Advanced SolTech Sweden AB (publ) Newsletter

Retail Green Bond SOLT 2

May 2019

Introduction

« The need for increased resources to support a low carbon strategy in China is crucial and require significant investments. I am proud to to see that our work in China, investing in and operating a portfolio of solar power stations, has developed so well and that we have been able to establish a great amount of trust among Swedish and Nordic Investors, making it possible to continue our mission to further develop a low-carbon way of life »

Frederic Telander, Chief Executive Officer, Advanced SolTech Sweden AB (publ).

Since 2015 when SolTech Energy Sweden AB (publ), Advanced SolTechs parent company, first established its Joint Venture with Advanced Solar Power Hangzhou Inc., we have seen a remarkable growth in the chinese solar energy market. During 2015 the total installed solar capacity was 43.18 GW, since then the total installed solar capacity has increased to 174 GW. During the same period Advanced SolTechs installed solar capacity in China has grown from a mere 2 MW to close to 100 MW.

« In our efforts of providing the market with solutions for green energy, we also saw the opportunity to start working with solutions for green finance. Advanced SolTech started the journey preparing the company for issuing green Bonds in 2016 and in 2017 the company received the highest grade, Dark Green for its Green Bond Framework by the Norwegian company Cicero and their partners SEI and ENSO »

Mats Holmfeldt, CFO, SolTech Group and responsible for the Green Bond Framework.

Advanced SolTech has been in the forefront of developing a Green Bond structure for the Swedish Retail Market and in March 2018, Nasdaq Stockholm opened an exclusive market for Retail based Green Bonds, having « Dark Green « classification – Nasdaq First North Sustainable Retail Bond Market. This as a result of Advanced SolTech Sweden AB being the first issuer of such bond.

This report is our first annual green bond report relating to Advanced SolTechs first Green Bond issuance. Further details can be found on our webpage : http://www.soltechenergy/investerare/advancedsoltech/greenbondreport

Green Bond Market

Global Market - The labelled green bond market has been showing tremendous growth, roughly doubling in size in 2016 and 2017. The growth has continued strongly in 2018, with the estimate that the green bond market will reach USD 1tn (trillion) by 2020.

Nordics - Sweden is the leading country in the Nordics both relating to the number of issuers as well as total issued amount. Proactive and engaged market, the Nordic Investment Bank, a multilateral institution owned by the Nordic and Baltic states and the Norwegian state bank KBN Kommunalbanken started issuing green bonds in 2010. The first corporate green bond in Sweden was issued in 2013. Significant for the Nordic green bond market are the many small and repeat issuers creating a big impact. Nordic players are also at the forefront of promoting market integrity:, demonstrating best practice in external reviews, pushing investor standards and leading the international dialogue.

The Nordic countries are at the forefront of defining « green ». Their green bond markets have evolved in the context of the Nordic Model, which relies strictly on consensus and cooperation to achieve equitable and sustainable social development. (The Green Bond market in the Nordics, Climate Bonds Initiative).

China - China´s economic growth has been an international success with over a billion people raised out of poverty in just three decades. However, the environmental cost of this growth has become evident with polluted air, rivers and green house gas emissions impacting human health, ecosystems and climate change.

The Chinese government is shifting its priorities in response to environmental challenges. The President of the Peoples Republic of China, Xi Jinping, has emphasized the country´s commitment to build an « ecological civilization. To achieve the goal of ecological civilization, President Xi called for promoting green development, which includes developing green finance. (China Green Bond Market, Climate Bonds Initiative).

Brief Description of Issuer

Advanced SolTech Sweden AB (publ). (ASAB) is the issuer of the Green Bonds, with proceeds being on lent in the form of intra-group loans and/or invested in Advanced SolTech Renewable Energy Hangzhou Co. Ltd (ASRE), which is the owner, installer and operator of Solar Power Stations on customers roof-tops in China.

