### **IREN SPA GREEN BOND**

**DNV-GL** 

### **DNV GL GREEN BOND PERIODIC REVIEW**

### **Scope and objectives**

On 17 October 2017, IREN SPA ("IREN" or "Issuer") issued a bond with ISIN: XS1704789590 (henceforth referred to as "BOND"). The nominal issuance value for the bond was Euro 500 million with received proceeds after issue discount (Disaggio di emissione) of Euro 491.78 million. DNV GL Business Assurance Italia S.r.l. (henceforth referred to as "DNV GL") conducted a Green Bond Eligibility Assessment on the bond using the Green Bond Principles 2017 (GBP).

IREN has used the proceeds of the BOND to finance the nominated projects and assets falling under the following categories:

#### Renewable Energy:

- Mini Hydro Power;
- Solar PV Energy Generation;
- Energy Network Development;

### **Energy Efficiency**

- Energy Distribution and Management;
- Cogeneration Facilities;

Waste Management Efficiency and Recycling

Waste collection and sorting upgrades;

#### Waste Water Treatment

• Wastewater treatment plant upgrades.

DNV GL has been commissioned by IREN to provide the initial and Periodic Review of the BOND. Our criteria and information covered to achieve this is described under 'Work Undertaken' below. The Periodic Review was conducted on the information provided by IREN dated 31 December 2017.

No assurance is provided regarding the financial performance of the BOND, the value of any investments in the BONDS, 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.

The scope of this DNV GL opinion is limited to the Green Bond Principles 2017 (GBP).

## Responsibilities of the Management of IREN and DNV GL

The management of IREN 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 IREN management

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and other interested stakeholders in the 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 IREN. DNV GL is not responsible for any aspect of the nominated assets 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 IREN's management and used as a basis for this assessment were not correct or complete.

### **Basis of DNV GL's opinion**

DNV GL adapted our Green Bond Principles methodology, which incorporates the requirements of the GBP, to create a IREN-specific Green Bond Eligibility Assessment Protocol (henceforth referred to as "Protocol"). 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".

As per our Protocol, the criteria against which the 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 Sustainability 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 IREN 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:

#### **Initial Verification**

- Creation of an IREN-specific Protocol, adapted to the purpose of the BOND, as described above and in Schedule 2 to this Assessment;
- Assessment of documentary evidence provided by IREN on the BOND and supplemented by a highlevel desktop research. These checks refer to current assessment best practices and standards methodology:
- Discussions with IREN management, and review of relevant documentation;

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• Documentation of findings against each element of the criteria. Our opinion as detailed below is a summary of these findings.

#### Periodic Verification

- Assessment of documentary evidence provided by IREN on the BOND and supplemented by a highlevel desktop research, documentation review and interviews with key personnel from the issuer IREN. These checks refer to current assessment best practices and standards methodology;
- Discussions with IREN management, and review of relevant documentation;
- Review of the nominated projects and assets as described in Schedule 2 as at the time of Periodic Verification;
- Review and testing where possible of Reporting Data;
- Documentation of findings for Periodic Verification as detailed in this document. Our opinion as detailed below is a summary of these findings.

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### Findings and DNV GL's opinion

DNV GL's findings are listed below:

- **1. Principle One: Use of Proceeds.** IREN has reported use of the proceeds of the BOND to re finance projects and assets including:
  - Renewable Energy (32.7%)
  - Energy Efficiency (47.3%)
  - Waste Management Efficiency and Recycling (8.6%)
  - Waste Water Treatment (11.4%)

DNV GL reviewed the criteria for the project categories above to determine the eligibility of the nominated projects and assets.

- 2. Principle Two: Process for Project Evaluation and Selection. The BOND's proceeds have been allocated solely to refinance the assets as defined in Schedule 1. DNV GL has reviewed evidence that demonstrates that IREN regularly assesses opportunities for improvement and devises action plans and initiatives to mitigate negative environmental and social impacts from its operations.
- 3. Principle Three: Management of Proceeds DNV GL has reviewed evidence showing how IREN traced the proceeds from the Bond, from the time of issuance to the time of disbursement. The full amount of the proceeds will be managed within treasury or equivalent, and thereafter disbursed in accordance with the debt obligation. The details of the disbursement and the outstanding value will be tracked using IREN's internal financial reporting system. At the end of each financial period, IREN reviews the outstanding balance 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.
- **4. Principle Four: Reporting.** IREN has confirmed that it will include and maintain a dedicated section on the Green Bond in its Sustainability Report and its website. This includes a description of the project and value of the proceeds invested, as well as the associated qualitative and quantitative environmental impacts. IREN plans to report on a specified range of KPIs relevant to each of the nominated Projects and Assets within the bond as specified in Appendix 2 of the green Bond Framework. This Appendix also sets out a schedule of performance improvements forecast which IREN with subsequently report on through the term of the bond.

