

# SCATEC SOLAR GREEN BOND

## DNV GL ELIGIBILITY ASSESSMENT

### Scope and Objectives

Scatec Solar ASA ("Scatec Solar") is an integrated independent power producer with headquarters in Oslo, Norway. Scatec Solar develops, builds, owns and operates solar power plants and delivers 279 MW in the Czech Republic, South Africa, Honduras and Rwanda. The company is in strong growth and has 147 MW under construction in the US and Jordan as well as a pipeline of projects under development in Africa, Middle East, Americas and Asia.

Scatec Solar is intending to issue a bond in the range of NOK 500 000-600 000 with a 3 year tenor. We understand that the bond will finance Scatec Solar's general corporate undertakings. Scatec Solar is a company whose purpose is to make solar power a sustainable and affordable source of energy worldwide, and as such is dedicated to the realization of environmental benefits through low-carbon electricity.

DNV GL AS ("DNV GL") has been commissioned by Scatec Solar to provide a green bond eligibility assessment of the Scatec Solar Green Bond. We were commissioned to provide an assessment of the alignment of the bond against DNV GL's Green Bond Eligibility Assessment Protocol which is built around the Green Bond Principles<sup>1</sup> (March, 2015). Our methodology to achieve this is described under 'Work Undertaken' below. We were not commissioned to provide an independent assurance or other audit activity.

No assurance is provided regarding the financial performance of the bond, the value of any investments in the bond, or the long term environmental benefits of the transaction. Our objective has been to provide an assessment that the bond has met the criteria established on the basis set out below.

### Responsibilities of the Management of Scatec Solar and DNV GL

The management of Scatec Solar has provided the information and data used by DNV GL during the delivery of this review. Our statement represents an independent opinion and is intended to inform Scatec Solar management and other interested stakeholders in the Scatec Solar Green Bond as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by Scatec Solar. DNV GL is not responsible for any aspect of the project categories referred to in this opinion and cannot be held liable if estimates, findings, opinions or conclusions are incorrect. Thus, DNV GL shall not be held liable if any of the information or data provided by Scatec Solar's management and used as a basis for this assessment were not correct or complete.

### Basis of DNV GL's opinion

We have adapted our green bond eligibility assessment methodology to create a Scatec Solar-specific Green Bond Eligibility Assessment Protocol ("Protocol") - see Schedule 1. Our Protocol includes a set of suitable criteria that can be used to underpin DNV GL's opinion. The overarching principle behind the criteria is that a green bond should "enable capital-raising and investment for new and existing projects with environmental benefits"<sup>2</sup>.

<sup>1</sup> The [Green Bond Principles](#) are a set of voluntary process guidelines for issuing green bonds, initially issued in January 2014 and then updated on March 27<sup>th</sup> 2015.

<sup>2</sup> Ibid

As per our Protocol, the criteria against which the Scatec Solar Green Bond has been reviewed are grouped under the four Principles:

- **Principle One: Use of Proceeds.** The Use of Proceeds criteria are guided by the requirement that an issuer of a green bond must use the funds raised to finance eligible activities. The eligible activities should produce clear environmental benefits.
- **Principle Two: Process for Project Evaluation and Selection.** The Project Evaluation and Selection criteria are guided by the requirements that an issuer of a green bond should outline the process it follows when determining eligibility of an investment using Green Bond proceeds, and outline any impact objectives it will consider.
- **Principle Three: Management of Proceeds.** The Management of Proceeds criteria are guided by the requirements that a green bond should be tracked within the issuing organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.
- **Principle Four: Reporting.** The Reporting criteria are guided by the recommendation that at least annual reporting to the bond investors should be made of the use of bond proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

## Work undertaken

Our work constituted a high level review of the available information, based on the understanding that this information was provided to us by Scatec Solar in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

- Creation of a Scatec Solar-specific Green Bond Eligibility Assessment Protocol, and adapted to the purpose of the Bond, as described above and in Schedule 1 to this Assessment;
- Assessment of documentary evidence provided by Scatec Solar on the Bond and on company activities using the Protocol and supplemented by a high-level desktop and media research. These checks refer to current assessment best practices and standards methodology;
- Review of externally published documents and internal analyses and documentation, and other sources of information on Environmental, Social and Governance (ESG) risks relating to the activities of Scatec Solar;
- Interviews with Scatec Solar senior managers at its head office in Oslo, Norway, and review of relevant documentation and evidence related to the criteria of the Protocol;
- Discussions with Scatec Solar senior management;
- Documentation of findings against each element of the criteria. Our opinion as detailed below is a summary of these findings.

