

Impact Report 2019



Impact Report – green financing

Vasakronan issued the world's first green corporate bond in November 2013, and remains the largest issuer of green corporate bonds in Sweden. Since 2018, Vasakronan's framework has included all debt instruments, rather than just bonds. The framework has been reviewed by the Center for International Climate Research (CICERO) with the highest rating, Dark Green. Vasakronan issued the world's first green commercial paper in 2018.

Properties account for just over 30% of energy consumption in Sweden. Continuing the work on reducing energy consumption in our properties is therefore self-evident to us. Through investments and close collaboration with our tenants, we have managed to halve our energy consumption since 2009 and moreover, by providing our properties with renewable or climate-neutral energy we have reduced our carbon dioxide emissions in scopes 1 and 2 and emissions from air travel by 99% since 2006.

Large amounts of construction materials are used in new construction, redevelopment and leasehold improvements of properties. The materials used in our construction projects cause a high degree of environmental and climate impact when they are extracted and produced, and the need for transportation is considerable. Therefore, it is essential to reduce the amount of materials and to opt for reused materials or materials produced from renewable or recycled products to a larger extent. In addition, we need to ensure that the materials used do not contain hazardous substances that are spread into indoor environments or into ecosystems outside our buildings. That is why all the materials used in our buildings are always evaluated and documented. The Byggvarubedömningen system is used in this work.

New construction and redevelopment projects lead to considerable construction and demolition waste. A great deal of it is not recycled but goes straight to incineration or landfill. As property owners, we also take care of large amounts of waste from our tenants' operations. Frequently, we are the ones who determine how well the waste can be sorted since we are responsible for the waste recycling facilities in the buildings. The EU's waste hierarchy guides our work to reduce

environmental impact both from construction waste and our tenants' waste. The goal is to minimise landfill and incineration and to increase the proportion that is recycled or reused.

Reducing water consumption is an important issue from a global and a local perspective. Vasakronan uses municipal water. In Uppsala, one of our four operating areas, the municipality has indicated that there is a water shortage. That is why we are working continuously, in Uppsala as well as in our other areas, with monitoring and implementing cost-effective measures to reduce consumption. Low water consumption is also a prerequisite for environmentally certifying buildings with high ratings.

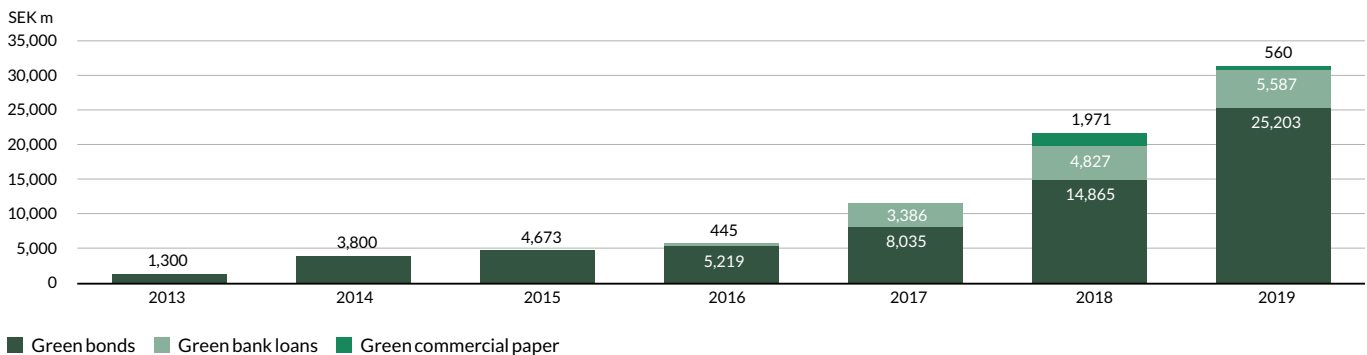
A company-wide business plan is developed every year, with financial, environmental and social targets. It also provides specific plans and goals for each unit and is followed up continuously during the year. For more information on our environmental targets for 2019 and how well we achieved them, refer to page 142 in the 2019 Annual Report.