ASAB is the Swedish subsidiary of SolTech Energy Sweden AB (publ) (SolTech). SolTech is a Swedish public (limited liability) stock company. The company was formed in Sweden on August 30, 2006 and registered at Bolagsverket (the Swedish Office for Company Registration). SolTechs share is publicly traded on First North at NASDAQ Stockholm under the ticker « SOLT ». SolTech is a developer and provider of integrated solar energy solutions, being both a building material and a solar energy solution. SolTech currently has installations in eight countries and is the majority shareholder in ASAB (51 %), with SolTechs CEO also being the Chairman of ASAB.

In China, SolTech operates through Advanced SolTech Renewable Energy (Hangzhou) Co. Ltd (ASRE) and has two seats on the board. The other two seats are occupied by ASRE :s COO and the CEO of SolTechs Chinese partner, Advanced Solar Power (Hangzhou) Inc. (ASP), a world leading solar cell/module manufacturer and supplier in the chinese and global market of CdTe thinn film solar modules. In China, SolTech is focusing on meeting the increased market demand for solar power stations and in paralell securing that the internal sustainability work is top class. SolTech is the majority (51%) owner of ASRE, with ASP as a minority (49%) owner. ASRE invests in, installs, operates maintains and owns solar power stations on its customers roof-tops. The customers commit to buy all electricity produced by such solar power stations under a 20-25 year contract. ASRE´s target is to reach an installed capacity of 605 MW at the end of 2021, that are fully connected to the grid by 2022.

Advanced SolTech - Green Bond Framework

Summary

Use of Proceeds - Eligible Projects and Assets are new, under construction or existing, and /or represents an expansion or enhancement of any existing Solar Energy Solutions, defined as Solar Power Stations owned and managed by ASRE in China.

Conditions - applicable to all ASRE Solar Power Stations are as follows :

The customer is located in an area where the level of Green House Gas (GHG) emissions is high.

The project shall include the exchange of fossil related energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reductions of GHG emission.

The installation shall use existing buildings, not prospecting of new land areas.

Customers - ASRE´s customers are Local Governments, municipalities as well as larger private and public companies with a long-term market positioning perspective.

Use of proceeds	Renewable Energy Meaning a project or asset funded, in whole or in part by ASAB that promotes the transition to a low-carbon society.
Evaluation	Customer evaluation including overall financial position Energy Consumption incl. energy mix & CO2 impact Future needs Geographical location Roof gradient and condition
Funds tracking	The use of proceeds are tracked through separate accounts to simplify the annual review.
Impact assessment	Impact reporting on all Solar Power Stations financed with Green Bonds ; 1. Total annual reduction or avoidance of CO2-equivalents emissions, measured per project compared to baseline (starting level defined as current impact). 2. Other potential climate and sustainability findings by the Solar Power Station installation.

Reporting	ASAB will report annually and until maturity of the Green Bonds issued, to the investors - on its website and in ASAB´s Annual Newsletter, provide the following information. The Green Bond Committee will review and approve each Green Bond Report.

Assurance obtained a second opinion from CICERO on the Advanced SolTech Green Bond Framework and been certified as Dark Green.

Summary

Overall, Advanced SolTechs Green Bond framework and environmental policies provide a progressive framework for climate-friendly investments. The Green Bond framework lists eligible businesses and projects that are mainly supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a strong governance structure.

Advanced SolTech will on a annual basis use an independent assurance provider for all outstanding Green Bonds to provide assurance that information presented has been prepared in line with Advanced SolTechs Green Bond Framework. *(They will make an annual audit on all Green Bonds issued together each year).*

Project Evaluation and selection procedure

- The customer is located in an area where the level of Green House Gas (GHG) emissions is high.
- The project shall include the exchange of fossil related Energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reduction of GHG emission.
- The installation shall use existing buildings, not prospecting of new land areas

A summary of the selection process is noted below :

- Customers with a long-term market positioning perspective
    - Local governments
    - Municipalities
    - Public companies
    - Larger private companies
- Customers overall financial position

Energy valuation

- Energy consumption
- Energy mix and CO2 impact
- Future energy needs

Advanced SolTech Green Bond Report

Green Bonds Details

Issuer :	Advanced SolTech Sweden AB (publ).
Issue Date :	1 Mars, 2018
Maturity Date :	February 28, 2023
Issued Amount :	127,685 MSEK
Interest Rate :	8,75 %
ISIN :	SE0010831313
Short Name :	SOLT2
Listing :	First North Sustainable Retail Bonds, Nasdaq Stockholm
Issuing Institute :	Avanza Bank AB
Agent :	Intertrust Sweden