## Findings and DNV GL's opinion

DNV GL's findings are listed below:

1. **Principle One: Use of Proceeds.** Scatec Solar's sole purpose is to develop, build, own and operate solar power plants. As such, we consider Scatec Solar to be "pure-play" for green bond purposes<sup>3</sup>. Scatec Solar plans to use the proceeds to facilitate the continued expansion of their current business, contributing to the growth of solar-based energy generation on a global scale. In particular, DNV GL has reviewed evidence that Scatec Solar has an investment pipeline whose value significantly exceeds the value of the Bond. As stated above, DNV GL provides no assurance regarding the financial performance of the bond, the value of any investments in the bond, or the effects of the transaction.

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<sup>3</sup> We consider a company to be "pure-play green" if >90% of its revenues come from business activities that are considered to have clear environmental benefits.

2. **Principle Two: Process for Project Evaluation and Selection.** As the proceeds of the bond will be put towards general corporate purposes, there is no need for the issuer to establish a process for project evaluation and selection. At a corporate level, Scatec Solar has expressed a commitment to operational excellence within HSE, beyond compliance with national and international laws and regulations. The Company also adheres to the IFC performance standards and the Equator Principles. DNV GL has reviewed evidence that demonstrates that Scatec Solar carries out sustainability impact assessments of its development projects and identifies adequate mitigation actions, when necessary. All of Scatec Solar's operating units must establish a site specific HSE plan, based on a standardised and comprehensive format as established by corporate HQ. Based on the evidence reviewed we found nothing to suggest that Scatec Solar's environmental, social and governance framework is not in line with good practice of the industry in which it operates.
3. **Principle Three: Management of Proceeds.** This principle is not applicable since the Bond is a general corporate purpose bond. Scatec Solar will thus not trace the use of proceeds of the Bond.
4. **Principle Four: Reporting.** Scatec Solar reports annually the MW installed capacity for each operational solar power plant as well as for the projects under construction and the (aggregated) backlog. For each operational plant Scatec Solar also reports the annual energy produced and the corresponding CO<sub>2</sub> emission reduction. We recommend that Scatec Solar also report estimated production and estimated CO<sub>2</sub> emission reduction for projects under construction and the (aggregated) backlog as of their annual report 2015. We further recommend that the company include some high level information about the calculation methodology for their CO<sub>2</sub> emission reduction in their annual report.

On the basis of the information provided by Scatec Solar and the work undertaken, it is DNV GL's opinion that the Scatec Solar Green Bond meets the criteria established in the Scatec Solar-specific Green Bond Eligibility Assessment Protocol and that it is aligned with the stated definition of green bonds within the Green Bond Principles, which is to "enable capital-raising and investment for new and existing projects with environmental benefits".

#### for DNV GL AS

Oslo

November, 9th 2015



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#### About DNV GL

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight.

With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

## Schedule 1- Scatec Solar-specific Green Bond Eligibility Assessment Protocol

### 1. Use of proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
1a	Type of bond	<p>The bond must fall in one of the following categories, as defined by the Green Bond Principles:</p> <ul style="list-style-type: none"> <li>Green Use of Proceeds Bond</li> <li>Green Use of Proceeds Revenue Bond</li> <li>Green Project Bond</li> <li>Green Securitized Bond</li> </ul>	<p>Review of:</p> <ul style="list-style-type: none"> <li>Scatec Solar - <a href="#">Articles of Association</a>.</li> <li>Scatec Solar Annual Report <a href="#">2014</a></li> <li>Scatec Solar <a href="#">Q3 2015 report</a></li> <li>Private letter from Scatec Solar senior management confirming future strategy within solar energy.</li> <li>Draft term sheet (dated 09.11.2015)</li> <li>Summary cash flow forecast for Scatec Solar</li> <li>List of project backlog/financing</li> </ul> <p>Interviews with managers on site on 26 June 2015.</p>	<p>The bond falls into the category of a Corporate General Purpose Bond and hence does not fall strictly within the types of bonds currently defined by the Green Bond Principles. However, we consider that Scatec Solar is a pure-play renewable energy company<sup>4</sup>, as all of its business activities are considered “green”.</p> <p>Scatec Solar’s purpose, as stated in its Articles of Association, is “...establishment and operation of business based on downstream technology for production of solar electricity, hereunder investment in companies operating such business.”</p> <p>As per October 2015, Scatec Solar has a portfolio of 279 MW of solar power plants in operation and has publicly declared 491 MW of solar power plants under construction and in backlog, awaiting execution. Furthermore, the company’s Third Quarter Report 2015 announces a project pipeline of 1,287 MW for the period 2016-2018. These forward looking intentions were further reinforced by senior managers of Scatec Solar.</p> <p>This development pipeline significantly exceeds the value of the Bond. These investment plans give further comfort to green bond investors that the proceeds of the bond will be used for eligible “green” projects.</p> <p>Given the history and strategy of Scatec Solar and its current business activities, DNV GL concludes that nothing currently suggests that over the tenor of the bond to be issued, Scatec Solar would develop business activities that are not considered “green”.</p>
1b	Green Project Categories	The cornerstone of a Green Bond is the utilization of the proceeds of the bond which should be appropriately described in the	Review of Draft term sheet (dated 09.11.2015)	Scatec Solar declare that the net proceeds from the Bond Issue shall be used for the establishment and operation of business based on technology for production of solar electricity, hereunder investment in companies operating such business.