Green financing

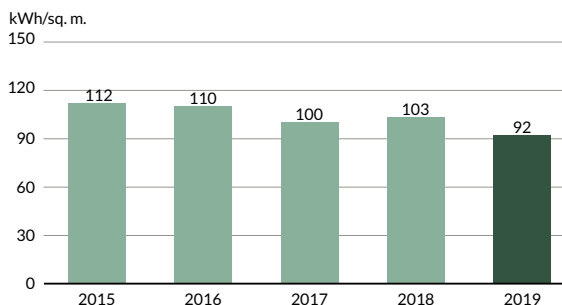
In 2019, Vasakronan issued SEK 13.4 billion in green bonds. The total volume of green bonds and commercial paper outstanding at year end was SEK 25.8 billion (16.8), equivalent to 39% (28) of the total interest-bearing liabilities. Green bonds are now issued in six currencies: SEK, NOK, EUR, JPY, AUD and USD. At year end, green assets amounted to SEK 33.3 billion, providing SEK 7.6 billion in remaining green borrowing capacity.

In addition to financing under the framework, Vasakronan had green unsecured loans with the Nordic Investment Bank and the European Investment Bank that totalled SEK 4.8 billion at the end of the year. In 2019, the first green secured bank loan was signed for SEK 0.8 billion. Green financing, including green bank loans that are financed outside the framework, represents 47% (35) of Vasakronan's total borrowings.

Green financing growth

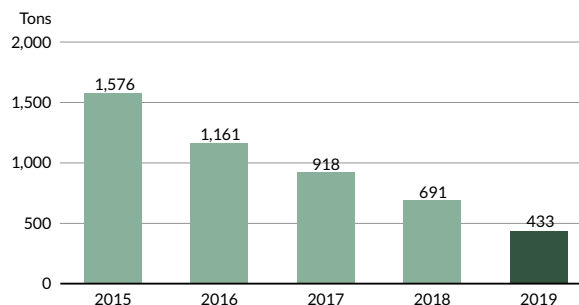


Energy intensity



In 2019, energy intensity averaged 92 kWh/sq. m.

Reduced CO₂-emissions



Pertains to scopes 1 and 2 and emissions from air travel in Scope 3.

Criteria under the framework

What can be financed with the proceeds from Green Finance Instruments is described in a framework that has been reviewed by the Center for International Climate Research (CICERO), a Norwegian climate research institute. Since 2017, Vasakronan's framework allows for investments in new construction and redevelopment projects as well as in existing properties.

The financing of new construction and redevelopment projects requires that they be certified according to LEED for new construction or redevelopment at Platinum level, or BREEAM-SE at Outstanding level, and have an energy intensity 25% below the National Board of Housing, Building and Planning's requirements (BBR requirements).

The criteria to be met for financing an existing property is that the building must be certified according to LEED for existing buildings on a Gold level or higher and have an energy intensity below 100 kWh/sq. m. per year. The framework and CICERO's report can be found at www.vasakronan.se.

Vasakronan has a special account for transactions attributable to the issue of green debt instruments. If the approved investment amount is less than the volume of green debt instruments outstanding, Vasakronan has undertaken to place a corresponding amount in this special account. At year end, the approved investment amount exceeded the volume of green debt instruments outstanding, and the account balance was therefore zero.

Emissions
9,192
tons

Reduction of climate impact
from existing properties (annual).

Emissions
692
tons

Avoided emissions from new builds and
redevelopment projects (annual).

Other information

The Impact Report has been prepared in accordance with the criteria in the framework for Green Finance Instruments. The framework was produced in accordance with the Green Bond Principles, and has been reviewed by CICERO, the independent climate and environmental research institute. The framework is available at www.vasakronan.se. The environmental data reported was produced in accordance with the same principles and methods as the Sustainability Report and is shown on page 116 in the 2019 Annual Report.

Investments in new construction and redevelopment projects corresponded to the amount that as of the balance-sheet date had been invested in the actual property. Existing properties are recognised at market value. The market value is updated mid-year and at the end of the year in connection with external evaluations being performed. Reporting of market value and amounts invested follows the accounting policies indicated on page 87.

The Existing properties category also includes properties that previously underwent new construction or renovation, and were financed over the course of the project in accordance with the criteria for new construction and redevelopment projects. In connection with the completion of new construction or redevelopment, an evaluation was conducted against the criteria set for investment in existing properties. Reclassifying a property from new construction and redevelopment projects to the category for existing properties requires that the new build or redevelopment is reported to the Board of Directors and that final certification has been obtained.

Calculation approach

The emissions reported for existing properties pertain to those attributable to energy consumption in buildings after taking into consideration the agreements contracted by Vasakronan with the respective energy utilities. Tenant electricity (energy for which the tenant has their own contract) is not included in energy consumption and the emission calculations.

