S&P Global Ratings

Green Evaluation

BIF III Holtwood LLC's

$350 Million Senior Secured Notes

Entity:	BIF III Holtwood LLC
Subsector:	Renewable Electricity
Location (HQ):	U.S.
Financing value:	US$ 350 million
Amount evaluated:	100%
Evaluation date:	Feb. 12, 2018
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Transaction Overview

BIF III Holtwood LLC (the portfolio) is planning to issue US$350 million of senior secured notes in February 2018. A majority of the proceeds (90% of funds raised) of the offering will be used to refinance existing indebtedness for the portfolio of two hydroelectric facilities (Holtwood and Wallenpaupack) located in Pennsylvania with a combined installed capacity of 296 MW. We expect the remaining proceeds will fund capital expenditure, acquisitions, and development activities at a number of renewable projects within Brookfield Infrastructure Fund III (BIF III). The notes are expected to have a 15-year bullet maturity in 2033.

Green Evaluation Overview

Transparency — **83**

- Use of proceeds reporting
- Reporting comprehensiveness

Governance — **83**

- Management of proceeds
- Impact Assessment Structure

Mitigation — **95**

Sector →	Net benefit ranking →	Hierarchy adjustments
Green energy	Supplying the grid with low-carbon electricity	Carbon

Adaptation — **NA**

100 ►	E1
	E2
	E3
0	E4

Overall Score

E1/90

Weighted aggregate of three (Transparency + Governance + Mitigation)

Project Description

90% of the funds raised will be used to refinance existing debt in the portfolio, which consists of two hydroelectric facilities: Holtwood, a 252 MW facility with 14 generating units, and Wallenpaupack, a 44 MW facility with two generating units, both located in Pennsylvania. The portfolio has a forecast long-term average (LTA) generation of 1,109 GWh per year with a weighted average portfolio capacity factor of 43%.

The remaining proceeds will be distributed to BIF III for capital expenditures on renewable assets. BIF III primarily holds wind, solar, and hydro renewable assets in the U.S., Colombia, and the U.K.. We have assumed that the proceeds will largely mirror the asset composition within BIF III, thus we have allocated the remaining proceeds to large hydro, wind, and solar assets in proportion and geography to that within BIF III.

Scoring Summary

This transaction received the strongest Green Evaluation score – E1 on our scale of E1 (highest) to E4 (lowest). The score reflects the excellent Mitigation score of 95, which largely reflects that the entirety of the proceeds is associated with renewable electricity generation – with over US$ 320 million going to large hydro.

The E1 score also reflects the strong Transparency and Governance scores of 83 and 83, respectively. The Transparency score largely reflects the transaction's intended reporting with respect to the proceeds of the issuance, as project documents require. The Governance score reflects the commitment to renewable generation and environmental stewardship, as well as the pure play nature of the entity.

Rationale

- The excellent Mitigation score is supported by a focus on renewable energy contributing to systemic decarbonization and located in areas of moderate carbon intensity. Over 90% of the proceeds will be used to refinance existing debt for green energy (large hydroelectric facilities) located in Pennsylvania. The remaining funds less financing fees will be distributed to BIF III and will also be allocated to green energy projects.
- The robust Transparency score reflects the intention of Brookfield Renewable to report on annual greenhouse gas (GHG) emissions reduced or avoided for the overall portfolio, as well as for the capital expenditures for renewable projects in BIF III.
- The strong Governance score reflects the certainty of the uses of funds which support Brookfield Renewable's strategic commitment to renewable power and the intention of the company to track the proceeds via annual financial reporting; this is partially based on its project finance structure.

Key Strengths And Weaknesses

Proceeds of the debt offering will be used to partly refinance existing debt in the portfolio. A key strength is that 90% of the debt offering will go to large hydro assets (Holtwood and Wallenpaupack) with a net benefit ranking of 86 in Pennsylvania. We expect the remaining proceeds will be used to offset capital expenditures within BIF III (various renewable assets in Colombia, the U.S., and the U.K.).

Hydroelectric power generation assets tend to achieve higher net benefit rankings when compared to other renewable peers such as wind and solar assets due to higher capacity factors and longer asset lives (therefore displacing more carbon).