<sup>4</sup> We consider a company to be “pure-play green” if >90% of its revenues come from business activities that are considered to have clear environmental benefits, as described under criterion 1C.

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
		legal documentation for the security.		
1c	Environmental benefits	All designated Green Project categories should provide clear environmentally sustainable benefits, which, where feasible, will be quantified or assessed by the issuer.	<p>Review of:</p> <ul style="list-style-type: none"> <li>Scatec Solar Annual Report <a href="#">2014</a></li> <li>Scatec Solar Annual Sustainability report <a href="#">2014</a></li> <li><a href="#">Climate Bond Standard</a> and currently existing green bond taxonomies</li> <li><a href="#">Scatec project portfolio</a></li> <li><a href="#">Power purchase agreements for Kalkbult, Linde and Dreunberg solar power plants</a></li> <li>UNFCCC website <a href="#">PoA 7167</a></li> <li>UNFCCC website <a href="#">PoA 'Scaling-Up Solar Photovoltaic Power Generation Across Africa and the Levant Region'</a></li> <li>Report from the Rwanda Environment management authority on Rwanda Grid Emission Factor from May 2014</li> <li>IEA CO<sub>2</sub> Emissions Report (2013 Edition)</li> <li>Scatec Solar policy on climate and carbon financing.</li> <li>Emission reduction calculation per park in operation</li> </ul> <p>Discussions with Scatec Solar management</p>	<p><b>Green Bond category – solar energy</b></p> <p>Solar energy is a clean energy source with clear environmental benefits over fossil fuels. The environmental benefits of solar energy are commonly assessed as: renewable energy capacity installed (MW), renewable energy produced (MWh), and CO<sub>2</sub> emissions avoided when compared to alternative more polluting energy sources.</p> <p><b>Emission reduction calculations and monitoring</b></p> <p>As per the July 2015 the cumulative installed nameplate capacity globally of Scatec Solar was approximately 219 MW, estimated to 435 000 tonnes of CO<sub>2</sub> avoided annually as reported by Scatec Solar.</p> <p>The methodology used by Scatec Solar to calculate and monitor emission reductions for its solar power plants was found to be reliable and consistently used over all projects in operation. The methodology used is based on the UNFCCC approved ACM0002 methodology which is based on best practices and is internationally accepted. This methodology includes detailed requirements for input data, assumptions, baseline scenario and project emission reductions calculation as well as for measuring, monitoring and reporting emission reduction on a regular basis. Although Scatec Solar does not have a governance document specifically describing the monitoring of emission reduction it is however used in practice for all projects in operation.</p>