When calculating reduced energy consumption in the existing properties be-

**Approved investment amount green bonds,
31 Dec 2019, SEK m**

Eligible investments in ongoing projects	977
Existing properties	32,341
- of which previously new construction and redevelopment projects	7,860
Total approved investment amount	33,318
Volume outstanding, green bonds	25,203
Volume outstanding, green commercial paper	560
Total volume outstanding	25,763
Remaining approved investment amounts	7,555

tween 2009 and 2019 (see the table on page 140), the property's metered energy consumption at 31 December 2009 was compared with the metered energy consumption at 31 December 2019. For properties that have previously gone through redevelopment, the highest permitted energy consumption under the BBR requirements at the completion date has been applied.

Climate impact reduction reported for the existing properties pertains to the difference between the annual GHG emissions that the property would have had in 2019, without improvement to the energy intensity or contracts for renewable/climate neutral energy, and the property's actual emissions in 2019 (based on measured energy consumption in 2019 and taking into account Vasakronan's renewable/climate neutral energy agreements).

When calculating the estimated reduction in energy consumption in ongoing new construction and redevelopment projects (see the table on page 139), the forecast energy intensity is compared with the highest permitted energy intensity under the BBR requirements. The assessed emissions avoided from new construction and redevelopment projects pertain to the difference between the annual GHG emissions that the property would have had if it had been built in accordance with the BBR requirements and without renewable/climate neutral energy contracts, and emissions from the property's forecast energy intensity and taking into account Vasakronan's renewable/climate neutral energy contracts.

Some of the existing properties that are financed under the framework are also financed with green bank loans. To make sure that the calculated reduction in climate impact will only have an effect on green financing under Vasakronan's framework, the portion pertaining to green bank loans has been deducted. To determine the size of that portion, the proportion of the green loan in relation to the property's market value was used. In cases where the existing property is pledged for green secured loans outside the framework, the proportion of the mortgage deeds in relation to the property's market value is used. For more information about which properties are partially financed through green loans, see the table "Existing properties forming basis for investment" on page 140.



NEW CONSTRUCTION

Hilton

Construction on the Hilton block in Solna began in 2016 and was completed in 2019. The building is nearly 10,000 square metres, housing primarily offices but also a coffee shop. The top two storeys, out of nine total, are built in wood, reducing the climate impact from construction. The top floor has a large terrace and the rest of the roof has been planted with sedum, which retains storm water, contributes to bio-diversity and insulates the building's roof.

- Environmental certification LEED, Platinum
- Energy intensity of 49 kWh/sq. m., which is 39% lower than the regulatory requirement
- Electric bus to and from Solna station
- Abundant bicycle parking and locker rooms for cyclists
- Electric vehicle charging stations



NEW CONSTRUCTION

Magasin X

Magasin X, next to Uppsala central station, will be Sweden's largest office property with a frame made entirely of wood. Using wood as a construction material significantly reduces carbon dioxide emissions per produced square metre. Trees also capture carbon dioxide through photosynthesis which means that the building, as long as it stands, is a carbon dioxide sink. The building, which will encompass 11,300 square metres, is expected to be ready for occupancy in 2021.

- Environmental certification LEED, target Platinum
- Energy intensity of 27 kWh/sq. m., which is 67% lower than the regulatory requirement
- Solar photovoltaics on the roof and integrated into the facade
- Borehole heat exchangers for heating and cooling
- Fuel cell facilities for long-term storage of solar electricity
- Abundant bicycle parking and locker rooms for cyclists



EXISTING PROPERTY

Tre Vapen 2

Tre Vapen 2 is an approximately 38,000 square metre office property in the Östermalm neighbourhood of Stockholm. It was originally built for the University of Arts, Crafts and Design and was completed in September 1959. The City of Stockholm has deemed the building culturally significant, meaning it cannot be drastically changed. Thanks to investments in new technology and systematic energy savings efforts, together with tenants we have reduced energy consumption 33% since 2009. The first solar photovoltaics were installed as early as 2007. The PV installation was expanded in 2015, becoming nearly eight times as large.

- Environmental certification LEED, Platinum
- Energy intensity 77 kWh/sq. m.
- Solar photovoltaics on the roofs
- Abundant bicycle parking and locker rooms for cyclists
- Electric vehicle charging stations

EXISTING PROPERTY

Dragarbrunn 31:1

Dragarbrunn 31:1, Svava is an entire block in Uppsala with buildings from the nineteenth and twentieth centuries. It houses residences, hotels, offices and stores. Thanks to investments in new technology and systematic energy savings efforts, together with tenants we have reduced energy consumption 33% since 2009. Solar photovoltaics were installed on the roof in 2016.

