S&P Global
Ratings

Reminder: this is a point in time evaluation and this Green Evaluation was issued over 18 months ago.

Green Evaluation

Three Gorges Finance II (Cayman Islands) Ltd.

Entity:	Three Gorges Finance II (Cayman Islands) Limited
ICB subsector:	Renewable Energy Equipment
Location (HQ):	Beijing, China
Financing value:	€650 million
Amount evaluated:	100%
Evaluation date:	July 10, 2017
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Transaction Overview

On June 21, 2017 Three Gorges Finance II (Cayman Islands) Ltd. issued €650 million of unsecured unsubordinated 1.30% notes due 2024 guaranteed unconditionally and irrevocably by China Three Gorges Corp. The financing is a labelled green bond. Proceeds will be used to finance European renewable energy projects based in Portugal and Germany acquired by China Three Gorges Corp.

Green Evaluation Overview

Transparency — 67
- Use of proceeds reporting
- Reporting comprehensiveness

Governance — 73
- Management of proceeds
- Impact Assessment Structure

Mitigation — 91

Sector	→	Net Benefit Ranking	→	Hierarchy overlay
Renewable Energy		Onshore and Offshore Wind		

Adaptation — NA

100
E1
E2
E3
E4
0

Overall Score

E1/83

Weighted aggregate of three (Transparency + Governance + Mitigation)

Project Description

China Three Gorges Corp. is the largest hydropower enterprise in the world in terms of installed capacity. However, the proceeds from the €650 million issuance evaluated in this report will be allocated to wind power projects in Germany and Portugal totaling 710MW of installed capacity. This is in line with China Three Gorges Corp.'s corporate strategy, under which it has acquired and plans to continue acquiring assets, both in China and further afield, to grow and diversify its renewable energy business. Accordingly, to complement its leadership in hydropower, the company is also engaged in wind power, solar power, and other forms of clean energy.

The Portuguese assets consist of 12 onshore wind projects in five regions across Portugal. The assets are fully operational, have an average age of six years, and total 422 MW of installed capacity. The portfolio benefits from a fixed feed-in tariff (FIT) that is indexed to annual inflation. On average, the remaining FIT period is nine years. After the FIT ends, all the assets are entitled to benefit from an additional period of seven years during which there is a floor and cap on the market price of its remuneration.

The other asset to which proceeds will be allocated is WindMW GmbH (or also referred to as Meerwind) , an offshore wind project in the North Sea off Northern Germany. The project includes 80 Siemens 3.6MW wind turbine generators installed on monopole foundations. It is 108 km from the mainland and 23 km from Meerwind's dedicated tailor-made operations base on Helgoland Island. The project has been operational since February 2015 and has a total installed capacity of 288 MW. In 2016, it produced 1,155 GWh of electricity and sold 1,134 GWh. Germany has supportive policies for offshore wind and renewables, largely due to the Energiewende (energy transition), which received legislative support in 2010 and aims to achieve a target of 60% renewable energy sources in final energy consumption by 2050. This environment means that the project faces no market risk during its first 12 years, as it benefits from a FIT with TenneT Holding B.V.

Scoring Summary

This transaction received an overall score of 83, which equates to E1, the highest level in our scoring range of E1 – E4 for mitigation proceeds. The overall score of 83 is a weighted aggregate consisting of strong scores in both Governance (73) and Transparency (67) and an excellent Mitigation score of 91, which reflects the net benefit ranking of the two projects of 64 and the strong positive adjustment from the assets being in the renewable sector. Despite the scores in Transparency and Governance being strong, they pull the overall score down from the excellent Mitigation score of 91.

Rationale

Summary

- Bond proceeds will be allocated exclusively to renewable energy projects (onshore and offshore wind), which are positioned at the top of our carbon hierarchy given their contribution to decarbonization.
- Our analysis of the Governance and Transparency of the transaction is positive. The financing has been aligned with the guidelines set out in the Green Bond Principles.

Key Strengths And Weaknesses

At 710 MW, the projects financed by the bond's proceeds constitute a considerable amount of installed capacity. When evaluating these projects, we used local baselines in Portugal and Germany to determine their net environmental benefits. In the case of renewable energy, we use the carbon intensity of the local power grid to estimate the emissions that a given project is likely to offset over its expected life. Offshore projects generally receive a higher Net Benefit Ranking because such assets tend to generate more energy and have higher capacity factors than their onshore counterparts.

