

Methodology Note for Green bonds / Renewable Energy eligible category

11/03/2019



BPCE SUSTAINABLE DEVELOPMENT BOND FRAMEWORK

Key features

https://www.groupebpce.fr/en/Investors/Funding/Framework-of-the-Sustainable-Development-Bond-Program



Addressing key components of sustainability

BPCE's Sustainable Development Bond Framework is a two pillar strategy that targets environmental and social financings to ensure long term sustainability

Green Bonds

Focused on environmental sustainability and creating a positive contribution to the reduction of climate change and other environmental challenges:

- Renewable energy
- Energy efficiency
- Green buildings
- Clean Transportation
- Sustainable Water Management
- Sustainable Waste Management
- Sustainable Agriculture
- Biodiversity conservation

Social Bonds

Human Development Addressing social sustainability challenges through contributions key to human development

- Healthcare
- Education
- Social Housing
- Social development

Local Economic Development

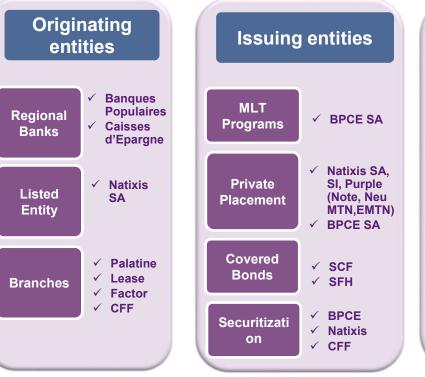
Supporting regional and community development

- Employment conservation and creation in economically or socially underprivileged areas
- Affordable basic infrastructure



BPCE's Sustainable Development Bond Framework encompasses the main entities of the group and all issuing signatures, for defined types of assets

Scope of the program







GBP & SBP Compliance

The Sustainable Development Bond Framework is aligned with the recommendation of the ICMA (Green & Social Bond Principles)

Use of **Proceeds**

SOCIAL

Human Development Healthcare

- Education
- Social Housing · Social development

Local Economic development

- Employment conservation & creation • Biodiversity
- Affordable basic infrastructure

GREEN

- Renewable Energy
- Energy Efficiency
- Green buildings
- · Clean transportation
- · Sustainable Water management
- · Sustainable Waste Management
- Conservation
- · Sustainable Agriculture

Selection process & **Project** Evaluation

· For each eligible category, a methodology note defines specific eligibility criteria, including ESG

selection criteria and reporting indicators

- A Sustainable Development Bond Governance Committee and an Operational Committee oversee both the methodologies and actual implementation of both framework and methodology notes
- Framework and methodology notes, including any substantial change to any, will be subject to the prior review by the provider of a second party opinion.

Management of Proceeds

- · Net bond proceeds will be granted to Groupe BPCE's regional banks or subsidiaries, by way of inter-company loans when necessary
- Green and social Bond proceeds will not be fungible with any other source of wholesale funding.
- Lookback period of max 3 years
- Pending allocation or reallocation, proceeds (swapped into euros if the bonds are not issued in euros) will be invested in cash or equivalents.
- At least once a year, earmarked eligible assets within the pool will be updated / screened for potential changes in eligibility status

External review

Reporting

- Once a year, as long as Green Bonds or Social Bonds are outstanding, BPCE will publish reports on:
- 1. Allocations by eligible project category and for each bond issue some examples of loans refinanced:
- 2. Yet to be allocated amount of cash or cash equivalents:
- Relevant environmental and/or social key performance indicators (outputs / impacts).
- Assurance report provided by BPCE auditor on the compliance, in all material respects, of (i) the eligible loans with the selection criteria, and (ii) the pending cash allocation



Dedicated governance

*Ad-hoc dedicated committees may be created within the financing entities to identify eligible assets, apply exclusion criteria, monitor the eligible asset pool and produce ad-hoc reporting at issuance and/or batch of issuance levels

Groupe BPCE has established a dedicated Governance (and ad-hoc comitology*) to monitor its Sustainable Development Bond Program

