

Impact Report – green financing

Vasakronan issued the world's first green corporate bond in November 2013, and remains the largest issuer of green bonds in Sweden. In 2018, Vasakronan launched a revised and expanded framework, which encompasses all debt instruments. The framework has been reviewed by the Center for International Climate Research (CICERO) and has received the highest rating, Dark Green.

Vasakronan's total investments approved for financing with green bonds totalled SEK 24.3 billion (14.2) at the end of 2018. Of these, SEK 23.4 billion (13.8) comprised investments in existing properties, of which SEK 5.5 billion (5.1) consisted of properties that had previously undergone new construction or redevelopment. Investment in ongoing projects totalled SEK 0.9 billion (0.4).

In 2018, Vasakronan issued SEK 7.4 billion in green bonds and SEK 2.0 billion in green commercial paper. The total volume of green bonds and commercial paper outstanding at year end was SEK 16.8 billion (8.0), equivalent to 28% (14) of the total interest-bearing liabilities.

Properties account for nearly 40% 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 by providing our properties with renewable or climate-neutral energy we have reduced our carbon dioxide emissions in Scope 1 and 2, and emissions from air travel in Scope 3 by 98% since 2006.

Large amounts of materials are used in new construction, redevelopment and leasehold improvements of properties. The materials used in our projects give rise

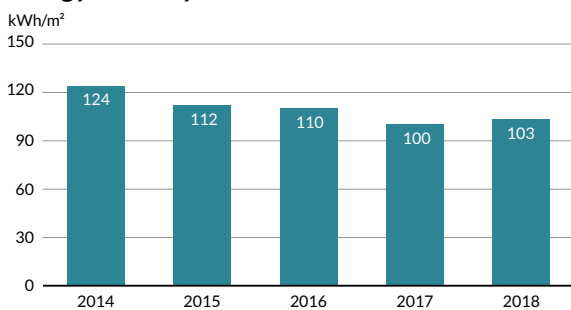
to major environmental and climate impact when they are extracted and produced, and in addition generate considerable transportation needs. That is why it is important to reduce the amount of material used and to use renewable raw materials, and recycled or reused material to much greater extents. In 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 material built into our buildings is always evaluated and documented. The Byggsvarubedömningen system is applied in this work.

Large amounts of waste arise in new construction and renovation projects, and a large portion of that waste currently goes to incineration or landfill. We also take care of large amounts of waste from our tenants' operations. Frequently, we are the ones who determine how well the waste is sorted since we are responsible for the waste recycling facilities in the buildings. The EU waste hierarchy governs our work with both types of waste, and the goal is to minimise landfill and incineration and to increase the proportion that is recycled or reused.

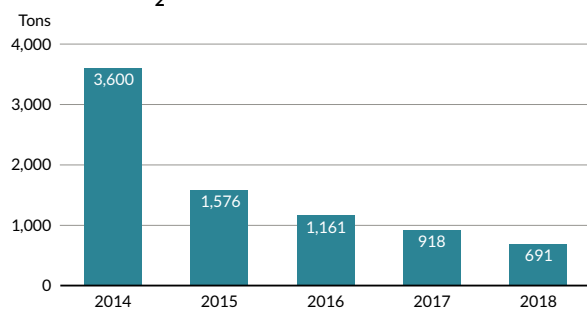
Water consumption is an important issue from a global and a local perspective. Vasakronan uses water from municipal systems, and even though no shortages have yet arisen in the locations where we operate, we are working continually on monitoring and on cost-efficient measures to reduce consumption. Low water use is also a prerequisite for environmentally certifying buildings with high ratings.

Each year, the company prepares business plans and financial, environmental, and social goals are set based on these business plans. For more information on our environmental goals for 2018 and how well we achieved them, refer to page 134.

