PLN’s ‘Green Ambition’ Hangs in the Balance
What the Company Should Do To Be Taken Seriously by Investors

Executive Summary
In November 2020, state-owned electricity company PT Perusahaan Listrik Negara (PLN) announced its commitment to provide clean and sustainable energy for Indonesia in line with government policy, and published its Statement of Intent on Sustainable Financing Framework.

The release of the framework is the first public acknowledgement that PLN is preparing to issue a debut “green and/or sustainable financing” instrument as early as January 2021.

This is a step in the right direction for PLN. However, the company will need to work hard to build credibility given its track record as a major carbon emitter that continues to add coal-fired power capacity at a determined pace.

The company's renewable energy plans lag its regional and global peers and therefore, to build a bridge to high quality ESG (environmental, social, and corporate governance) investors, PLN’s management team must prepare itself for a much higher level of scrutiny than it previously faced from the fixed income market.

Figure 1: PLN Takes the Majority Share of New Coal Plans

Source: Global Coal Exist List, Nov. 2020.
Based on IEEFA research, ESG investors are reluctant to fund issuers that lack transparency and that continue to be fossil fuel focused. This will be an obvious challenge for PLN in light of the fact that the company still has at least 20 gigawatts (GW) of coal projects in the pipeline.

PLN also has no meaningful experience of disclosing or reporting to investors on ESG-linked performance metrics. This has the potential to create risk for those who invest in good faith but find that PLN does not yet have the capacity to meet expectations in the sustainable finance market.

**PLN Must Step Up To Meet Its ‘Green Ambition’**

To successfully launch a high-quality green or sustainable bond, PLN’s management team should be prepared to address the following issues to fund the company’s ‘green ambition’.

1. **The requirement for specific credible plans with policy commitments**

   ESG bond investors typically look deeper than the financing framework and risk-return paradigm. They analyze the details of a company’s overall vision and actions on- and off-paper to ensure coherence with the realities of the issuer’s broader financial and strategic positioning. This is the case even when proceeds are promised to be used for green assets.

   The Statement of Intent reveals that PLN has not implemented its past renewable energy project investments as planned, and therefore has limited track record of successful implementation. If the Statement of Intent is only a preliminary framework, the company would need to provide specifics on what it will do, this time, that makes its sustainable financing plans different from the past.

   An example would be to commit to projects that are credible with relatively low implementation risk and that will commence as soon as PLN secures financing.

   If follow-through on a project fails, redress such as a penalty cost as part of the terms of the bond could also prove the utility company’s commitment to delivering on stated transformation goals.
The company’s renewables commitment must also exclude large-scale hydropower projects, which currently make up a significant portion of PLN’s electricity generation capacity plan. Large-scale hydropower is contentious due to the documented negative impacts on communities and ecosystems. As such, investing in large hydropower projects may not offer a compelling pathway for investors more focused on supporting a conventional mix of renewable energy from solar and wind.

In addition, providing a roadmap for phasing out fossil fuel energy sources, and ideally abandoning the coal projects in the pipeline and indefinitely, would demonstrate PLN’s seriousness in transforming into a sustainable utility business.

Providing a credible implementation plan is likely to be challenging for PLN. However, to quote Indonesia’s Finance Minister Sri Mulyani Indrawati, “Developing renewables is always very challenging, but it is not impossible”.

2. The understanding that PLN’s performance will be examined, and any comparison with regional peers will not favor PLN based on its renewables track record

A surge in green bond issuance from emerging markets and the region is expected in 2021 as issuers raise funds to meet climate pledges. Green investors can therefore afford to be selective and uncompromising. This could work against PLN as investors will be motivated to look for the best combination of pricing and ESG credentials.

PLN needs to be aware of how the company looks in comparison to neighboring competitors that have a more credible history in implementing renewable projects. For example, in Vietnam, renewables already comprise 25% of the national energy mix and a further 11GW is anticipated by 2023. Indonesia compares unfavorably, with renewables comprising 6% and only a further 3GW is anticipated by 2023.
The risk for PLN is that unless the company addresses its issue with renewables credibility to avoid any accusations of greenwashing, it runs the risk of being regarded as unsuitable for portfolios that have a green/sustainable mandate. This was the case for Korea Electric Power Co. which issued green bonds while investing in more coal-fired power plants in Indonesia and Vietnam, and State Bank of India which also issued green bonds and just recently contemplated financing Adani Group’s Carmichael coal project in Australia.