Sustainable Development Bond Governance Committee

Joint sponsorship of Groupe BPCE's CFO and Head of Environmental, Social, and Governance (ESG) with participation from ESG, business development and finance teams of the Group regional banks and Natixis, Head of MLT Funding & Investor relations, Head of Asset and Liability Management (ALM), Head of Portfolio

Management and external ESG experts



Strategy & Supervision

- Issuance targets and follow up of deliveries,
- · Framework, methodology notes and reporting review and approval,
- Supervision of the governance and process for eligible asset pool evaluation and selection,
- · Deal reviews and enforcement of lessons learnt

Innovation

- Steering BPCE group's entities sustainable product (loans) innovation process, including how to embed impact and eligibility criteria in products characteristics
- Definition of new issuance types

Dialogue and engagement

- Market practice review and dialogue with external stakeholders
- Support of business initiatives and dialogue with clients

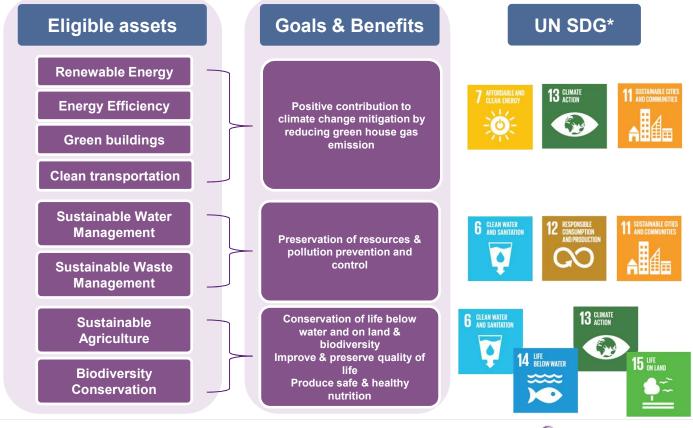


FOCUS ON GREEN BONDS

FOCUS ON GREEN BOND ISSUANCE

BPCE's Green Bond Framework is aligned with the Green Bond Principles defined by ICMA in terms of Use of Proceeds

Eligible Categories





RENEWABLE ENERGY METHODOLOGY

GREEN BOND METHODOLOGY FOR RENEWABLE ENERGY

The following methodology description is related to the "Renewable Energy" Eligible category under BPCE « Green bond » type of issuance.

1 Green Bonds Focused on environmental sustainability and creating a positive contribution to the reduction of climate change and other environmental challenges

✓ Renewable Energy

- ✓ Energy efficiency
- ✓ Green buildings
- √ Clean transportation
- ✓ Sustainable Water management
- ✓ Sustainable Waste management
- ✓ Sustainable Agriculture
- ✓ Biodiversity conservation

Renewable energy methodology

Use of Proceeds

Renewable energy projects wind (on-shore and offshore), and/or solar power, and/or hydro projects, and/or biomass

Management of proceeds

- Proceeds allocated through intragroup loans
- Eligible pool of assets updated at least yearly
- 3 years look back period
 Audit trail: Green flags
- Audit trail : Green flags introduced in treasur

Reporting

- Issuances
- Eligible asset pool: size, split by category, MW, kWh
- Impact: Annual reduced/avoided GHG emissions at pool and EUR invested (EIB methodology)
- External assurance : auditor's report





Selection & evaluation

Environmental impact mitigation: biodiversity, local disturbances from construction to exploitations phases, landscape

Local impact mitigation & Stakeholders' engagement and consultation

ESG due dilligence process

Business practices' review : money laundering, corruption, conflict of interest

Suppliers' audit : financial stability and product quality

Labour and human rights conformity and local requirements

Governance

- BPCE Sustainable Development Bond Committee
- Ad-hoc dedicated committees within financing entities

External review

- Second Opinion
- Third party audit of proceeds allocation and actual eligibility



1. USE OF PROCEEDS

Eligible Assets: Renewable Energy Projects





Financing or refinancing of loans for the development, construction, operation and maintenance of renewable energy projects.

