Pedagogical Notes | MIPC 2019

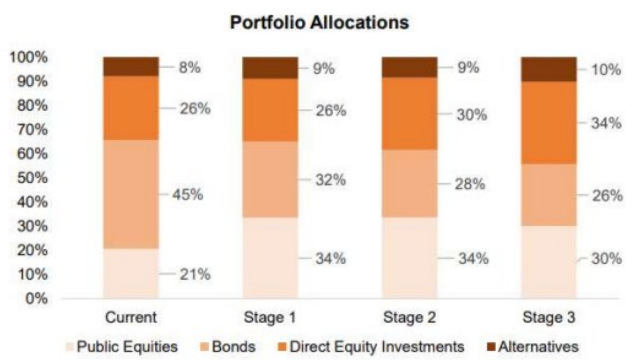
APM Capital | University of Sydney

Proposal at a Glance

APM Capital suggests a three-part strategy for NLPIB to address the concerns posed by the board and various stakeholder groups:

1. No divestment of oil and gas (O&G): Divestment would be a short-term solution with long-term detriments.
2. Green Assets: Loading up green assets can address stakeholder concerns and diversify portfolio.
3. Fund Restructure: A shift towards growth through direct equity and debt investments is necessary to achieve NLPIB's dual mandate.

The following graph exhibits the asset allocation recommended by APM:



	2019 (Now)	2024 (Stage 1)	2029 (Stage 2)	2034 (Stage 3)
Returns	5.3%	7.0%	7.4%	7.7%
Sharpe Ratio	0.41	0.54	0.59	0.62
Direct	26%	30%	36%	42%
Indirect	74%	70%	64%	58%
Growth	55.0%	68.5%	72.1%	74.3%
Defensive	45.0%	31.5%	27.9%	25.7%

No Divestment of O&G

APM believes that divestment does not address fundamental environmental problems. By controlling the assets directly, NLPIB could better promote environmentally friendly practices. In addition, APM argues that divestment does not fulfil the dual mandate of NLPIB, since it would impact the portfolio returns and contradict the fund's obligation of sustaining the local economy. Divesting from O&G companies, where the majority of labor is currently employed, would create funding shortage due to lower active contributions. As such, APM believes that divestment does not fulfill NLPIB's dual mandate as it eliminates strong returns from the O&G sector and adversely impacts an important stakeholder group.

Investment in Green Assets

APM recommends investing in indirect green investments in the short term and transitioning to direct investments in renewable infrastructure in the long term. Investments in green mutual funds address the environmental concerns of key stakeholders, while creating a buffer before returns are generated from existing and potential future direct investments in infrastructure. In doing so, the fund is adequately prepared for the second stage of its sustainable investing strategy. In the long term, APM suggests that NLPIB invests in local hydroelectric projects and especially wind farms to satisfy target returns and stakeholders, since NL has an untapped potential for wind energy production. Currently, only 0.8% of NL energy is generated from wind, despite the favourable coastal geography and shallow waters for offshore wind. Moreover, new turbines would boost NL's employment and contribute more than $2.2bn to the local economy.

Fund Restructure

APM's analysis shows that NLPIB has historically struggled to meet its benchmark rate of return. In a low-rate environment, a greater investment in growth equities is necessary to achieve the required rate of return in the long run. APM suggests that NLPIB should reallocate its holdings in fixed income ETFs towards green infrastructure bonds, specifically government-issued debt funding NL projects such as Muskrat Falls. Then, the fund would directly support the local economy and improve returns without significantly increasing its risk level.