- Environmental certification LEED, Gold
- Energy intensity 83 kWh/sq. m.
- Solar photovoltaics on the roof
- Electric vehicle charging stations
- Car pool for tenants



SANDRA JONSSON, TECHNOLOGY & DEVELOPMENT MANAGER, STOCKHOLM AND UPPSALA

Power demand

Reducing our power demand has been an important task for Sandra Jonsson, Technology & Development Manager in Stockholm and Uppsala. Power demand is a measure of how much energy is needed to do something at a given point in time, for example to run a ventilation system at full capacity. By not running all of the installations at their highest setting at the same time, the power demand can be lowered. Many energy suppliers try to help their customers reduce their peak loads and have therefore tied their fees to the highest load. Reducing power demand thus provides both a reduced cost and a reduced environmental impact. For more information, refer to page 21 in the 2019 Annual Report.



Ongoing new construction and redevelopment projects forming basis for investment, with an eligible investment of SEK 977 million

Property	Location	Certification	Energy intensity (F), kWh/sq. m.	Energy intensity BBR ²⁾ , kWh/sq. m.	Estimated reduction in energy consumption, %	Estimated emissions avoided (annual), tons	Waste, kg/sq. m.	Materials, kg/sq. m.
Abbedissan 2 (previously Priorn 5)	Malmö	LEED Platinum (F)	32	45	28	107	-	-
Hilton 7 ¹⁾	Stockholm	LEED Platinum	49	80	39	91	32	1,124
Kungsängen 14:5 (Magasin X)	Uppsala	LEED Platinum (F)	27	80	67	238	-	-
Kronåsen 1:1 (Celsius)	Uppsala	LEED Platinum (F)	33	96	66	255	-	-
Total			-	-	-	692	-	-

1) The project is financed in part by green bank loans with the NIB.

2) Maximum permitted energy intensity under National Board of Housing, Building and Planning guidelines.

(F) = Forecast

Waste and materials are not reported for the Abbedissan 2, Kronåsen 1:1 (Celsius) and Kungsängen 14:5 (Magasin X) projects, as these were not completed as of 31 Dec 2019.

Existing properties forming basis for investment, with an approved investment amount of SEK 32,341 million

Property	Location	Certification	Energy intensity, kWh/sq. m. at 31 Dec 2009	Energy intensity, kWh/sq. m. at 31 Dec 2019	Reduction in energy consumption 2009-2019, %	Reduction in climate impact (annual), tons	Water intensity, m ³ /sq. m. at 31 Dec 2019
Lorensberg 45:16	Gothenburg	LEED Platinum	126	77	39	95	0.25
Gullbergsvass 16:1	Gothenburg	LEED Gold	113	86	24	286	0.30
Gullbergsvass 1:16	Gothenburg	LEED Platinum	81	57	30	481	0.31
Heden 42:4	Gothenburg	LEED Gold	125	82	34	320	0.88
Heden 46:1	Gothenburg	LEED Gold	100	87	14	151	0.13
Inom Vallgraven 20:14	Gothenburg	LEED Gold	135	73	46	108	0.46
Heden 22:19	Gothenburg	LEED Gold	102	54	47	472	0.25
Inom Vallgraven 11:6	Gothenburg	LEED Gold	114	77	32	296	0.63
Inom Vallgraven 33:10	Gothenburg	LEED Gold	102	69	33	51	0.37
Inom Vallgraven 59:14	Gothenburg	LEED Gold	104	94	10	150	0.43
Inom Vallgraven 61:11	Gothenburg	LEED Gold	108	85	22	153	0.48
Gasklockan 3	Malmö	LEED Gold	98	84	14	415	0.57
Kaninen 32	Malmö	LEED Gold	124	53	58	131	0.37
Magnus Stenbock 4	Malmö	LEED Platinum	119	79	34	129	0.20
Björnen 1	Malmö	LEED Gold	122	81	34	103	0.29
Bylgia 1	Malmö	LEED Platinum	125	59	53	189	0.12
Abbedissan 1 (previously Priorn 2) ²⁾	Malmö	LEED Gold	124	92	26	94	0.61
Jungmannen 1	Malmö	LEED Gold	133	54	59	79	0.17
Nereus 1	Malmö	LEED Platinum	124	68	45	354	0.21
Sejen 3 ⁴⁾	Malmö	LEED Platinum	-	- ⁴⁾	-	-	-
Kurland 11	Stockholm	LEED Gold	127	85	33	42	0.48
Uggleborg 12 ¹⁾	Stockholm	LEED Platinum	127	60	53	633	0.57
Tre Vapen 2 ²⁾	Stockholm	LEED Platinum	115	77	33	303	0.27
Rosenborg 1	Stockholm	LEED Gold	179	93	48	120	0.20
Rosenborg 3 ¹⁾	Stockholm	LEED Platinum	105	50	52	344	0.33
Hekla 1	Stockholm	LEED Gold	62	39	37	198	0.29
Riga 2	Stockholm	LEED Gold	104	43	59	412	0.54
Modemet 1, Bldg. 8 ¹⁾	Stockholm	LEED Platinum	105	34	68	587	0.35
Hammarby Gård 12	Stockholm	LEED Platinum	94	70	26	70	0.38
Albydal 3	Stockholm	LEED Gold	89	71	21	109	0.20
Skjutsossen 8	Stockholm	LEED Gold	111	67	40	102	0.41
Kvarngärdet 1:19	Uppsala	LEED Gold	189	67	64	260	0.22
Dragarbrunn 28:5	Uppsala	LEED Platinum	80	58	28	412	0.42
Dragarbrunn 31:1 ²⁾	Uppsala	LEED Gold	125	83	34	443	1.03
Dragarbrunn 18:9	Uppsala	LEED Gold	168	78	54	292	0.26
Fålhagen 1:39 ⁴⁾	Uppsala	LEED Platinum	-	- ⁴⁾	-	-	-
Hubben ¹³⁾	Uppsala	LEED Platinum	115	48	59	271	0.62
Dragarbrunn 24:5	Uppsala	LEED Gold	145	88	39	537	0.46
Total			117	70	37	9,192	0.39