- Renewable Energy Projects* includes existing, on-going and/or future projects of conception, construction, operation and/or maintenance of renewable energy production units of energy produced from wind (on-shore and offshore), and/or solar power (photovoltaic or concentrated solar power), and/or hydro, and/or biomass projects.
- Eligible Renewable Energy Assets include loans:
 - Which meet the Selection Criteria developed by the BPCE Groupe financing entities and subject to the prior review by the provider of a second party opinion.
 - For large hydro projects: relevant ESR or sustainability specialists will perform an assessment on the basis of the IFC Performance standards, completed with additional criteria from the World Commission on Dam and the Safeguard Policy on Safety of Dams. Clients are invited to use a mapping and impact management tool from the Hydropower Sustainability Assessment Protocol (International Hydropower Association)
 - For biomass projects: additional analysis will cover the World Bank's General EHS Guidelines with a specific focus on the main challenges: 1/ Sustainable sourcing (sustainable raw material and sourcing process, including transport and land use); 2/ Competition with food
- For each bond, the issuing entity will publicly disclose the estimation of ex-ante environmental benefits and the share of refinancings, once proceeds allocated and at the least annually within the reporting.
- O At this stage, this methodology note covers the « project finance » loan format originated by any entity within Groupe BPCE.





2. PROCESS FOR SELECTION AND EVALUATION

Methodology for Renewable Energy Project Asset Selection (1/2) Groupe BPCE will select renewable energy loans thanks to a specific methodology...

Renewable Energy loans pipeline

Eligible loans categories Renewable Energy Projects

Eligibility Criteria

- Loans financing or refinancing only renewable energy projects: wind (on-shore and offshore), and/or solar power, and/or hydro projects, and/or biomass.
- Project closing which had taken place in the last three years
- Only term loan facilities, of which only drawn amounts are considered eligible
- All greenfield* projects are eligible (agreed upon Equator Principles)
- Regarding brownfield projects, only projects located in "designated countries" +
 projects in "non designated countries" which have undergone an independent
 Environmental & Social assessment in line with the main principles of Equator
 Principles ("EP-like")
- A case by case sustainability analysis will be performed for large hydro projects (projects considered as compliant with the Equator Principles could be excluded)

ESG selection criteria

- E&S risk assessment
- Client risk assessment (based on KYC and LAB definitions).
- ESG controversies check (sector, client, project) at project approval and / or legal authorization.

Eligible pool of loans

Validated by the Committee

ESG Selection criteria

(detailed in appendix)

Environmental impact mitigation: biodiversity, local disturbances from construction and exploitation phases, landscape

Local impact mitigation

& Stakeholders' engagement and consultation

ESG due diligence process

Business practices' review: money laundering, corruption, conflict of interest

Supplier's audit: financial stability and product quality

Labour and human rights conformity and social requirements

Cf details in Appendices



¹ KYC: Know your customer ² LAB: Anti money Laundering ⁴ ESR: Environmental & Social Responsibility team

^{*} Greenfield: new construction, including significant extension of existing facilities; Brownfield: refinancing of existing facilities with no or little extension.

^{**} As defined by the Equator Principles - http://www.equatorprinciples.com/index.php/designated-countries

^{***} Project closing means the signing of the credit documentation and that's when Natixis contractually commits to make the loan available to the horrower

2. PROCESS FOR SELECTION AND EVALUATION

Methodology for Renewable Energy Project Asset Selection (2/2)

...and selection workflow

Loan pipeline

1.Look-back period

- Loans financing
- Loans refinancing

Project closing which had taken place in the last three years

- 2. Type of projects*
- Greenfield projects
- Brownfield projects
- Projects located in "designated countries" are eligible
- Projects in "non designated countries" must have undergone an independent Environmental & Social assessment in line with the main principles of Equator Principles ("EP-like")

3. Climate change mitigation objective

- Wind (on-shore and offshore)
- Solar power (photovoltaic or concentrated solar power)
- Hydro

For large hydro project (excluding projects considered as compliant with the EP): a case by case sustainability analysis will be performed by relevant ESR or sustainability specialists based on the IFC Performance standards, completed with additional criteria from the World Commission on Dam and the Safeguard Policy on Safety of Dams**

Biomass

Additional analysis will cover the World Bank's General EHS Guidelines with a specific focus on the main challenges