3. **The need for enhanced transparency, internal capacity, safeguards and use of proceeds to boost PLN’s credibility**

The Statement of Intent outlines an improved internal process, policies and capacity to meet best practice in environmental and social safeguards. On its face, this appears to be an ambitious step forward for PLN.

What’s not apparent is whether there will be sufficient relevant expertise to help PLN rise above business-as-usual practices. The key will be whether the company places climate or environmental science experts, with recognized qualifications, experience and authority on the company’s Sustainability Financing Task Force, or within its Corporate Planning Directorate and Project Originating Units to provide much-needed guidance on identifying and implementing eligible projects.

Details on what steps will be taken to evaluate the projects will also be important given the lack of specifics in the Statement of Intent. For example, PLN may want to specify what type of feasibility and environmental studies will
be conducted and how the project tendering and procurement process would work.

In addition, to address questions about PLN’s governance track record, the company should add safeguards to processes around project selection and management of proceeds that involve oversight by external parties such as the Ministry of Finance.

As PLN is building its credibility on renewables, ideally the proceeds from green/sustainable financing should only be used for new green projects. Using proceeds from its first green/sustainable finance instrument to refinance existing projects would inhibit the company’s renewables growth.

The Statement of Intent states that PLN has adopted the green, social and sustainability bond principles of the International Capital Markets Association (ICMA) when preparing its Sustainable Financing Framework. This is a valid reference as far as it goes, but IEEFA has yet to see an expert report on the company’s compliance against those principles. As a result, PLN should be prepared to fill this information gap.

4. The undertaking of post-issuance reporting which can make or break an issuer’s reputation

PLN is not known as a seasoned reporter as it is privately held by the government and has operated with limited public disclosure requirements or scrutiny from investors specifically concerned with sustainability issues. The Statement of Intent indicates a likelihood that the company will raise more funds in future years to fulfil its green aspirations. ESG investors are attracted to issuers that are high quality reporters. Consequently, in preparation for the implementation of its sustainable financing framework, it is in PLN’s interest to meet the expectations of ESG investors on post-issuance reporting, and not only at-issuance.

Outlined below is a non-exhaustive list of what ESG investors value most in a high standard post-issuance report:

- Project level information that is comprehensive and comparable year-on-year, particularly in relation to the use of proceeds and the impact of projects, which should include absolute emissions avoided
- Disclosure of the methodology for impact assessment that is transparent, clear and consistent
- An annual independent ‘green audit’ report on the post-issuance report, including an outline of the experts’ work, rather than a limited-scope assurance report. The scope of work ideally comprises, but should not be limited to, verifying the amounts of reported allocated and unallocated proceeds in accordance with the framework, evaluating the effectiveness of the design and execution of processes around project selection and the use and management of proceeds, and confirming the existence of
eligible green assets and the accuracy of the impact or performance measures.

Research by the Climate Bonds Initiative (CBI) supports IEEFA's findings and includes a list of good reporters and the reasons why they're established post-issuance reporters.

PLN has an opportunity to lift the country's position in global capital markets as investors and leading companies reliant on global supply chains are looking to invest in and source from low carbon economies. Despite PLN's new ambitions, any gaps in the state-owned company's overall strategy and implementation plan, if left unresolved, could give reputation-sensitive investors a reason to favor green bonds from more seasoned ESG-aware issuers.
**Figure 4: Screenshots of Actual Post-Issuance Reports: Use of Proceeds and Impact**

(Links of Actual Reports Provided Below)

