

## Green Bond Framework – Scatec Solar ASA

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### Introduction

Scatec Solar is an integrated independent solar power producer, delivering affordable, rapidly deployable and sustainable source of clean energy worldwide. A long-term player, Scatec Solar develops, builds, owns, operates and maintains solar power plants, and already has an installation track record of 600 MW.

Headquartered in Oslo, Norway, Scatec Solar is currently producing electricity from 322 MW of solar power plants in the Czech Republic, South Africa, Rwanda, Honduras and Jordan and 394 MW are under construction. The company holds a project backlog and pipeline of 1.5 GW under development in the Americas, Africa, Asia and the Middle East.

In 2016, the solar power plants in operation resulted in avoiding close to 660,000 tons of greenhouse gas emissions. The company's projects in developing countries are undergoing the mechanisms of the UN Framework Convention on Climate Change (UNFCCC) to certify that the solar electricity generated by our facilities substitute the use of fossil fuels, and that the greenhouse gas emissions avoided by our power production are real, verifiable and permanent.

Scatec Solar is committed to operate in line with the Equator Principles and the International Finance Corporation (IFC) Environmental & Social Performance Standards to ensure consistent standards across all projects. We work with trusted partners such as the IFC, Norfund, KLP and several larger development banks that all have high standards for the projects and their associated impacts.

Our solar power plants are embedded in local communities in emerging economies for 20-25 years. Environmental and Social Impact Assessments are undertaken at the start of the project phase for all projects. Community relations, social and environmental impacts are managed as an integrated part of the business.

To show support to the United Nations Sustainable Development Goals (SDGs) and strengthen the company's reporting, we have chosen to incorporate aspects of the SDGs in our sustainability reporting (refer to appendix 3 for more information).

### Scatec Solar Green Bond

This green bond framework is aligned with the Green Bond Principles (GBPs) published in June 2017 by the International Capital Market Association.

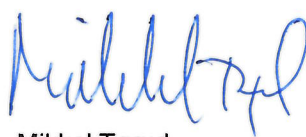
DNV GL has been commissioned to conduct an eligibility assessment of the Scatec Solar Green Bond.

Oslo, October 30, 2017



Raymond Carlsen

CEO



Mikkel Tørud

CFO

## Scatec Solar ASA Green Bond Framework, 30 October 2017

### 1. Use of Proceeds

Scatec Solar's objective is to develop, build, own and operate large scale solar power plants.

Scatec Solar has defined a set of "Eligible Activities" in this Green Bond Framework as follows:

#### Renewable Energy:

- Solar project development, equity investment into solar power projects, engineering procurement construction (EPC) and operation and maintenance of utility scale solar plants.
- Solar project development activities include e.g. securing land arrangements, securing power grid connection, securing required permits, conducting environment and social impact assessments (ESIAs), securing power purchase agreements, engineering and design of the power plants, as well as securing equity and debt financing.

NOK 500 million of the new green bond will be used to refinance the existing NOK 500 million bond maturing in 2018 ("the 2018 bond"). The remaining will be used for Eligible Activities in relation to project backlog, pipeline and new opportunities.

Scatec Solar is every quarter describing and reporting status on projects in backlog and pipeline, as well as an aggregate MW capacity for projects in the opportunity phase.

The proceeds from the existing bond have been used for Eligible Activities in relation to projects that are currently under construction in Malaysia, Brazil and Honduras and projects in the company's backlog in Egypt, South Africa, Mozambique, Mali and Honduras.

See below for a list of the projects with expected installed capacity and annual production. Refer to appendix 1 for more information on each project.

Location	Capacity (MW)	Annual production (GWh)
<b>Under construction</b>		
Malaysia	197	282
Brazil	162	305
Honduras (phase I)	35	73
<b>Backlog</b>		
Egypt	400	870
South Africa	258	645
Mozambique	40	77
Mali	33	60
Honduras (phase II)	18	37
<b>Total</b>	<b>1,143</b>	<b>2,349</b>

Solar energy is a clean energy source with clear environmental benefits. In 2016, Scatec Solar's solar power plants in operation resulted in avoiding close to 660,000 tons of greenhouse gas emissions

(please refer to a break down per plant in appendix 3). The emissions number is based on company estimates and certified emission volumes for projects registered under country-specific programmes.