- Sustainable sourcing (sustainable raw material and sourcing process, including transport and land use)
- Competition with food
- Nuclear
- Fossil fuel

4. Do no harm sustainability objective (ESG selection criteria***)

Needing deeper consideration to determine eligibility

- E&S risk and impact assessment and mitigation measures at project level
- Environmental impact mitigation: biodiversity, local disturbances from construction and exploitation phases, landscape
- Local impact mitigation, Stakeholders' engagement and consultation
- ESG due diligence process
- Business practices' review: money laundering, corruption, conflict of interest
- Supplier's audit: financial stability and product quality
- Labour and human rights conformity and social requirements
- Client risk assessment (based on KYC and LAB definitions)
- ESG controversies check (sector, client, project) at project approval and / or legal authorization.

Eligible pool of loans

*agreed upon Equator Principles (EP) ** In addition, clients are invited to use a mapping and impact management tool from the Hydropower Sustainability Assessment Protocol (International Hydropower Association)



Eligible

Exclusions

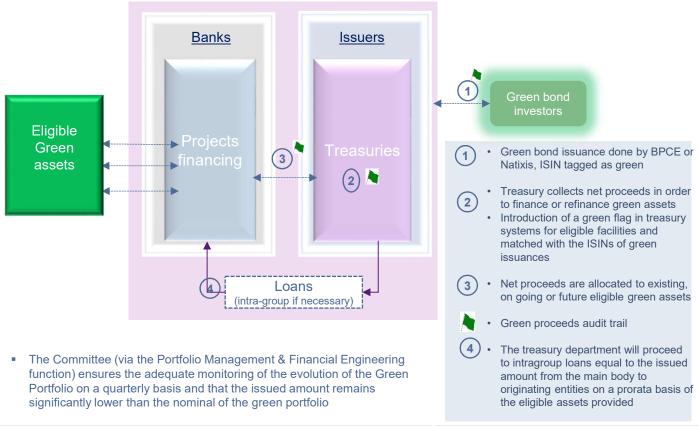
or subject to conditions



3. MANAGEMENT OF PROCEEDS

Tracking and allocation process

Groupe BPCE will implement dedicated processes to ensure tracking and transparency





4. REPORTING

Two levels of reporting

Groupe BPCE will report annually both at bond and program levels on allocation and environmental impacts

		AT	BOND (or bate	ch of bonds	or notes) LEVEL		
Detail of the notes issued	: issuer, ISIN, cur	: issuer, ISIN, currency, size, issue date, maturity					
Eligible projects			incl. Allocated amounts (EUR)		Agregated Output and Impact in	dicators (at bond level)	
Onshore wind projects				MW installed	MWh produced or expected		
Offshore wind projects				MW installed	MWh produced or expected	Average GHG emissions reduced / avoided	
Solar PV projects				MW installed	MWh produced or expected	per EUR invested at bond level Total GHG emissions reduced/avoided (in kild	
Hydro projects				MW installed	MWh produced or expected	of CO2) at bond level	
Biomass projects				MW installed	MWh produced or expected		
			AT ELIGIBLE	POOL OF AS	SETS LEVEL		
Eligible projects	Size of the total eligible pool	incl. Allocated amounts (EUR)	% financing vs refinancing	Agregated Output and Impact indicators (at portfolio level)			
Onshore wind projects				MW installed	MWh produced or expected		
Offshore wind projects				MW installed	MWh produced or expected		
Solar PV projects				MW installed	MWh produced or expected	Annual GHG emissions reduced/avoided (in kilo of CO2) at eligible pool level	
Hydro projects				MW installed	MWh produced or expected	Rid of CO2/ at eligible poor level	
Biomass projects				MW installed	MWh produced or expected		
ххххх							

- O Reporting will only include the pro-rated share of output and impact indicators that corresponds to the project amount financed by the Green Bond (green bond share of financing VS. total project amount).
- Reporting methodologies and assumptions used in the quantitative determination are detailed in appendix
- Project and Sponsor names Due to French banking laws, BPCE, Natixis and other group entities cannot disclose
 the name of the underlying projects or sponsors. Projects specific data will thus be anonymized.