The power grid in Germany, where the majority (€400 million) of the proceeds will be allocated, has a higher carbon intensity than Portugal. This higher carbon intensity—combined with the higher average capacity factors that offshore wind projects achieve—leads to our view that these projects will offset more carbon emissions than other similar projects worldwide. This results in Net Benefit Rankings of 79 for the German project and 40 for the Portuguese projects as compared with other renewable projects around the world. We weight these results based on the relative proportion of proceeds allocated in each project hence the German Net Benefit Ranking is more heavily weighted. Because S&P Global Ratings views renewable energy projects as having the highest decarbonization potential, we adjusted these scores upwards through the application of our carbon hierarchy to get a final Mitigation score of 91.

China Three Gorges Corp. has stated its commitment to report on both the allocation of proceeds and the environmental impact; we view this as positive in our assessment of the transaction's Transparency and Governance, especially because it has committed to do so annually. However, the Transparency score is hindered slightly by a lack of clarity on which environmental impact metrics it will disclose (capacity factor, carbon dioxide equivalent (CO_2e) emissions avoided, etc.).

The financing also benefits from clear screening criteria that emphasize environmental benefit. The screening process also involves a project review by the company's environmental protection department and the social responsibility office. Another aspect that contributes towards the strong Governance score is the commitment to track and monitor proceeds to ensure that they reasonably match and align with the green projects selected. However, we would have viewed further separation of green proceeds from non-green—such as through the use of a subaccount—as even more robust.

Project level scores

Sector	Location	Project	Use of Proceeds (€ Mil.)	Use of Proceeds treatment	Net Benefit Ranking
Green Energy	Germany	Offshore Wind	€400	Actual	79
Green Energy	Portugal	Onshore Wind	€250	Actual	40
			€650		

Green Evaluation Process

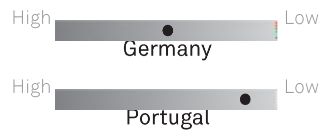
67 Transparency

73 Governance

91 Mitigation

Weighted aggregate of three (Transparency + Governance + Mitigation)

E1/83 Overall score



Technology category	Local baseline of carbon intensity	Net Benefit Ranking	→ Carbon hierarchy adjustment	Environmental Impact Score	Proceeds (€ Mil.)
Wind power		**64**	**Green energy**	**91**	**€650**
Solar power					
Small hydro					
Large hydro					
Energy management and control			Energy efficiency		
Unspecified					
Green transport without fossil fuel combustion			Green transport		
Green buildings – new build			Green buildings		
Unspecified					
Energy efficient projects (industrial efficiencies)			Energy efficiency		
Green transport with fossil fuel combustion			Green transport		
Green buildings refurbishment			Green buildings		
Unspecified					
Nuclear			Nuclear power		
Large hydro in tropical areas			Green energy		
Unspecified					
Coal to natural gas			Fossil fuel power plants		
Cleaner fuel production					
Cleaner use of coal					
Unspecified					

Increasing Decarbonization Impact

Technology category	Local baseline of water scarcity	Net Benefit Ranking	→ Water hierarchy adjustment	Environmental Impact Score	Proceeds (€ Mil.)
Water			Water		

Scores may vary slightly from the actual due to rounding.

Our Green Evaluation Approach

Weighted aggregate of three:

Transparency + Governance + Mitigation or Adaptation = Green Evaluation

Common approach used amongst second opinion providers

Unique to S&P Global Ratings

Transparency

- Use of proceeds reporting
- Reporting comprehensiveness

Governance

-Management of proceeds
-Impact Assessment Structure

Mitigation

Buildings, industrial efficiencies, energy infrastructure, transport, and water

Net Benefit Ranking

eKPI's: Carbon, Waste, Water Use

Hierarchy Applied

Environmental Impact

Mitigation Score

Adaptation

Resilience capex such as flood defenses, asset protection etc.

Cost Benefit Ranking

Resilience benefit ratio:
Estimate of reduction in damages if event occurs

Resilience Level

Adaptation Score

Final Green Evaluation (E1 - E4 or R1 - R4)

eKPI – Environmental Key Performance Indicator