Use of Proceeds

Reporting Date :	31 Mars, 2019
Amount Disbursed to Eligible Green Projects :	12 600 000 EUR
Renewable energy CO2 avoidance :	45 673 tons first year
Bond proceeds remaining to be used :	Zero (0)

Further Bond Information

Number of projects/clients supported by Advanced SolTech Green Bonds (Solt 2):	25
Geographic allocation of projects :	China

Green Bonds - Invested per project

Projects (Client)	Amount RMB
Shaoxin Shangyu Shunhe Electric Appliance for Illumination Co., Ltd.	6,585,664
Shaoxing Longze Pipe Co., Ltd.	10,046,050
Zhejiang Kanglongda Special Protection Technology Co., Ltd.	15,487,899
JiangSu YangHe Brewery Co., Ltd.	16,897,175
Henan Provincial Zhongtian Renewables Technology Co., Ltd. (An Yang)	51,083
Kaifeng University	57,572
Shanghai Yongde Lables & Packaging Co., Ltd.	78,746
Henan Provincial Energy Conservation Co., Ltd. (Henan Provincial Government Weier Road Comprehensive Office Building)	*99,817*
Henan Provincial Zhongtian Renewables Technology Co., Ltd. (Hebi City Wisdom Hebi Comprehensive Service Center)	
Henan Provincial Zhongtian Renewables Technology Co., Ltd. (Hebi City Government Second Comprehensive Office Building)	
Carport of Zhejiang Jindun Fire Control Equipment Co., Ltd.	103,963
NingBo Hrale Plate Heat Exchanger Co Ltd.	140,683
Zhejiang Jinma Packing Material Co., Ltd.	238,914
Kaifeng University Phase II	273,117
Ningbo Jinwei Fastner Group Co., Ltd.	283,560
Advanced Solar Power (Hangzhou) Inc.	403,113
Zhejiang Roomeye Energy-Saving Technology Co., Ltd.	459,132
Cixi Huawei Appliance Co., Ltd.	543,340
Fenghua Xuri Hongyu Co., Ltd.	675,101
Zhejiang Jindun Fire Control Equipment Co., Ltd.	904,079
Ningbo Nanhai Investment Co., Ltd.	906,183
Ebara Great Pumps Co., Ltd.	1,213,284
Zhejiang Wuhuan Titanium Industry Co., Ltd.	1,622,919
National Center for the Performing Arts	5,052,866
Zhejiang Luhuan Engineering Machinery Co., Ltd.	7,035,515
Ningbo TaiMao Bicycle Industry Co., Ltd.	7,553,603
Hangzhou Baowei Auto Parts Co., Ltd.	19,578,518
Total:	**96,291,909**

Comment : EUR 12 600 000 have been converted to 96 291 909 RMB

Green Bonds - CO2 avoidance per project

Projects (Client)	CO2 Avoidance (tons per year)
Shaoxin Shangyu Shunhe Electric Appliance for Illumination Co., Ltd.	2,000
Shaoxing Longze Pipe Co., Ltd.	1,000
Zhejiang Kanglongda Special Protection Technology Co., Ltd.	1,500
JiangSu YangHe Brewery Co., Ltd.	10,000
Henan Provincial Zhongtian Renewables Technology Co., Ltd. (An Yang)	130
Kaifeng University	400
Shanghai Yongde Lables & Packaging Co., Ltd.	250
Henan Provincial Energy Conservation Co., Ltd. (Henan Provincial Government Weier Road Comprehensive Office Building)	*40*
Henan Provincial Zhongtian Renewables Technology Co., Ltd. (Hebi City Wisdom Hebi Comprehensive Service Center)	*107*
Henan Provincial Zhongtian Renewables Technology Co., Ltd. (Hebi City Government Second Comprehensive Office Building)	*110*
Carport of Zhejiang Jindun Fire Control Equipment Co., Ltd.	234
NingBo Hrale Plate Heat Exchanger Co Ltd.	1,000
Zhejiang Jinma Packing Material Co., Ltd.	1,000
Kaifeng University Phase II	150
Ningbo Jinwei Fastner Group Co., Ltd.	437
Advanced Solar Power (Hangzhou) Inc.	1,000
Zhejiang Roomeye Energy-Saving Technology Co., Ltd.	1,000
Cixi Huawei Appliance Co., Ltd.	800
Fenghua Xuri Hongyu Co., Ltd.	2,000
Zhejiang Jindun Fire Control Equipment Co., Ltd.	4,000
Ningbo Nanhai Investment Co., Ltd.	1,800
Ebara Great Pumps Co., Ltd.	3,115
Zhejiang Wuhuan Titanium Industry Co., Ltd.	1,300
National Center for the Performing Arts	800
Zhejiang Luhuan Engineering Machinery Co., Ltd.	3,000
Ningbo TaiMao Bicycle Industry Co., Ltd.	5,000
Hangzhou Baowei Auto Parts Co., Ltd.	3,500
Total:	**45,673**