5. EXTERNAL REVIEW

Second party
Opinion at
methodology note
level

Groupe BPCE has appointed VigeoEiris as Second Party Opinion on the Renewable energy methodology note

VIGEO EIRIS' OPINION

Vigeo Eiris is of the opinion that the Green Bonds considered to be issued by Groupe BPCE entities is aligned with the voluntary guidelines of the Green Bond Principles.

We express a reasonable assurance⁵ (our highest level of assurance) on the Issuer's commitments and the Bonds' contribution to sustainability.

The Eligible Projects are likely to contribute to two United Nations' Sustainable Development Goals, namely Goal 7: Affordable and Clean Energy, and Goal 13: Climate Action.



APPENDICES



INFRASTRUCTURE PROJECT FINANCING

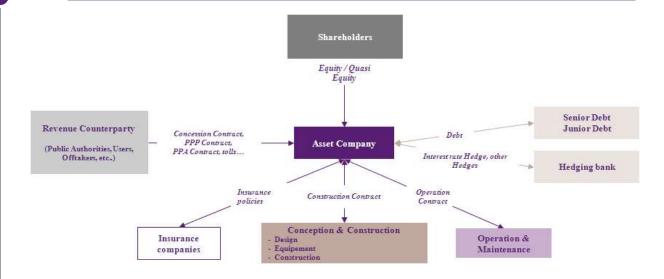
Infrastructure assets can be defined as:

- Large long-term physical assets that provide essential products or services
- ✓ Limited or no competition and high barriers to entry
- ✓ Operates in a regulated sector.

Project finance generally entails a project (or group of projects) isolated within a fixed-term SPV (Special Purpose Vehicle) created for the construction (greenfield) or management (brownfield) of the financed assets.

Project finance is a method of financing in which the lender considers, first and foremost, the cash flows generated by the project both as a source of repayment and as security against long-term exposure.

Usual transaction structure for a Project Finance transaction



Asset segmentation of Infrastructure renewable Project financing





DETAIL OF THE ELIGIBILITY CRITERIA

ESG Selection criteria – Generally applicable

	ESG Selection criteria - Supporting elements and assessment documents					
	Greenfield assets (new construction, including significant extension of existing facilities)	Brownfield assets (refinancing of existing facilities with no or little extension)				
Environmental impact mitigation: biodiversity, local disturbances from construction and exploitation phases, landscape	E&S risk-management procedure, embedded in the internal loan approval process – e.g. Natixis' Equator Principles procedure Technical and legal reviews Impact assessment studies, especially E&S requirements of project's specification* Construction and exploitation permits (incl. ICPE file – when applicable)	Technical and legal reviews (including construction and exploitation permits) For projects located outside the "designated country list" (cf EP*), independent review including "Equator Principles-like" screening				
Local impact mitigation & Stakeholders' engagement and consultation	E&S risk-management procedure, embedded in the internal loan approval process – e.g. Natixis' Equator Principles procedure Legal reviews Local impact assessment studies Construction and exploitation permits (incl. ICPE file – when applicable)	Technical and legal reviews (including construction and exploitation permits) For projects located outside the "designated country list" (cf EP*), independent review including "Equator Principles-like" screening				
ESG due diligence process	E&S risk-management procedure, embedded in the internal loan approval process - E.g.: Natixis' Equator Principles procedure Construction and exploitation permits (incl. ICPE file – when applicable) Know Your Customer procedure > Risk mapping on project shareholders (SPV members) Contractual clause demanding from sponsor to report any major change to operating conditions (notably legal proceedings from local communities)	Technical and legal reviews (including construction and exploitation permits) For projects located outside the "designated country list" (cf EP*), independent review including "Equator Principles-like" screening Know Your Customer procedure > Risk mapping on project shareholders (SPV members) Contractual clause demanding from sponsor to report any major change to operating conditions (notably legal proceedings from local communities)				
Business practices' review: money laundering, corruption, conflict of interest	Know Your Customer procedure Compliance with LAB (anti-money laundering) Long term commitment	Know Your Customer procedure Compliance with LAB (anti-money laundering) Long term commitment				
Supplier's audit: financial stability and product quality	Project finance teams' have a dedicated vetting process for suppliers as well as the recommendations from the Lenders' Technical adviser.	Project finance teams' have a dedicated vetting process for suppliers as well as the recommendations from the Lenders' Technical adviser.				
Labour and human rights conformity and social requirements	E&S risk-management procedure, embedded in the Project finance teams' internal loan approval process – e.g. Natixis' Equator Principles procedure TNE law compliance Technical and legal reviews (incl. of contractual clause on respect of labour and human rights and social legal requirements regarding international (SPV contracts))	Technical and legal reviews (including construction and exploitation permits) For projects located outside the "designated country list" (cf EP*), independent review including "Equator Principles-like" screening Technical and legal reviews (incl. of contractual clause on respect of labour and human rights and social legal requirements regarding international (SPV contracts))				