Energy intensity



Reduced CO₂-emissions



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

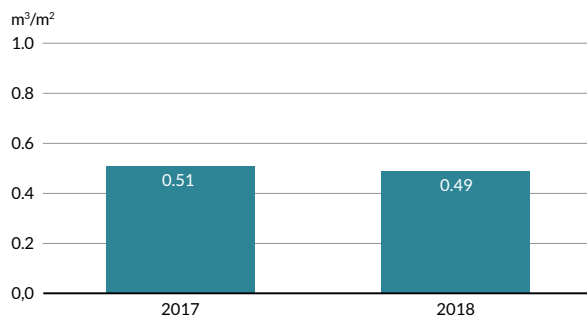
Larger share of waste recycling



■ Recycling, 57% (49)
 ■ Energy recovery through incineration, 40% (49)
 ■ Landfill and hazardous waste, 2% (2)

Pertains to tenant waste for 2018, where tenant waste totalled 10,044 tons (10,101).

Greater focus on water use



Water intensity

Criteria under the framework

As a basis for the selection of assets that can be financed with Green Finance Instruments, there is a framework that has been reviewed by the Center for International Climate Research (CICERO), a Norwegian climate research institute. Since 2017, Vasakronan's framework also allows for investments in existing properties. 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 financing of new construction and renovation projects requires that they be certified according to LEED for new construction or renovation 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 guidelines (BBR requirements). 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.

Approved investment amount green bonds, 31 Dec 2018, SEK m

Eligible investments in ongoing projects	852
Existing properties	23,444
- of which previously new construction and renovation projects	5,489
Total approved investment amount	24,296
Volume outstanding, green bonds	14,865
Volume outstanding, green commercial paper	1,971
Remaining approved investment amounts	7,460

Ongoing new construction and major renovation projects forming basis for investment

Property	Location	Certification	Energy performance (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.
Kronåsen 1:1 (Hubben) ¹⁾	Uppsala	LEED Platinum (F)	30	115	74	465	38	1,018
Hilton 7 ¹⁾	Stockholm	LEED Platinum (F)	50	80	38	107	-	-
Priorn 5	Malmö	LEED Platinum (F)	33	45	27	130	-	-
Kronåsen 1:1 (Celsius)	Uppsala	LEED Platinum (F)	51	96	47	284	-	-
Total			41	84	51	986		

1) The project is financed in part by green bank loans via the NIB. See page 30, for more information.

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

(F) = Forecast

Waste and materials are not reported for the Hilton 7, Priorn 5 and Kronåsen 1:1 (Celsius) projects, as these were not completed as of 31 December 2018.

Existing properties forming basis for investment

Property	Location	Certification	Energy performance, kWh/sq. m. at 31 Dec 2018	Energy performance, kWh/sq. m. at 31 Dec 2009 ¹⁾	Reduction in energy consumption 2009–2018, %	Reduction in climate impact (annual), tons ²⁾	Water intensity, m ³ /sq. m. at 31 Dec 2018
Lorensberg 45:16	Gothenburg	LEED Gold	82	126	35	111	0.24
Heden 22:19	Gothenburg	LEED Gold	62	102	39	577	0.20
Heden 42:4	Gothenburg	LEED Gold	81	125	36	386	0.83
Inom Vallgraven 11:6	Gothenburg	LEED Gold	90	114	21	362	0.62
Inom Vallgraven 20:14	Gothenburg	LEED Gold	73	135	46	132	0.51
Inom Vallgraven 33:10	Gothenburg	LEED Gold	74	102	28	60	0.36
Inom Vallgraven 59:14	Gothenburg	LEED Gold	91	104	12	176	0.46
Inom Vallgraven 61:11	Gothenburg	LEED Gold	91	108	16	178	0.49
Gullbergsvass 16:1	Gothenburg	LEED Gold	89	113	21	358	0.32
Gullbergsvass 1:16	Gothenburg	LEED Gold	69	81	14	586	0.28
Björnen 1	Malmö	LEED Gold	90	122	26	125	0.24
Kaninen 32	Malmö	LEED Gold	60	124	52	168	0.39
Magnus Stenbock 4	Malmö	LEED Gold	95	119	20	153	0.23
Nereus 1	Malmö	LEED Platinum	73	124	41	440	0.20
Priorn 2	Malmö	LEED Gold	91	103	12	149	0.59
Jungmannen 1	Malmö	LEED Gold	81	133	39	97	0.13
Bylgia 1	Malmö	LEED Gold	75	125	40	235	0.10
Uggleborg 12 ³⁾	Stockholm	LEED Platinum	66	127	48	796	0.49
Rosenborg 3 ³⁾	Stockholm	LEED Platinum	54	105	49	453	0.35
Riga 2	Stockholm	LEED Gold	47	104	55	525	0.35
Hekla 1	Stockholm	LEED Gold	31	62	50	242	0.24
Albydal 3	Stockholm	LEED Gold	72	89	19	143	0.25
Tre Vapen 2	Stockholm	LEED Gold	93	115	19	438	0.19
Dragarbrunn 24:5	Uppsala	LEED Gold	91	145	37	609	0.51
Modemet 1, Hus 8 ³⁾	Stockholm	LEED Platinum	34	105	68	763	0.36
Dragarbrunn 18:9	Uppsala	LEED Gold	86	168	49	333	0.27
Dragarbrunn 28:5	Uppsala	LEED Gold	66	80	18	471	0.45
Dragarbrunn 31:1	Uppsala	LEED Gold	84	125	33	870	1.07
Kvarngärdet 1:19	Uppsala	LEED Gold	70	189	63	295	0.37
Hammarby Gård 12	Stockholm	LEED Platinum	72	94	23	85	0.39
Kurland 11	Stockholm	LEED Gold	78	127	38	52	0.51
Skjutsossen 8	Stockholm	LEED Gold	68	111	39	132	0.38
Total			74	116	36	10,500	0.39