## **2. Process for Project Evaluation and Selection**

Eligible Activities related to solar projects are required to meet the process for project evaluation and selection. The proceeds of the bond will be solely used for Eligible Activities related to projects selected as described in this Green Bond Framework. All projects in Scatec Solar's project backlog and pipeline are selected as described below.

### **Scatec Solar investment evaluation and selection**

Scatec Solar always conducts an initial commercial, technical and legal assessment of all project opportunities before resources are allocated.

Scatec Solar is furthermore committed to operate in line with the Equator Principles and the International Finance Corporation (IFC) Environmental & Social performance standards to ensure consistent standards across all projects.

We work with trusted partners such as the IFC, EBRD, Norfund, Africa50, KLP and several development banks that all have high standards for the projects and their associated impacts.

Scatec Solar performs a systematic and in-depth selection process when searching and planning for projects in new markets. The process involves relevant commercial, technical, regulatory and legal aspects of the projects. The company conducts Environmental and Social impact assessments (ESIA) for all our projects to identify and manage potential impact on the environment and communities surrounding the site. The work is comprehensive and involves many stakeholders over a prolonged period. The environmental and social profile of a prospected project forms part of the process for project evaluation and selection.

Health, Safety, Security and Environmental focus are key elements of Scatec Solar's approach to operational excellence. HSSE is particularly emphasised in the construction phase. We define and communicate the health and safety standards to our employees and contractors and we continuously work for zero harm to personnel, materials and the environment. We ensure that all our business activities are conducted in accordance with applicable labour standards and fundamental human rights norms as prescribed by the International Labour Organisation and the Universal Declaration of Human Rights.

All our projects are required to have a site specific HSE plan based on a standardised format including HSE indicators to be reported on a regular basis.

In addition to the above Scatec Solar applies strict margin and return requirements on the projects before investment decisions are made and funds deployed.

The Chief Financial Officer (CFO) of the company is responsible for the allocation of funds based on the above process and guidelines, as well as assessment and analysis performed by relevant departments including the sustainability department. The company has committed to tracking the outstanding balance of proceeds in line with the GBP.



### **3. Management of Proceeds**

Proceeds from the new bond will immediately be used to pay all outstanding principle amount of the 2018 bond.

Proceeds over and beyond refinancing will be disbursed to a dedicated account which is managed to ensure that proceeds only can be used for Eligible Activities as defined above. The Chief Financial Officer (CFO) has delegated the authority to the treasury function to ensure that these proceeds are only used for Eligible Activities in line with the Green Bond Framework. The proceeds will be tracked in line with the Green Bond Principles.

Any surplus unallocated proceeds will be placed on ordinary bank accounts or short-term money market funds until deployed.

Based on current business plan and requirements to develop and invest in the project backlog and pipeline Scatec Solar has overcollateralized of minimum 130% of the proceeds from this bond issuance.

### **4. Reporting**

Scatec Solar publishes quarterly reports, annual reports and sustainability reports expected to cover the needs of the Green Bond Framework 2017. This will include annual reporting on the projects covered by the NOK 500 million refinancing and the remaining proceeds of temporarily holdings. Scatec Solar is committed to provide both outstanding reporting and impact reporting on at least an annual basis. The company will not publish a separate green bond report.

Scatec Solar reports installed capacity (MW) for each solar plant in operation, under construction and in backlog quarterly. We also report the annual energy produced per plant and the corresponding CO<sub>2</sub> emission reduction per year. In 2016, the solar power plants in operation resulted in avoiding close to 660,000 tons of greenhouse gas emissions. This emissions number is based on company estimates and certified emission volumes for projects registered under country-specific programmes. Refer to appendix 2 and 3 for a summary of installed capacity, annual power production and greenhouse gas emissions per project, as well as more information on the company's sustainability reporting.