DETAIL OF THE ELIGIBILITY CRITERIA

The regulatory context in France provides a robust framework in terms on ESG risks management, especially with mandatory requirements and impact assessments within the ICPE (*Installation Classée pour la Protection de l'Environnement*) regulation*

ESG Selection criteria – France contextualization

	ESG Selection criteria - Supporting elements and assessment documents, applicable for both Greenfield and Brownfield assets
Environmental impact mitigation: biodiversity, local disturbances from construction and exploitation phases, landscape	ICPE file Construction and exploitation permits Technical and legal reviews (incl. on environmental considerations and specifications) Environmental impact assessment studies (if not included in the ICPE file – for registration and declaration status)
Local impact mitigation & Stakeholders' engagement and consultation	ICPE file (local impact assessment studies) Construction and exploitation permits (public meeting / inquiry results included in the permitting process) Legal reviews (incl. on social considerations and stakeholders' engagement) Local impact assessment studies, incl. in environmental impact assessment studies
ESG due diligence process	E&S risk-management procedure, embedded in the internal loan approval process Construction and exploitation permits Know Your Customer procedure Contractual clause demanding from sponsor to report any major change to operating conditions (notably legal proceedings from local communities)
Business practices' review: money laundering, corruption, conflict of interest	Know Your Customer procedure Compliance with LAB (anti-money laundering) Long term commitment
Supplier's audit: financial stability and product quality	Referenced list of suppliers And/or Technical Review
Labour and human rights conformity and social requirements	TNE law compliance (France Energy Transition Law) Technical and legal reviews (incl. of contractual clause on respect of labour and human rights and social legal requirements regarding international (SPV contracts))

Due to the highly regulated context regarding ESG issues in France, ESG selection criteria will be all covered within:

- ICPE file
- Construction and exploitation permits
- Technical and legal reviews
- Environmental impact assessment studies (if not included in the ICPE file – for registration and declaration status)
- Know Your Customer file
- Contractual clause demanding from sponsor to report any major change to operating conditions

*http://www.installationsclassees.developpement-durable.gouv.fr/



FOCUS ON FRANCE

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The regulatory context in France provides a robust framework in terms on ESG risks management, especially with mandatory requirements and impact assessments within the ICPE (*Installation Classée pour la Protection de l'Environnement*) regulation*

	Bir	nding vs Volonta	ry			ESG Select	ion Criteria		
Project finance legal / business processes and supporting documents*	French Legal Requirement	Project Finance / Banking Standard Market Practice	Ad-hoc processes	Environmental impact mitigation	Local impact mitigation & Stakeholders' engagement and consultation	ESG due diligence process	Business practices' review	Supplier's audit	Labour and human rights conformity and social requirements
ICPE file (public meeting / inquiry results included in the permitting process)	when applicable								
Construction and exploitation permits (incl. public meeting / inquiry resincluded in the permitting process)	ults								
Technical reviews (incl. on environmental considerations and specifications)		\							
Legal reviews (incl. on social considerations and stakeholders' engagement, contractual clause on respect of labour and human rights social legal requirements regarding international (SPV contracts))	and	~							
Environmental / Local impact assessment studies (if not included in the ICPE file – for registration and declaration status)	е	~							
Know Your Customer procedure		~							
Compliance with LAB (anti-money laundering)		~							
Referenced list of suppliers			~						
Long term commitment			~						
E&S risk-management procedure, embedded in the internal loan approprocess (incl. In the permitting process)	val 🗸		~						
Contractual clause demanding from borrower to report any major chang operating conditions (notably legal proceedings from local communities		~							
* applicable for both Greenfield and Brownfield projects									1