On the basis of the information provided by IREN and the work undertaken, it is DNV GL's opinion that the BOND meets the criteria established in the 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 Business Assurance Italia Srl

Sydney, 1 March 2018

**Mark Robinson** 

Manager, Sustainability Services DNV GL – Business Assurance

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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.

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### SCHEDULE 1: NOMINATED ASSET TO BE REFINANCED THROUGH IREN GREEN BOND

Project Group and Name	Eligible Green Category	Eligible Category (DNV)	Funded Amount (EUR)
BU Ambiente			254,180,345
Termovalorizzatore per produzione calore per tlr – Comune di Parma	Energy efficiency	Cogeneration Plant	212,056,840
Termovalorizzatore per produzione calore per tlr – Comune di Piacenza	Energy efficiency	Cogeneration Plant	0
Raccolta differenziata Torino + Emilia	Waste Management Efficiency & Recycling	Waste Management Efficiency & Recycling	42,123,504
BU Energia			152,799,109
Accumulatori teleriscaldamento del Bit (TO)	Energy efficiency	Energy distribution & management	3,912,992
Accumulatori teleriscaldamento del Martinetto (TO)	Energy efficiency	Energy distribution & management	11,277,657
Accumulatori teleriscaldamento di Mirafiori Nord (TO)	Energy efficiency	Energy distribution & management	1,891,980
Sottostazione scambio termico e pompaggio Lucento	Energy efficiency	Energy distribution & management	0
Scambio termico e pompaggio TRM Grugliasco (TO) e interconnessione grugliasco Beinasco	Energy efficiency	Energy distribution & management	2,010,241
Rete di teleriscaldamento Piacenza,collegamento e stazione di pompaggio Tecnoborgo (PC)	Renewable Energy	Energy distribution & management	5,652,481
Rete di teleriscaldamento PAI di Parma (PR)	Renewable Energy	Energy distribution & management	25,998,734
Sviluppo reti teleriscaldamento Torino (TO)	Renewable Energy	Energy Network Development	90,966,883
Sviluppo reti teleriscaldamento Emilia (RE)	Renewable Energy	Energy Network Development	6,779,058

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Mini Hydro La Loggia	Renewable Energy	Mini Hydro	4,309,083		
Mini Hydro Pianchette - Noasca	Renewable Energy	Mini Hydro	0		
Mini Hydro Giffoni riattivazione impianto Vassi	Renewable Energy	Mini Hydro	0		
IREN Rinnovabili			18,000,000		
Impianti Fotovoltaici Enìa Solaris presso Brindisi	Renewable energy	Solar	18,000,000		
BU Reti			66,800,546		
MIGLIORAMENTO IMPIANTI GENOVA - fino 2019	Waste Water Treatment	Waste Water Treatment upgrades	37,120,285		
MIGLIORAMENTO IMPIANTI REGGIO EMILIA	Waste Water Treatment	Waste Water Treatment upgrades	10,350,863		
MIGLIORAMENTO IMPIANTI DI PIACENZA	Waste Water Treatment	Waste Water Treatment upgrades	6,077,610		
MIGLIORAMENTO IMPIANTI DI PARMA	Waste Water Treatment	Waste Water Plant Upgrades	2,570,124		
CELSIUS - Impianto di turboespansione cogenerativa	Energy efficiency	Cogeneration Plant	1,437,736		
Investimenti idroelettrici	Renewable energy	Mini Hydro	9,243,929		
Total <sup>1</sup>	Total <sup>1</sup>				

<sup>&</sup>lt;sup>1</sup> The nominal issuance value for the bond was Euro 500 million with received proceeds after issue discount (Disaggio di emissione) of Euro 491.78 million.

