate Director, Sovereigns

gabriel.forss@spglobal.com

Felix Ejgel

Managing Director & Sector Lead
International Public Finance

felix.ejgel@spglobal.com

Copyright © 2024 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.spglobal.com/ratings (free of charge) and www.ratingsdirect.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.spglobal.com/ratings/usratingsfees.

Australia: S&P Global Ratings Australia Pty Ltd holds Australian financial services license number 337565 under the Corporations Act 2001. S&P Global Ratings' credit ratings and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

spglobal.com/ratings

S&P Global
Ratings