GROUPE BPCE

RENEWABLE ENERGY EXAMPLE OF ELIGIBLE WIND PROJECT

Parc Eolien de Sainte Rose – Antilles



Valorem Sainte Rose – The Guadeloupe

	Term Sheet
Туре	Construction Loan
Sponsors	Valorem 60% Caisse des Dépôts et Consignations 30% Syndicat Mixte d'Electricité de la Guadeloupe 5% Région Guadeloupe 5%
Transaction size	Eur 45m
Maturity of the loan	15 years
Financial Close	June 2017

Key Features

- ✓ Largest Wind Project of the Guadeloupe
- ✓ Dedicated Energy Storage System & Energy Management System developed by Valorem aiming at levelling the production level
- ✓ Caisse d'Epargne CEPAC acted as Arranger and joint creditor with Agence Française de Développement (AFD)







- 16 MW Wind Turbines Plant located in Guadeloupe, Lesser Antilles, France
- Biggest renewable energy project of the island that contributes to reduce the reliance on thermal plants
- The Project is developed on a Build and Operate basis by Valorem
- The Wind Turbines have a rated power of 2,000 kW each, with 90 meters of diameter and a maximum rotation speed of 19 units per minute and weight 361t
- The plant will operate under a 15-year PPA agreement with the Electricité de France and benefits from the tariffs granted by regulation to area with strong cyclonic risk
- Total project costs of EUR 48m are financed through a EUR 45m term facility.
- The original bank pool comprises CE PAC & Agence Française de Développement



RENEWABLE ENERGY EXAMPLE OF ELIGIBLE SOLAR PROJECT

Albioma Solaire – Reunion & Mayotte



Albioma Solaire - The Reunion

	Term Sheet
Туре	Refinancing & Construction Loans
Sponsors	Albioma Solaire Reunion
Transaction size	Eur 95m
Maturity of the loan	12 to 21 years
Financial Close	June 2017

Key Features

- √ 103 Individual Plants
- ✓ Plants benefit from the ISO 14001 certification
- ✓ Caisse d'Epargne Provence Alpes Corse acted as sole creditor



- 30.5 MW Solar Plants located in the Réunion & Mayotte, Overseas France including 15MW of plants to be built
- Contributes to reduce the reliance on thermal plants and to abandon recourse to fossil energies by 2030
- The Project is developed on a Build and Operate basis by Albioma a seasoned operator of renewable energy plants in overseas France and is secured by the a 20-year PPA agreement with the Electricité de France
- The financing covers more than a hundred of individual plants situated in the Réunion and the island of Mayotte



RENEWABLE ENERGY EXAMPLE OF ELIGIBLE SOLAR PROJECT

Sweihan Solar PV IPP – United Arab Emirates



Sweihan Solar PV IPP – United Arab Emirates

	Term Sheet
Туре	Loan (Soft Mini Perm)
Sponsors	Abu Dhabi Water and Electricity Authority ("ADWEA") (60%) Marubeni Corporation (20%) JinkoSolar Holding Co., Ltd. (20%)
Transaction size	USD 665,000,000
Maturity of the loan	c. 24 years post completion
Financial Close	May 2017

Key Features

- ✓ World's largest solar IPP to date
- ✓ Lowest levelized cost of electricity ("LCOE") ever achieved globally at this time, with an LCOE of US\$ 2.94c per kWh
- ✓ Natixis acted as Mandated Lead Arranger, Technical Bank and Hedge Provider