<table>
<thead>
<tr>
<th>No.</th>
<th>Issue</th>
<th>Project name</th>
<th>Project category</th>
<th>Project description</th>
<th>Project value, EURm</th>
<th>Green bond funds allocated, EURm</th>
<th>Green bond funds utilized, EURm</th>
<th>Planned energy generation (GWh per year)</th>
<th>2019 actual energy generation (GWh per year)*</th>
<th>Projected reduction of CO₂ emissions (tons per year)</th>
<th>2019 actual reduction of CO₂ emissions (tons per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2017 (all funds allocated and utilized until 31.05.2019)</td>
<td>refinancing of wind power parks in Estonia (Tallinn region) and Lithuania (Klaipeda)</td>
<td>Renewable energy projects</td>
<td>At the beginning of 2018, Ignitis Group acquired wind power parks in Estonia (operated by Tallinnveeja OU 6 turbines) and Lithuania, Klaipeda district (operated by UAB Elektros 8 turbines) with the overall capacity of 62 MW. The acquisition of the wind power parks was financed using borrowings from commercial banks. To optimize the financing structure of projects the company refinanced borrowings using funds raised by green bonds.</td>
<td>68.6</td>
<td>68.6</td>
<td>68.6</td>
<td>138</td>
<td>140</td>
<td>91,097</td>
<td>92,895</td>
</tr>
<tr>
<td>5</td>
<td>2017 (all funds allocated and utilized until 31.05.2019)</td>
<td>Acquisition of a 25% interest in the wind power park in Klaipeda, Lithuania (Klaipeda)</td>
<td>Renewable energy projects</td>
<td>EWing to implement its strategy, which focuses on energy production using renewable energy sources, Ignitis Group made a decision to acquire a 25% minority shareholding in the wind power park in Klaipeda, operated by Rinkinio LAB. The 100% shareholding held by the wind power park allows it manage the park more efficiently. The wind power park consists of 8 wind turbines with the capacity of 14 MW each. One main investment over the course of the project is a useful Waste to Energy (WtE) plant. The total cost of the project is EUR 26.5 million. The WtE plant is planned to be operational by the end of 2020.</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>Indicators for the final project are provided above in row No.2*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2018 (all funds allocated and utilized until 31.05.2019)</td>
<td>Acquisition of wind power parks in Lithuania (Viljolatva and aep Gala)</td>
<td>Renewable energy projects</td>
<td>Implementing its strategy to invest in renewable energy production, Ignitis Group acquired Viljolatva OJSC and aep Gala OJSC three wind farms in total. Viljolatva operates one wind farm of 14.5 MW (7 turbines) in Tarage district. aep Gala operates two wind farms with the capacity of 10 MW and 11 MW (17 turbines in total) in Klaipeda and Taurage district. Over a project’s useful life one invested EUR 20.2 million. EUR 1.0 million additional expenditure is planned to be financed by the bank.</td>
<td>218.1</td>
<td>218.1</td>
<td>218.1</td>
<td>86</td>
<td>91</td>
<td>38,564</td>
<td>39,364</td>
</tr>
<tr>
<td>6</td>
<td>2018 (all funds allocated until 31.05.2019)</td>
<td>Small residential and industrial solar PV projects</td>
<td>Renewable energy projects</td>
<td>The implementation activities on the basis of FIDCO and FPA business models were successfully completed by UAB Ignitis. The idea is to reduce the usage of energy resources and increasing the efficiency of consumption and the development of solar photovoltaic projects. 10,751 kWp of solar photovoltaic installations for businesses and small industrial customers is planned to be installed. The storage technology combined solar photovoltaic installations, taking into account the degree of photovoltaic installations, will provide energy efficient solar photovoltaic installations, allowing considerable savings in the purchase of electricity on average about 1.65 GWh of electricity per year. According to the guarantees of the manufacturers of the solar photovoltaic installations, after 20 years the operational capacity of the new photovoltaic installations will be at least 80% of the nominal capacity. For more information below <a href="http://www.ignitis">www.ignitis</a>).</td>
<td>9.9</td>
<td>9.9</td>
<td>23</td>
<td>12.35 *</td>
<td>2.07</td>
<td>5,455</td>
<td>865</td>
</tr>
</tbody>
</table>

*Source: [Ignitis Group Green Bond Investor Letter 2019](https://www.ignitis.lt/en)

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Figure 5: Screenshots of Actual Post-Issuance Reports: Use of Proceeds and Impact