## APPENDIX

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### Appendix 1: Projects under construction and in backlog – From the Third Quarter 2017 Report

The development of the projects currently under construction and in backlog were partly financed by the previous bond issuance and will be subject to refinancing and financing under the new issuance.

#### Plants under construction

##### Malaysia, 197 MW

In December 2016 Scatec Solar partnered with a local ITRAMAS-led consortium that had signed three 21-year PPAs with the country's largest electricity utility, Tenaga Nasional Berhad (TNB).

Scatec Solar and partners achieved financial close for debt financing of the project on October 6, 2017.

Scatec Solar will invest about MYR 250 million through both ordinary preference shares and preference shares convertible to 49% equity ownership in the projects. Scatec Solar will build and operate the solar power plants.

CIMB and Maybank was appointed to arrange the non-recourse project debt financing, in the form of an Islamic Bond, totaling MYR 1,000 million for the three projects. The project bond was rated AA- by the Malaysian Rating Corporation Berhad (MARC) and given a 'dark green' rating from CICERO - The Center for International Climate and Environmental Research in Oslo.

##### Brazil, 162 MW

In December 2016 Scatec Solar signed an agreement with the Brazilian company Kroma Energia Ltda. and its partners ("Kroma"), securing four PV plants totalling 162 MW (DC) co-located in the state of Ceará in Brazil.

The projects were bid and won by Kroma in the auction process held by ANEEL, the Brazilian Electricity Regulatory Agency, in November 2015. The project companies have since then signed 20-year PPAs with CCEE, the Brazilian Power Commercialization Chamber.

On September 29, 2017 Scatec Solar entered into a partnership agreement with Statoil ASA to establish a 50/50 joint venture to build, own and operate large scale solar plants in Brazil. The Joint Venture has an ambition to become a significant player in the Brazilian solar market.

As the first step of the agreement Statoil acquires the right to participate with a 40% equity position in Scatec Solar's existing 162 MW Apodi project. Statoil paid USD 25 million for 40% of the project rights and for participation in the Joint Venture. Statoil is in addition injecting USD 35 million in the project companies to fund their share of the project.

Subsequently Scatec Solar and Statoil have acquired additional 8% of the project rights from Kroma. Following this transaction Scatec Solar will own 44%, Statoil 44% and Kroma 12% of the equity in the project.

Financing of the Apodi project has been secured through project financing from Banco Nordeste (BNB) with 65% debt leverage.

##### Los Prados, Honduras, 35 MW

In October 2015 Scatec Solar and Norfund acquired the Los Prados solar project in Honduras. The project has a 20-year PPA with Empresa Nacional de Energía Eléctrica (ENEE), the state-owned utility. Scatec Solar and ENEE has obtained the required interregional interconnection permit for the first phase of the project representing a capacity of 35 MW, while the remaining 18 MW will be built later in phase two.



Scatec Solar will build, own and operate the solar power plants with a 70% shareholding. Norfund will hold the remaining 30% of the equity.

Project financing will be provided by the Central American Bank of Economic Integration (CABEI) and Export Credit Norway (ECN) with guarantee from the Norwegian Export Credit Guarantee Institute (GIEK). All financing institutions have obtained approvals to provide the project finance debt to the project.

The lenders and ENEE have for some time been in dialogue with regards to the required security agreement between these institutions. This process has unfortunately delayed financial close of debt to the project. In July 2017, the project sponsors initiated construction activities on the project site to ensure that the relevant timelines in the agreement with ENEE are met.

## **Projects in backlog**

### **Egypt, 400 MW**

In April 2017, Scatec Solar and partners signed six 25-year PPAs for projects in "Round 2" of the FiT program in Egypt totalling 400 MW (DC).

All located in the Ben Ban area near Aswan in Upper Egypt, the six solar plants are expected to generate about 870 GWh of solar electricity per year in total.