- 1,177 MWp Solar PV Plant located in Sweihan, Abu Dhabi, UAE
- The Project is developed on a Build, Own and Operate basis by ADWEA, Marubeni and JinkoSolar
- The plant will operate under a 25-year PPA agreement with the Abu Dhabi Water & Electricity Company ("ADWEC", fully owned subsidiary of ADWEA)
- Scheduled COD is set for 1st May 2019. EPC Contractor is Sterling & Wilson. JinkoSolar will supply the
 monocrystalline PV modules and Ingeteam Energy will provide the inverters. During the first two years of
 operation, the operation & maintenance will be undertaken by the EPC contractor, and will then be carried inhouse
- Total project costs of US\$ 872m are financed through a US\$ 648m term facility structured as a soft mini perm, with remaining costs funded by equity and pre-completion revenues based on a debt-to-equity ratio of 74:26. An additional standby facility was also raised to fund any potential cost overruns
- The original bank pool comprises Natixis, MUFG, MUTB, the Norinchukin Bank, SMBC, CA-CIB, BNPP and First Abu Dhabi Bank



RENEWABLE ENERGY EXAMPLE OF ELIGIBLE OFFSHORE WIND PROJECT

Galloper – United Kingdom











Galloper - United Kingdom

Term Sneet		
Туре	Loan	
Sponsors	Siemens Financial Services (25%) RWE (25%) Green Investmenk Bank (25%) Macquarie (25%)	
Transaction size	GBP 1,370,000,000	
Maturity	c.15 years post completion	

Key Features

- First offshore wind deal arranged by Natixis in the UK, the largest offshore wind market in Europe
- Strong experience and track-record of the Sponsors and contractors. Notably RWE, as Construction & Operation Manager and Offtaker, and Siemens, as Turbine Supplier and O&M Contractor
- Solid off-take regime with PPAs signed with Statkraft (A-S&P) and RWE (BBB+ S&P) over debt maturity ,
- Solid and proven RO regime offering a tail of 4 years vs debt maturity

- The project comprises the design, construction, operation and maintenance of the 336MW offshore wind farm Galloper located in the North Sea off the coast of Suffolk, England
- Contractual structure during construction is organized around 5 major contracts during construction with reputable counterparties, all of which are in the EPCI form, hence limiting interface risks, enabling clear triggers for liquidated damages and reducing knock on effects of delays
- During operations, the scheduled and unscheduled maintenance of the WTGs and all additional supplies of equipment by Siemens is covered under a 'full service' offshore long term program contract with Siemens matching debt maturity and including vessel provision and a strong 95% technical availability guarantee. The Project will be managed during construction and operation by RWE utilizing its significant track-record (1.4 GW of offshore wind built and operated).
- The Project is expected to benefit from renewable support under the RO regime for a term of 19 years. Imbalance risk will be borne by both offtakers and power price forecasts provided by market consultant Poyry consider generation weighted assumptions for the profile cost effect. The Term Loan has been sculpted and amortizing over the debt maturity of c.15 years, thereby leaving 4 year-tail vs. RO maturity.
- Natixis acted as Mandated Lead Arranger. In that transaction Natixis also acted as Insurance Bank as well as Hedging Bank and Bookrunner.



DEFINITION, ASUMPTIONS AND REFERENCES

- The **Equator Principles defined Designated Countries** as countries deemed to have robust environmental and social governance, legislation systems and institutional capacity designed to protect their people and the natural environment. As of September 2017, the following countries are Designated Countries: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Republic of Korea, Latvia, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States.
- The 8 IFC performance standards :
 - 1. Assessment and Management of Environmental and Social Risks and Impacts
 - 2. Labor and Working Conditions
 - 3. Resource Efficiency and Pollution Prevention
 - 4. Community Health, Safety and Security
 - 5. Land Acquisition and Involuntary Resettlement
 - 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources
 - 7. Indigenous Peoples
 - 8. Cultural Heritage
- GHG accounting methodology and assumptions The determination of the GHG emissions from projects has been released on the EIB methodology (Methodologies for the Assessment of Project GHG Emissions and Emission Variations Version 10,1)
 http://www.eib.org/attachments/strategies/eib-project_carbon_footprint_methodologies_en.pdf For Biomass, GHG emissions avoided are based on IPCE documentation or the Business plan
- Annual energy produced Figures are last annual project energy production. If such figures are not available, figures are the estimated annual energy production (based on the project business plan)