Large hydro assets located in tropical areas such as Colombia score lower on our environmental impact scale given significant environmental hazards. In this transaction, only a small proportion of the funds will be allocated to this asset type, so the impact on the final score is not material to the final E1 outcome.

Further supporting the excellent Mitigation score is the allocation of all proceeds to green energy projects, which are at the top of our carbon hierarchy because they contribute to the systemic decarbonization of the economy.

The transaction's Governance score of 83 reflects a strong commitment to monitoring environmental impacts but is modestly weakened by the lack of separate subaccounts for tracking the proceeds. Furthermore, environmental impact assessments reported on by Brookfield Renewable will not take into account the full life cycle of the projects.

We believe Brookfield Renewable demonstrates a commitment to environmental governance as evidenced by the company's core strategy: the ownership and development of renewable power with a strong commitment to efficient, sustainable, and responsible use of natural resources with policies intended to consider the socioeconomic and environmental expectations of a broad range of stakeholders.

Furthermore, Brookfield Renewable owns 54 hydroelectric facilities across the U.S., (including Holtwood and Wallenpaupack) that have attained certification by the Low Impact Hydropower Institute (LIHI). The LIHI provides certification to hydropower projects that have eliminated or reduced their environmental impact as defined by

LIHI's criteria. This certification provides a methodology to calculate the portfolio's expected environmental impacts.

Brookfield Renewable intends to track the amount of GHG emissions avoided on an annual basis. The company has also indicated its intention to report on annual GHG emissions avoided at the aggregate portfolio level, which we view as positive for Transparency.

We apply the local baseline carbon intensity of the various regions and blend them accordingly. The blending approach tracks the proportion of spending in various geographies and weights each proportionally.

Project level scores

Sector	Location	Technology	Use of Proceeds (US$ Mil.)	Use of Proceeds treatment	Net Benefit Ranking
Green Energy	Pennsylvania, U.S.	Large hydro	318.37	Actual	86
Green Energy	Colombia	Large hydro in a tropical area	7.56	Estimated	65
Green Energy	U.S.	Onshore wind	6.70	Estimated	60
Green Energy	U.S.	Solar	4.71	Estimated	40
Green Energy	U.K.	Large hydro	4.48	Estimated	67
Green Energy	Brazil	Onshore wind	2.63	Estimated	31
Green Energy	India	Solar	1.72	Estimated	58
Green Energy	Global	Solar	1.68	Estimated	39
Green Energy	China	Onshore wind	1.27	Estimated	69
Green Energy	India	Onshore wind	0.88	Estimated	69
			350.00		

Green Evaluation Process

83	83	95	Weighted aggregate of three (Transparency + Governance + Mitigation)	E1/90
Transparency	Governance	Mitigation		Overall Score

Technology *	Local baseline of carbon intensity Various countries High • • • • • Low	Net Benefit Ranking	→	Carbon hierarchy adjustment Green energy	Environmental Impact Score	→	Proceeds (US$ Mil.)
Energy management and control							
Geothermal							
Large hydro		**85**			**96**		**322.85**
Small hydro				Systemic Decarbonization			
Solar power		**40**			**85**		**8.11**
Wind power		**60**			**90**		**11.48**
Unspecified							
Green transport without fossil fuel combustion							
Green buildings – new build				Significant decarbonization through low-carbon solutions			
Unspecified							
Energy efficient projects (industrial efficiencies)							
Green buildings refurbishment							
Green transport with fossil fuel combustion				Decarbonization by alleviating emissions of carbon-intensive industries			
Unspecified							
Large hydro in tropical areas		**65**			**56**		**7.56**
Nuclear				Decarbonization technologies with significant environmental hazards			
Unspecified							
Cleaner fuel production							
Cleaner use of coal				Improvement of fossil-fueled activities' environmental efficiency			
Coal to natural gas							
Unspecified							

*Technologies listed in alphabetical order within each hierarchy group

Our Green Evaluation Approach

Weighted aggregate of three:

Transparency + **Governance** + **Mitigation** or **Adaptation** = **Green Evaluation**

Common approach used amongst second opinion providers

Transparency
- Use of proceeds reporting
- Reporting comprehensiveness

Governance
- Management of proceeds
- Impact Assessment Structure

Unique to S&P Global Ratings

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

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