Total investments for the 400 MW of solar plants is estimated at USD 450 445 million and the plants are expected to generate annual revenues of about USD 60 million over the 25-year contract period. Scatec Solar will build, own and operate all six projects and Scatec Solar's share of equity investments will be in the range of USD 55 million. Scatec Solar is partnering with local developers, KLP Norfund Investments and Africa50 for equity investments in the projects. Africa50 is an infrastructure investment fund, established by the African Development Bank and backed by more than 20 African states.

European Bank for Reconstruction and Development (EBRD) is leading a consortium of banks that will support the six projects with a total debt of USD 350 335 million. Loan agreements were signed on October 19 and financial close is expected by end of October 2017. Construction start is planned sequentially in first half of 2018 with approximately 18 months of construction before grid connection.

### **Uppington, South Africa, 258 MW**

In April 2015 Scatec Solar was awarded preferred bidder status for three projects in Uppington in the fourth bidding round under REIPPP (Renewable Energy Independent Power Producer Programme) in South Africa.

Scatec Solar will build, own and operate the solar power plants with a 42% shareholding. KLP Norfund Investments will hold 18% and a Trust (initially fully funded by Scatec Solar and KLP Norfund) will hold the remaining 40% the equity.

Project financing will be provided by Standard Bank and a syndicate of other South African banks.

In August 2017, the Department of Energy announced the way forward for the fourth bidding round under REIPPP. The Department has invited all IPPs to sign all required agreements and thereby to reach financial close based on revised tariff of 0.77 Rand/kWh.

On this basis Scatec Solar is now completing the financing with project finance lenders and sponsors to be ready to close financing by a timeline to be set out by the Department of Energy.

### **Mozambique, 40 MW**

In October 2016 Scatec Solar and Norfund signed a PPA securing the sale of solar power over a 25-year period to the state-owned utility Electricidade de Mozambique (EDM).

Scatec Solar will build, own and operate the solar power plants with a 52.25% shareholding. Norfund and EDM will hold the remaining part of the equity.

On June 2, IFC, the International Finance Corporation, a member of the World Bank Group, and the Emerging Africa Infrastructure Fund, managed by Investec Asset Management and a part of the Private Infrastructure Development Group (PIDG) signed the loan agreement to provide project finance debt for the project.

Scatec Solar and partners are working to close out remaining conditions precedent of the loan to reach financial close.

### **Mali, 33 MW**

In July 2015, Scatec Solar ASA together with its development partners International Finance Corporation (IFC) and Power Africa 1, signed a 25-year PPA with Energie du Mali (EDM).

IFC and African Development Bank (AfDB) will provide the non-recourse project finance for the project. The project has also been awarded a USD 25 million concessional loan from the Climate Investment Funds under the Scaling Up Renewable Energy Program.

Scatec Solar will build, own and operate the solar power plant with a 51% shareholding. IFC Infraventures and Power Africa will hold the remaining part of the equity.

Board approval has been obtained from IFC for project finance and from World Bank for the required Partial Risk Guarantee. Final approval by African Development Bank of updated lending terms is expected soon. Scatec Solar and partners are working with lenders and authorities to finalize project, loan and guarantee agreements.

### **Los Prados, Honduras, 18 MW**

Refer to above information on the Los Prados project. As the 35 MW is moved to 'Under Construction' the 18 MW Phase 2 of the project is included in the project backlog.

## **Appendix 2 – Reporting per project**

Table 1 and 2 below show a summary of installed capacity, annual power production and greenhouse gas emissions per plant for the global operating portfolio and estimates for the projects under construction and in backlog.

**Table 1:**

<b>Projects (when in full operation)</b>	<b>Installed capacity (MW)</b>	<b>Actual power production FY 2016 (MWh)</b>	<b>Green House Gas Emissions avoided (tons of CO<sub>2</sub> per year)<sup>2</sup></b>
Kalkbult, South Africa	75	145,528	128,538
Linde, South Africa	40	88,446	88,539
Dreunberg, South Africa	75	160,268	120,928
Czech portfolio, Czech Republic	20	21,353	12,000
ASYV, Rwanda	9	14,169	8,000
Agua Fria, Honduras	60	100,947	60,000
Utah Red Hills, USA <sup>1</sup>	104	208,074	178,000
Oryx, Jordan	10	23,000 <sup>3</sup>	15,000
EJRE/GLAE, Jordan	33	78,000 <sup>3</sup>	48,000
<b>Total</b>	<b>426</b>		<b>659,005</b>