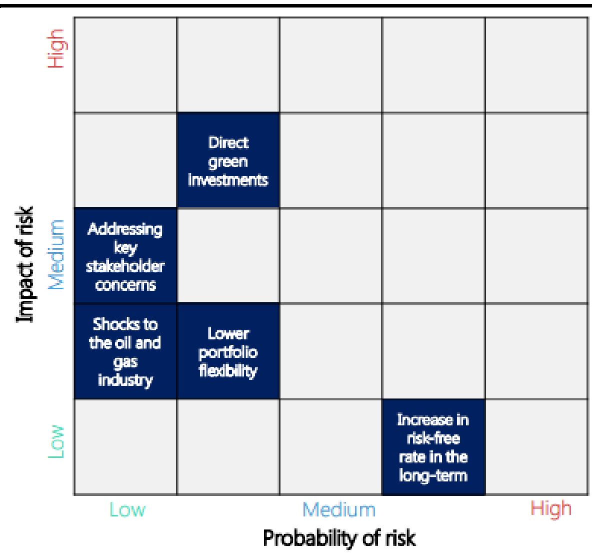
Stakeholder Analysis

APM's strategy addresses concerns of all stakeholders. The **NL government** benefits from APM's strategies for NLPIB to not divest from its O&G investments, as the industry continues to generate tax revenue, sustain local employment, and maintain NL's economic health. **Taxpayers** would have less burden funding public expenditures as a result of NLPIB's investment in government bonds. **Pensioners** are also addressed as portfolio restructuring increases pension fund returns, generating enough future distributions and alleviating government burden to fund potential shortfalls. **Indigenous groups** will be satisfied as well by the more environmentally friendly practices of O&G companies, while **environmental activists** are assured by the investment in green mutual funds and local green infrastructure projects. Lastly, the **O&G Labor Union** no longer needs to worry about job cuts due to divestment.

Portfolio Construction Methodology

APM's proposed portfolio construction considers three asset characteristics: Expected return, standard deviation, and covariance. The optimal asset weights are obtained by maximizing the Sharpe Ratio given specific portfolio constraints. The resulting portfolio increases weight in direct equity and bond investments and decreases that of fixed income assets, leading to higher risk-adjusted returns for the total fund.

Risk Analysis

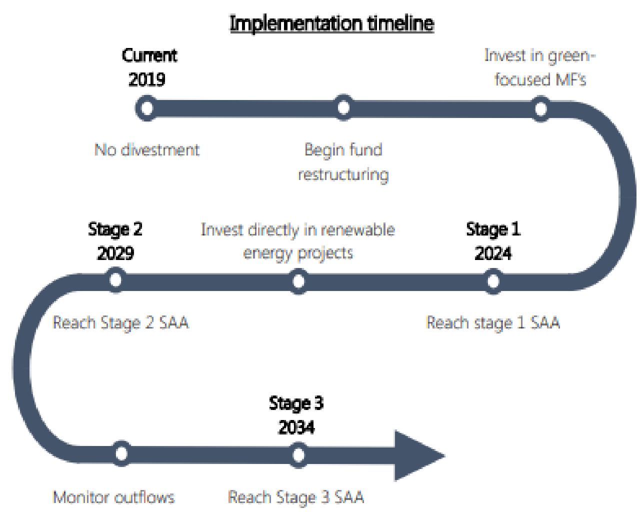


Among all risks, the impact of direct green asset investments is the highest. In order to mitigate this risk, APM suggests the implementation of a better monitoring system to ensure successful project execution. In addition, there is a high probability of increase in long-term risk-free interest rate, which may lead to lower returns in growth assets but could be hedged by derivatives. Shocks to the O&G industry present a third risk. However, green mutual funds and direct green investments can partially offset NLPIB's exposure to O&G once APM's strategy is fully implemented. Finally, NLPIB's large direct green holdings allows the allocation of board directors to monitor and ensure environmental standards being met in projects, while further investments in O&G should be avoided to prevent exacerbating conflicts of stakeholders' interests.

Implementation Timeline

APM divides its strategy into 3 stages to avoid short-term disruptions and improve feasibility:

During stage 1 (2019-2024), NLPIB will inform stakeholders of the no-divestment decision, begin fund restructuring, and invest in green-focused mutual funds. Starting in stage 2, NLPIB will restructure the fund by investing directly in renewable energy projects. During stage 3 (2029-2034), NLPIB will stabilize the portfolio and embed ESG-centric elements into the overall portfolio construction process.



Final Considerations

APM provides a detailed strategy with different stages of implementation to meet NLPIB's dual mandate. The recommendation of no divestment from O&G assets distinguishes APM's solution from that of other proposals. The team dives deep into its first argument and proposes that divestment, by itself, cannot halt environmental damages, and therefore, it is more logical for NLPIB to retain control and ensure ESG-friendly practices are applied in South White Rose's operations. Furthermore, all stakeholder concerns are well considered in APM's recommendations. By restructuring the fund towards growth and direct green investments, NLPIB is better positioned to achieve its return objectives while achieving environmental and economic sustainability in the long run.