**GREEN BOND 1 ISSUED 2017**

<table>
<thead>
<tr>
<th>Type of eligible green project</th>
<th>Eligible green project</th>
<th>Total actual capex spend (GBP)**</th>
<th>Capacity fully operational (MWh)***</th>
<th>Qualifying capacity (MWh)****</th>
<th>Date fully operational</th>
<th>Allocation of Green Bond 1 proceeds (GBP)</th>
<th>Qualifying output (GWh)*****</th>
<th>Qualifying carbon saved (tCO₂e)****</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore wind farm</td>
<td>Shrewsbury North</td>
<td>102.9</td>
<td>67/67</td>
<td>Nov 15</td>
<td>102.9</td>
<td>121.3</td>
<td>30,692</td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Tenerifermo</td>
<td>42.9</td>
<td>34/34</td>
<td>Feb 17</td>
<td>41.5</td>
<td>33.8</td>
<td>23,940</td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Skeve Dvina</td>
<td>94.5</td>
<td>94.5</td>
<td>Jun 17</td>
<td>94.5</td>
<td>94.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Comhairle Gealinn Tuirisn</td>
<td>65.6</td>
<td>66/66</td>
<td>Jun 17</td>
<td>81.9</td>
<td>191.9</td>
<td>54,091</td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Dumfries</td>
<td>88.9</td>
<td>94/94</td>
<td>Aug 17</td>
<td>88.9</td>
<td>121.3</td>
<td>30,697</td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Clyde (extension of Clyde Windfarm (Scotland) Limited)</td>
<td>100.3</td>
<td>175/175</td>
<td>Sep 17</td>
<td>500.1</td>
<td>652.5</td>
<td>168,049</td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Bhaven</td>
<td>117.1</td>
<td>110/110</td>
<td>Oct 17</td>
<td>206.7</td>
<td>200.7</td>
<td>54,091</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Onshore wind farm project contribution</td>
<td>537.7</td>
<td>544/411</td>
<td></td>
<td></td>
<td>521.9</td>
<td>1,394.5</td>
<td>356,416</td>
</tr>
<tr>
<td></td>
<td>HDVC Transmission connection</td>
<td>Caithness-Moray</td>
<td>1,020.0</td>
<td>1,200/1,200</td>
<td>Jan 19</td>
<td>26.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total contribution</td>
<td>Onshore wind farms and Caithness-Moray transmission link</td>
<td>1,557.7</td>
<td>1,744/1,411</td>
<td></td>
<td></td>
<td>548.4</td>
<td>1,394.5</td>
<td>356,416</td>
</tr>
</tbody>
</table>

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**GREEN BOND 2 ISSUED 2018**

<table>
<thead>
<tr>
<th>Type of eligible green project</th>
<th>Eligible green project</th>
<th>Total actual capex spend (GBP)**</th>
<th>Capacity fully operational (MWh)***</th>
<th>Qualifying capacity (MWh)****</th>
<th>Date fully operational</th>
<th>Allocation of Green Bond 2 proceeds (GBP)</th>
<th>Overall output (GWh)/Qualifying output (GWh)*****</th>
<th>Qualifying carbon saved (tCO₂e)****</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore wind farm</td>
<td>Leannamore</td>
<td>30.8</td>
<td>30.8</td>
<td>Feb 18</td>
<td>30.8</td>
<td>61.1</td>
<td>15,424</td>
<td></td>
</tr>
<tr>
<td>Onshore wind farm</td>
<td>Stornoway</td>
<td>1476</td>
<td>228/214</td>
<td>Dec 18</td>
<td>1476</td>
<td>250.2</td>
<td>71,656</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Onshore wind farm project contribution</td>
<td>1,784</td>
<td>244/132</td>
<td></td>
<td></td>
<td>1,784</td>
<td>341.3</td>
<td>87,240</td>
</tr>
<tr>
<td>HDVC Transmission connection</td>
<td>Caithness-Moray transmission link</td>
<td>1,020.0</td>
<td>1,200/1,200</td>
<td>Jan 19</td>
<td>413.0</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total contribution</td>
<td>Onshore wind farm and Caithness-Moray transmission link</td>
<td>1,998.4</td>
<td>1,446/1,132</td>
<td></td>
<td></td>
<td>591.4</td>
<td>314.3</td>
<td>87,240</td>
</tr>
</tbody>
</table>

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*Capacity fully operational reflects the total capacity of the project in MW.

**Reported actual capex and qualifying capacity reflect SSE’s 50.3% ownership in Clyde Windfarm (Scotland) Limited and Dumfries wind farms as at 31 March 2020.

***Reported output and carbon saved reflects SSE’s 50.3% ownership in Dumfries and Clyde Windfarm (Scotland) Limited wind farms as at 31 March 2020.

****Green Bond 1 output (GWh) and carbon saved (tCO₂e) for reporting period 1 April 2010 to 31 March 2020.

*****Green Bond 1 output (GWh) and carbon saved (tCO₂e) for reporting period 1 April 2010 to 31 March 2020.

Source: SSE’s third annual Green Bond Report March 2020 (extract).
About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute’s mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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