1) Properties that underwent new construction or renovation, and were financed over the course of the project in accordance with the criteria for new construction and redevelopment projects. After the project was completed, the property was reclassified to the existing properties category.

As of 31 December 2019, these properties comprised SEK 7.9 billion out of a total SEK 33.3 billion. For further information, see Other information and methods.

2) The property is financed in part by a green bank loan. For further information, see Other information and methods.

3) The property is financed in part by a green bank loan with the NIB. For further information, see Other information and methods.

4) The property was acquired in December 2019 and therefore twelve months of data is missing. Included in the green pool based on forecast energy intensity. For Sejen 3 the forecast energy intensity was 70 kWh/sq. m. and for Fågelhagen 1:39 it was 42 kWh/sq. m.

Auditor's Limited Assurance Report

This is a translation of the original report in Swedish

To the general meeting of the shareholders of Vasakronan AB (publ), corporate identity number 556061-4603

Introduction

We have been engaged by the Group Management of Vasakronan AB ("Vasakronan") to undertake a limited assurance engagement of Vasakronan's Impact Report – green financing ("the Report") for the year 2019. The Report consists of the pages 136–140 in the Annual Report.

Responsibilities of the Board of Directors and Group Management

The Board of Directors and Group Management are responsible for the preparation of the Report in accordance with the applicable criteria, as explained on page 136 of the Annual Report and consists of the parts of Vasakronan's Green Finance Framework which are applicable to the Report, as well as the accounting and calculation principles that the Company has developed. This responsibility includes the internal control relevant to the preparation of an impact report that is free from material misstatements, whether due to fraud or error.

Responsibilities of the Auditor

Our responsibility is to express a limited assurance conclusion on the selected information specified above based on the procedures we have performed and the evidence we have obtained.

We have conducted our limited assurance engagement in accordance with ISAE 3000 *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* issued by IAASB. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the selected information in the Report, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards.

The firm applies ISQC 1 (*International Standard on Quality Control*) and accordingly maintains a comprehensive system of quality control

including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent towards Vasakronan in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance conclusion.

Our procedures are based on the criteria defined by the Board of Directors and Group Management as described above. We consider these criteria suitable for the preparation of the Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the selected information disclosed in the Report has not been prepared, in all material respects, in accordance with the reporting criteria.

Stockholm, March 23, 2020

Öhrlings PricewaterhouseCoopers AB

Helena Ehrenborg

Authorised Public
Accountant

Fredrik Ljungdahl

Sustainability Expert
member of FAR