Project / customer examples

Customer/project	Amount (RMB)	CO2 avoided - predictions made by customer
JiangSu YangHe Brewery Co, Ltd.	**16.897.176**	**- 10 000 tons**

Area : Jiangsu Province

Criterias

Eligible Project and Asset Category

- Solar Panels for electricity generation

Conditions

- The customer is located in an area where the level of Green House Gas (GHG) emissions is high.
- The project shall include the exchange of fossil related Energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reduction of GHG emission.
- The installation shall use existing buildings, not prospecting of new land areas.

Customer

- Local government / Public Company

Customer valuation

- The customer is a state-owned enterprise, one of the world´s top 500 enterprises and is a publicly traded company.

Energy valuation

- The customer uses approx. 40 million kwh of electricity per year, almost all of them generated by coal.
- With our solar power installation, the customer could use 10 million kwh from solar, which will result in approx. 10 thousand Tons of less CO2 being admitted in the environment.
- The customer´s future energy needs is estimated to be stable for the coming 5 years.

When considering an optimal, financially viable, environmentally friendly and safe Solar Energy Solution, adapted to the customers current and future electricity needs, geographic location and roof/panel gradient and conditions are of great importance.

Project / customer examples

Customer/project	Amount (RMB)	CO2 avoided - predictions made by customer
Zhejiang Kanglongda Special Protection Technology Co, Ltd.	**15.487.899**	**- 1500 tons**

Area : Zhejiang

Criterias

Eligible Project and Asset Category

- Solar Panels for electricity generation

Conditions

- The customer is located in an area where the level of Green House Gas (GHG) emissions is high.
- The project shall include the exchange of fossil related Energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reduction of GHG emission.
- The installation shall use existing buildings, not prospecting of new land areas.

Customer

- Public Company, i.e. publicly traded share

Customer valuation

- Public company with stable and solid financials

Energy valuation

- The customer uses approx. 12 million kwh of electricity per year, almost all of them generated by coal.
- With our solar power installation, the customer could use 1.5 - 2.0 million kwh from solar, which will result in approx. 1500-2000 Tons of less CO2 being admitted in the environemt.
- The customer´s future energy needs is estimated to be stable for coming 5 years.

When considering an optimal, financially viable, environmentally friendly and safe Solar Energy Solution, adapted to the customers current and future electricity needs, geographic location and roof/panel gradient and conditions are of great importance.

Project / customer examples

Customer/project	Amount (RMB)	CO2 avoided - predictions made by customer
Zhejiang JinDun Fire Control Equipment Co, Ltd. Area : ZhengZhou	**904.079**	**- 1500 tons**

Criterias

Eligible Project and Asset Category

- Solar Panels for electricity generation

Conditions

- The customer is located in an area where the level of Green House Gas (GHG) emissions is high.
- The project shall include the exchange of fossil related Energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reduction of GHG emission.
- The installation shall use existing buildings, not prospecting of new land areas.