1) Scatec Solar sold 100% of the sponsor equity in the 104 MW Utah Red hills project in fourth quarter 2016

2) South Africa project emissions obtained from the country's designated Renewable Energy Programme; all others are company's own annual estimates

3) Annual estimate (Oryx reached Commercial Operation date in June 2016, GLAE in July 2016 and EJRE in September 2016).



**Table 2:**

Projects	Capacity (MW)	Expected annual power production (MWh)	Estimated Green House Gas Emissions avoided (tons of CO <sub>2</sub> per year)**
<b>Under construction:</b>			
Malaysia	197	282,000	210,000
Brazil	162	305,000	150,000
Honduras (phase I)	35	73,000	N/A
<b>In backlog:</b>			
Egypt	400	870,000	350,000
South Africa	258	645,000	N/A
Mozambique	40	77,000	N/A
Mali	33	60,000	46,000
Honduras (phase II)	18	37,000	N/A

### Reporting on CO<sub>2</sub> emission reductions

The company's projects in developing countries are undergoing the mechanisms of the UN Framework Convention on Climate Change (UNFCCC) to certify that the solar electricity generated by our facilities substitute the use of fossil fuels, and that the greenhouse gas emissions avoided by our power production are real, verifiable and permanent. The aim is to register these projects with the UNFCCC under Scatec Solar's Global Programme of Activities (PoA).

On registration, the UNFCCC issues Carbon credits called Certified Emission Reductions (CERs) attributable to the specific plants. The CERs can be used by buyers to offset their greenhouse gas emissions. Scatec Solar signed a carbon purchase agreement with the Norwegian Ministry of Climate and Environment for the sale of credits from the projects included in the POA, with the option to introduce new projects in developing countries.

### Appendix 3: Sustainability reporting

In 2014, Scatec Solar published the company's first sustainability report (available on our website). There are several factors that influence what areas our company wants to prioritise when it comes to maintaining a sustainable business practice. Important elements include the company's strategy, regulatory requirements, input from our stakeholders, global frameworks and initiatives. Two years ago, we started a comprehensive process to identify and prioritise material sustainability aspects for our company. The first step included a mapping of stakeholders and a prioritisation based on how each stakeholder group is:

- Affected by Scatec Solar
- Affecting Scatec Solar
- Invested in the success/failure of Scatec Solar

A materiality analysis was developed illustrating the aspects of high importance to stakeholders and high relevance for Scatec Solar's strategy. For each sustainability aspect, a set of indicators and goals were established. These are monitored on a regular basis and receive a high degree of attention from our management and company as a whole. The structure of our sustainability report is founded on this materiality assessment, which also serve as the basis for our sustainability framework presented below:





## UN Sustainable Development Goals

To strengthen the company's reporting and show support for the United Nations Sustainable Development Goals, Scatec Solar has chosen to incorporate aspects of the SDGs in our sustainability reporting.

In addition to providing clean and renewable energy, all our solar plants establish social and environmental programmes to benefit the local communities surrounding the facilities. The UN development goals are tangible and specific, giving us a solid tool to frame, define and materialise all our activities. For easy recognition, we have prioritised our activities in local communities and other relevant areas under the following six SDGs:

**Goal # 4: Quality Education:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

**Goal # 7: Affordable Clean Energy:** Ensure access to affordable, reliable, sustainable and modern energy for all

**Goal # 9: Industry, Innovation and Infrastructure:** Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

**Goal # 11: Sustainable Cities and Communities:** Make cities and human settlements inclusive, safe, resilient and sustainable

**Goal # 15: Life on Land:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

**Goal # 17: Partnerships for the Goals:** Strengthen the means of implementation and revitalise the global partnership for sustainable development

Focusing on the selected goals also gives us the advantage of sharpening and developing our professional expertise within these areas.