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### **SCHEDULE 2: GREEN BOND REVIEW CRITERIA**

### 1. Use of proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
1a	Type of bond	The bond must fall in one of the following categories, as defined by the Green Bond Principles:  Green Use of Proceeds Bond Green Use of Proceeds Revenue Bond Green Project Bond Green Securitized Bond	Review of: - BOND Term Sheet - IREN Green Bond Framework Discussions with IREN management	The reviewed evidence confirms that the BOND falls in the category: Green Use of Proceeds Bond.
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 legal documentation for the security.	Review of: - BOND Term Sheet - IREN Green Bond Framework - Sub Project Performance and Financial Documentation  Discussions with IREN management	As identified by the BOND Term Sheet the purpose of the BOND is to use the proceeds to finance and refinance credit facilities for projects falling under the following categories:  • Renewable Energy (32.7%)  • Energy Efficiency (47.3%)  • Waste Management Efficiency and Recycling (8.6%)  • Waste Water Treatment (11.4%)  DNV GL's assessment concluded that these assets would present a low risk of GHG emissions relative to fossil fuels and qualify for inclusion under the Green Bond Principles within the Renewable Energy category.

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Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
1c	Environmen tal benefits	All designated Green Project categories should provide clear environmentally sustainable benefits, which, where feasible, will be quantified or assessed by the issuer.	Review of: - BOND Term Sheet - IREN Green Bond Framework - IREN Asset Specifications  Discussions with IREN management	DNV GL considers the improvements in waste collection and processing procedures resulting in 10% more sorted wastes for recycling and 10% less gross unsorted wastes within existing waste management areas to qualify as Green.  DNV GL considers the upgrade of existing Wastewaste management areas to qualify as Green.  DNV GL considers the upgrade of existing wastes within existing waste management areas to qualify as Green.  DNV GL considers the upgrade of existing waste wastes management areas to qualify as Green.  DNV GL considers the upgrade of existing wastewater Treatment Facilities to process 30% greater waste loads while meeting the current and forecast discharge standards to qualify as Green.  DNV GL considers Solar PV energy generations projects to qualify as Green.  DNV GL considers the energy network development associated with delivering energy from renewable energy generation and storage to qualify as Green.
1d	Refinancing share	In the event that a proportion of the proceeds may be used for refinancing, it is recommended that	Review of: - BOND Term Sheet	The proceeds of the BOND, as below, have been reported to be allocated to refinance the nominated projects assets listed in Schedule 1. This represents 100% of the Green Bond Proceeds

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Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
		issuers provide an estimate of the share of financing vs. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced.	<ul> <li>Bond disclosure         documentation</li> <li>BOND Proceeds and reporting         framework</li> <li>Discussions with IREN         management</li> </ul>	and between 55% and 100% refinancing of individual projects and assets.

## 2. Process for Project Selection and Evaluation

Ref.	Criteria	Requirements	Work Undertake	n	DNV GL Findings
2a	Investment- decision process	The issuer of a Green Bond should outline the decision-making process it follows to determine the eligibility of projects using Green Bond proceeds. This includes, without limitation:  • A process to determine how the projects fit within the eligible Green Projects categories identified in the Green Bond Principles;  • The criteria making the projects eligible for using the Green Bond proceeds; and  • The environmental sustainability objectives	Review of: - BOND Term Sheet - IREN Green Bond Framework - Appendix 2 of the Green Bond Framework	5.2 Process f  All the Eligible Requirements" environmental defined by IRE "Relevant Eligi Which grant vis with defined c fuels, Increase Improvement collection and  Appendix 2 increase in	or Project Evaluation and Selection  Projects / Activities are selected in respect of "Relevant Eligibility". The eligible investment projects must have a clear positive impact and Shall be aligned with the policies of sustainability and