Customer

- Public Company, i.e. publicly traded share

Customer valuation

- Public company with stable and solid financials

Energy valuation

- The customer uses approx. 13 million kwh of electricity per year, almost all of them generated by coal.
- With our solar power installation, the customer could use 4 million kwh from solar, which will result in approx. 4000 Tons of less CO2 being admitted in the environment.
- The customer´s future energy needs is estimated to be stable for the coming 5 years.

When considering an optimal, financially viable, environmentally friendly and safe Solar Energy Solution, adapted to the customers current and future electricity needs, geographic location and roof/panel gradient and conditions are of great importance.

Project / customer examples

Customer/project	Amount (RMB)	CO2 avoided - predictions made by customer
Ningbo TaiMao Bicycle Industry **Co, Ltd.**	**7.553.603**	**- 5000 tons**

Area: Ningbo

Criterias

Eligible Project and Asset Category

- Solar Panels for electricity generation

Conditions

- The customer is located in an area where the level of Green House Gas (GHG) emissions is high.
- The project shall include the exchange of fossil related Energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reduction of GHG emission.
- The installation shall use existing buildings, not prospecting of new land areas.

Customer

- Larger private company

Customer valuation

- The customer is a full foreign-owned enterprise with solid and stable financials.

Energy valuation

- The customer uses approx. 5 million kwh of electricity per year, almost all of them generated by coal.
- With our solar power installation, the customer could use 5 - 5,5 million kwh from solar, which will result in approx. 5000 - 5500 Tons of less CO2 being admitted in the environment.
- The customer´s future energy needs is estimated to be stable coming 5 years.

When considering an optimal, financially viable, environmentally friendly and safe Solar Energy Solution, adapted to the customers current and future electricity needs, geographic location and roof/panel gradient and conditions are of great importance.

Project / customer examples

Customer/project	Amount	CO2 avoided - predictions made by customer
Hangzhou Baowei Auto Parts Co, Ltd.	**19.578.518**	**- 3500 tons**
Area : Hangzhou		

Criterias

Eligible Project and Asset Category

- Solar Panels for electricity generation

Conditions

- The customer is located in an area where the level of Green House Gas (GHG) emissions is high.
- The project shall include the exchange of fossil related Energy to solar power or, if increased energy need, the avoidance of fossil related energy use, and delivers a substantial reduction of GHG emission.
- The installation shall use existing buildings, not prospecting of new land areas.

Customer

- Larger private company

Customer valuation

- The customer is a joint venture created by a public company, one of the world´s top 500 enterprises with stable and solid financials.

Energy valuation

- The customer uses approx. 2.5 million kwh of electricity per year, almost all of them generated by coal.
- With our solar power installation, the customer could use 3,5 million kwh from solar, which will result in approx. 3500 Tons of less CO2 being admitted in the environment.
- The customer´s future energy needs is estimated to be stable for the coming 5 years.

When considering an optimal, financially viable, environmentally friendly and safe Solar Energy Solution, adapted to the customers current and future electricity needs, geographic location and roof/panel gradient and conditions are of great importance.

Advanced SolTech Green Bond Updates

Since the first issue of Green Bonds in the spring 2018 (SOLT2) in the amount of 128 MSEK, a number of milestones have been achieved :

- Advanced SolTech Sweden AB (publ) (ASAB) has since then issued two additional Green Bonds in the Retail Market :
    - May 2018, 148 MSEK (SOLT3)
    - October 2018, 70 MSEK (SOLT4)
- Early 2019 ASAB´s first Institutional Green Bond was launched
    - January, 170 MSEK (SOLT5)
    - May In progress (SOLT5 – tap issue)
- Further Institutional Bonds are planned to be issued during 2019.

To date Advanced SolTech has invested some +800 MSEK for nearly 100 MW of installed solar energy capacity in China. With a set installation target of 605 MW of solar energy capacity in 2022, further investments of some + 3 000 MSEK will be needed. Such is planned to be financed through a mix of equity, loans and Green Bonds.

After the listing of SOLT2 on Nasdaq First North Sustainable Retail Bonds in March, 2018 Advanced SolTech has become a partner to Climate Bonds Initiative which is an international organisation based in London, founded 2009 and solely working to mobilize the largest capital market of all, the USD 100 trillion bond market, for climate change solutions.