1) Pertains to the properties' energy intensity as of 31 December 2009, alternatively the energy intensity at the time the property was acquired. In the case of newly constructed or renovated properties, the highest permitted energy consumption under the BBR requirements at the completion date has been applied.

2) Pertains to the difference between the annual GHG emissions that the property would have had in 2018, without improvement to the energy intensity (compared with 31 Dec 2009) or agreements for renewable/climate neutral energy, and the property's actual emissions in 2018 (based on measured energy consumption in 2018 and taking into account Vasakronan's renewable/climate neutral energy agreements).

3) 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 renovation projects. After the project was finished, the property was reclassified to the existing properties category. As of 31 December 2018, these properties comprised SEK 5.5 billion out of a total SEK 23.4 billion. For further information, see Other information.

Other information

The Impact Report has been prepared in accordance with the guidelines 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 112.

Investments in new construction and renovation projects corresponded to the amount that as of the balance-sheet date had been invested in the 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 83.

The emissions reported for existing properties pertain to emissions attributable to energy consumption in buildings after taking into consideration the agreements contracted by Vasakronan with the respective energy suppliers. Tenant electricity is not included in energy intensity and the emission calculations. The Existing prop-

erties category 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 renovation 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 renovation projects to the category for existing properties requires that the new build or renovation is reported to the Board of Directors, that final certification has been obtained and that energy intensity has been measured over at least a rolling twelve-month period.

In addition to funding with green commercial paper and bonds, Vasakronan has green unsecured loans with the Nordic Investment Bank and the European Investment Bank that totalled SEK 4,827 million at year end. The loans will finance the redevelopment of Sergelhuset in central Stockholm, the Platinum new build in Gothenburg, the new build of Kronåsen 1:1 (Hubben) in Uppsala and the new build of Hilton 7 in Stockholm. The aim is for these properties to achieve LEED Platinum certification. The percentage of green funding consisting of green bonds, green commercial paper and green loans increased during the period to 35% (20) of the total debt portfolio.



CELSIUS
New build

Celsius was started in 2018 and will comprise 10,000 square metres of offices and advanced laboratories. The building is being raised at Uppsala Science Park and will provide workplaces for around 600 people. The largest tenant will be the National Food Agency, which will lease around 8,000 square metres.