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Ref.	Criteria	Requirements	Work Undertake	n	DNV GL Findings
				social criteria process of eva meet the requ The internal process of eva meet the request.  • Technic describ financi. • Accour report. • Sustain Functio. • Finance finance At the end of included in a Projects / Activ DNV GL confirmation of the Crite Appendix 2 of Principles eligi	and Committee reviews the half yearly and environmental and and key performance indicators (KPIs) to be used during the luation and selection to facilitate the reporting and to Ensure they irements of Green Bond Principles.  Tocess for evaluation and selection Involves: cal assessment: each project is proposed with a technical card bing characteristics, environmental benefits (KPI) and annual al data; nting / Planning assessment: annual data are checked and ed in respect of accounting and planning procedures; nability assessment: each project is selected according to bonal sustainability criteria and objectives e assessment: each project is selected according to Functional expective and or objectives this process, if all assessments are positive, the project will be portfolio of Eligible Projects / Activities (Portfolio of the eligible vities).  med this process to define a clear and repeatable system by which is identified and included or excluded from the Green Bond project eria making the projects eligible for inclusion contained withing the Green Bond Framework were in line with the green Bond ible categories and can be expected to result in quantifiable benefits as set out and scheduled with KPI metrics in Appendix
2b	Issuer's environment al 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.	Review of: - IREN Sustainabil Policy and Gover Framework - IREN Sustainabil - IREN Green Bond - Appendix 2 to th Bond Framework	ity Reporting d Framework e IREN Green	DNV GL reviewed the IREN Environmental and Sustainability Policy in addition to the Sustainability Reporting Framework for IREN and its subsidiary organisations.  IREN's Sustainability and CSR policies and governance frameworks form the basis for clear stakeholder reporting of relevant metrics such a GHG emissions, Energy generation, waste management, technological rollouts and other social and environmental metrics. The proposed reporting associated with

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Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
			Discussions with IREN management	the IREN Green Bond is in line with their existing Sustainability Reporting framework and metrics to stakeholders and investors.
				IREN's Sustainability reporting is conducted according to GRI G4 Guidelines with external review of their Sustainability Reporting.
				DNV GL notes that the performance of the nominated assets within the Bond pool is to be reported as a part of IREN's periodic Sustainability reporting as per the IREN Green Bond Framework.
				The selected reporting performance metrics for the nominated projects and assets as stated within Appendix 2 of the Green Bond Framework, are in line with the social and environmental governance framework demonstrated by IREN within the information provided on their website.
				DNV GL notes that in addition to the stated metrics, IREN has provided a forecast schedule of environmental performance for the nominated projects and assets for future reporting and performance evaluation purposes. This is noted to provide an additional layer of reporting and transparency for stakeholders
				We have also carried out a high-level media review of IREN. We have found no evidence to suggest that IREN or any of the assets are or have been operating in breach of national or local environmental regulations.
				Based on the evidence reviewed and the discussion we had with senior managers, we found nothing to suggest that IREN's environmental, social and governance framework is not in line with good practice of the industry in which it operates.

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## 3. Management of proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
3a	Tracking procedure	The net proceeds of Green Bonds should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner and attested to by a formal internal process that will be linked to the issuer's lending and investment operations for Green Projects.	Review of: - BOND term sheet - BOND Proceeds and reporting framework  Discussions with IREN management	The evidence reviewed shows how IREN has tracked the BOND's proceeds, from the time of issuance to the time of disbursement and through the bond tenor to date.  The full amount of the proceeds has reported to have been managed within treasury or equivalent, and thereafter disbursed in accordance with the debt obligations.  The details of the disbursement and the outstanding value have been tracked in IREN's internal financial system. At the 2017 financial period, the outstanding balance of the BOND has been tracked and reported.
3b	Tracking procedure	So long as the Green Bonds are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible green investments or loan disbursements made during that period.	Review of: - BOND term sheet - IREN Green Bond Framework  Discussions with IREN management	The evidence reviewed shows that IREN has traced the proceeds from the BOND, from the time of issuance to the time of disbursement, and reduced the net balance of proceeds by amounts in line with the assets debt repayment schedule. At the end of each financial period, the outstanding balance of the Bond will be reviewed.
3с	Temporary holdings	Pending such investments or disbursements to eligible Green Projects, the issuer should make known to investors the intended types of temporary investment	Review of: - BOND Management of Proceeds framework  Discussions with IREN management	The net proceeds of the Bond are being managed within treasury or equivalent, have been tracked and are reported to have been fully and immediately disbursed to the nominated accounts.

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Ref.	Criteria	Requirements	Work Undertaken	DNV GL Findings
		instruments for the balance of unallocated proceeds.		

## 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.	Discussions with IREN management	IREN will on an ongoing basis include a dedicated section on the Green Bond in its Sustainability Report. This will include description of the project and value of the proceeds invested, as well as the associated qualitative and quantitative environmental impacts. IREN plans to report on a number of project performance specific metrics as listed in Appendix 2 of the Green Bond Framework. In addition, IREN has provided a forecast schedule of environmental performance for the nominated projects and assets to be reported on through the term of the Green Bond.