## 2. Process for Project Selection and Evaluation

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
2a	Issuer's environmental and social and governance framework	In addition to information disclosed by an issuer on its Green Bond process, criteria and assurances, Green Bond investors may also take into consideration the quality of the issuer's overall framework and performance regarding environmental sustainability.	<p>Review of:</p> <ul style="list-style-type: none"> <li>HSE Policy</li> <li>Scatec Solar <a href="#">Sustainability Report 2014</a></li> <li>Scatec Solar Annual Report 2014</li> <li>Samples of Environmental and social assessment, management and monitoring documentation, such as: <ul style="list-style-type: none"> <li>ESIA of the <a href="#">Oryx 1 Photovoltaic Solar Project</a></li> <li>E&amp;S construction Monitoring Report for Dreunberg</li> <li>E&amp;S impact Management Plan for Rwanda</li> <li>E&amp;S construction Monitoring Report for Linde</li> <li>HSE Plan Linde</li> </ul> </li> <li>Samples of regular HSE reporting documentation such as: <ul style="list-style-type: none"> <li>Monthly progress report, Linde May 2014</li> <li>Monthly progress report Rwanda March 2014</li> <li>Monthly progress</li> </ul> </li> </ul>	<p>Scatec Solar has expressed a commitment to operational excellence within HSE and have set an ambition for zero harm to personnel, material and environment. Compliance with national, regional and international laws and regulations are mandatory and the Company also adhere to the ICF performance standards and the Equator Principles.</p> <p>The company conducts environmental and social impact assessment (ESIA) in connection with their project developments. The assessments are used to identify and manage potential impact on the environment and communities surrounding the site. The assessments are carried out by an accredited and independent third party. It should be noted that, generally, the development, construction and operation of a solar power plant rarely involve material environmental or social risks, hence most projects have been categorised as "Category B" in connection with Equator Principles reviews.</p> <p>All of Scatec Solar operating units must establish a site specific HSE plan, based on a standardised and comprehensive format as established by corporate HQ. Key HSE topics and indicators are included in the regular, monthly progress report from each site. Based on information provided by Scatec Solar managements, Scatec Solar builds solar power plants using the highest industry standards (such as IEC 61730, IEC 61215, ISO 2859, CBTL laboratories, UL (USA) and CE (EU) at global level etc.).</p> <p>In 2014, Scatec Solar issued their first sustainability report. In this report, they outline their 10 priority areas that all fall under the three main themes; Delivering competitive renewable energy, Contributing to local value creation, and Being a trusted business partner. Each of the area is supported by a policy statement and followed by a description of actions and results in 2014 as well as ambitions and goals going forward. The prioritised areas show a strong commitment for cooperation and contribution to development in the local communities they operate, f example to use local labour and suppliers, train and provide workers with technical skills in order to make the workers more eligible candidates for future jobs after the construction of the site is finalised. The company is transparent on their goals and achievement in this area and report on indicators</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
			<p>report Agua Fria April 2015</p> <ul style="list-style-type: none"> <li>• Example of industry standards used by Scatec solar (IEC 61730, IEC 61215, ISO 2859, CBTL laboratories, UL (USA) and CE (EU))</li> <li>• Scatec Solar Quality Policy</li> </ul>	<p>such as number of job creation, % use of local employees and no. of workers with documented skill enhancement.</p> <p>We have carried out a high-level media review of Scatec Solar and a selection of monitoring and compliance reports issued by the company. We have found no evidence to suggest that Scatec Solar have been operating in breach of national or local environmental regulations.</p> <p>Based on the evidence reviewed and the discussion we had with senior managers, we found nothing to suggest that Scatec Solar's environmental, social and governance framework is not in line with good practice of the industry in which it operates.</p>

### 3. Management of proceeds

This principle is not applicable since the Bond is a General Corporate Purpose bond. Scatec Solar will thus not trace the use of proceeds of the Bond.

### 4. Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
4a	Periodical reporting	In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, issuers should provide at least annually a list of projects to which Green Bond proceeds have been allocated including - when possible with regards to confidentiality and/or competitive considerations - a brief description of the projects and the amounts disbursed, as well as the expected environmentally sustainable impact.	<p>Review of:</p> <ul style="list-style-type: none"> <li>• Scatec Solar <a href="#">Sustainability Report 2014</a></li> <li>• Scatec Solar Annual Report 2014</li> </ul> <p>Discussion with Scatec Solar management.</p>	<p>Scatec Solar reports annually the MW installed capacity for each operational solar power plant as well as for the projects under construction and the (aggregated) backlog. For each operational plants Scatec Solar also report the annual energy produced and the corresponding CO<sub>2</sub> emission reduction pr year. This information is already present in Scatec Solar's public reports and no additional communication to bond investors is planned at this stage.</p> <p>We recommend that Scatec Solar also report estimated production and estimated CO<sub>2</sub> emission reduction for projects under construction and the (aggregated) backlog as of their annual report 2015. We further recommend that the company include some high level information about the calculation methodology for their CO<sub>2</sub> emission reduction in their annual report.</p>