A few examples of environmental measures:

- Environmental certification LEED Platinum
- Projected energy intensity of 51 kWh/sq. m., which is 47% lower than the regulatory requirement
- Water saving by catching rainwater to use for flushing toilets
- Solar photovoltaics

Priorn was started in 2017 and will comprise 13,000 square metres of offices. The property is located a few minutes walk from the Triangeln's railway station. A few examples of environmental measures:

PRIORN
New build

- Environmental certification LEED Platinum
- Projected energy intensity of 33 kWh/sq. m., which is 27% lower than the regulatory requirement
- Installation of geo-energy plant to supply the property with heating and cooling
- Solar photovoltaics
- Green roofs
- Parking and other facilities for bicycles
- Electric vehicle charging stations



BOHUSGATAN
Renovation

Bohusgatan was built in 1984 and is located by Heden in central Gothenburg with good public transportation links. The property was renovated from 2013–2018. A few examples of environmental measures:

- Environmental certification LEED Gold
- An average energy intensity of 62 kWh/sq. m.
- Parking and other facilities for bicycles, including recharging stations
- Tree planting and green facades
- New external sunshades to reduce solar irradiation and cooling needs



SKJUTS-GOSSEN 8
Existing

Skjutsgossen in Södermalm, Stockholm was constructed from 1942–1944 and initially contained a clothing factory. The property was renovated and modernised from 2009–2010. The building is located close to Mariatorget’s metro station. A few examples of environmental measures:

- Environmental certification LEED Gold
- An average energy intensity of 68 kWh/sq. m.
- Solar photovoltaics
- Electric car rechargers
- Parking and other facilities for bicycles

Björnen 1 on Södra Förstads-gatan in central Malmö was built in 1903 using period architecture. In 2001, the property underwent a major renovation and today it contains office and retail premises. The property is located walking distance from Triangeln’s railway station. A few examples of environmental measures:

BJÖRNEN 1
Existing



- Environmental certification LEED Gold
- An average energy intensity of 90 kWh/sq. m.
- Improved ventilation and a new fan room



OXEN
Existing

Oxen, or Dragarbrunn 28:5, comprises a number of buildings. The oldest section is from 1889 and one of the other sections was built in 1948 and houses the Uppsala City Theatre. The property is located in central Uppsala only a few minutes walk from Uppsala railway station and within easy reach of a plethora of local services and public transportation links. A few examples of environmental measures:

- Environmental certification LEED Gold
- An average energy intensity of 66 kWh/sq. m.
- Parking and other facilities for bicycles

Auditor's Limited Assurance Report on Green Finance Investor Report

To the annual general meeting of shareholders of Vasakronan AB (publ), Corp. ID 556061-4603

Introduction

We have been engaged by the Group Management of Vasakronan AB ("Vasakronan") to undertake a limited assurance engagement of Vasakronan's Green Finance Investor Report ("the Investor Report") for the year 2018. The Investor Report consists of pages 128–132 in the Annual Report.

Responsibilities of the Board of Directors and Group Management

The Board of Directors and the Group Management are responsible for the preparation of the Investor Report in accordance with the applicable criteria, as explained on page 128 of the Annual Report and consists of the parts of Vasakronan's Green Finance Framework which are applicable to the Investor 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 Investor Report that is free from material misstatements, whether due to fraud or error.

Responsibilities of the Auditor

Our responsibility is to express a conclusion on the Investor Report based on the limited assurance procedures we have performed.

We have conducted our limited assurance engagement in accordance with ISAE 3000 *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Investor Report, and applying analytical and other limited assurance procedures. A limited assurance engagement has a different focus and a considerably smaller scope compared to the focus and scope of an audit in accordance with International Standards on Auditing and other generally accepted auditing standards.

The audit 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 in relation to Vasakronan in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The limited assurance procedures performed do not enable us to obtain such a level of assurance that we would become aware of all significant matters that might be identified in an audit engagement. Consequently, the conclusion based on a limited assurance engagement does not provide the same level of assurance as a conclusion based on an audit.

Our procedures are based on the criteria defined by the Board of Directors and the Group Management as described above. We consider these criteria suitable for the preparation of the Investor 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 Investor Report is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and the Group Management.

Stockholm, March 25, 2019

Öhrlings PricewaterhouseCoopers AB

Helena Ehrenborg

Authorised Public Accountant

Fredrik Ljungdahl

Sustainability Expert
Member of FAR