

Indigenous Sustainability Fund

Context

In Canada, one of the wealthiest and resource rich countries in the world, the Nibinamik First Nation declared a state of emergency on May 13, 2020, due to a failing diesel generating system in midst of the COVID-19 pandemic. Blackouts occur daily and have widespread impacts on food security, health, and safety risks: *“Food security concerns grow exponentially as the perishable food reserves are at risk of spoilage every time the power goes off”*

“Individuals with existing life-threatening medical conditions, requiring treatment at home, such as dialysis, face unacceptable risks and potential consequences without power” **Nibinamik Declaration of State of Emergency - Update #1**

“If you have a blackout in Winter, your house freezes in six hours and all your pipes explode” **Grant Sullivan, Gwich’in Tribal Council**

140 First Nations communities across Canada rely on diesel generated electricity. Few of these communities have proximity to the grid to justify transmission projects. Other issues with diesel include fuel spills and shortages, and a lack of capacity that frustrates growth and development plans.

Indigenous people on-reserve pay 3x as much of their income as the median Canadian household on meeting basic energy needs. Additionally, a shocking 25% of Indigenous people are living in poverty and 53% of Canada’s Indigenous children live in poverty, compared with the national rate of 17.6% as reported in the 2016 census. The lack of clean, reliable energy is a major contributor to the grinding poverty that is a part of everyday life.

Replacing the Existing Diesel Subsidy

Indigenous Services Canada has been funding and running these costly diesel generators. These include direct costs for diesel fuel, operation and maintenance of the generators and other costs such as storage and logistics.

A fiscal stream can be monetized to fund diesel replacement projects in the form of a 25-year federal offtake agreement, paid by Indigenous Services Canada on an “avoided cost” basis. For example, if Indigenous Services Canada continues funding \$26 million perpetually for 10 megawatts through diesel generation, this amounts to **\$866 million in present value terms** at 3% treasury rates (\$26mm/.03). This is a public cost ceiling for the status quo that has already been going on for over 50 years.

We show a cost savings solution by comparing the **total delivered cost** of diesel versus biomass electricity generation on an apples-to-apples basis:

Cost Comparison Chart	Diesel	Biomass	Difference
Nameplate Capacity - Megawatt	10	10	0
Operating Hours/Year	8,760	7,884	876
Megawatt-hours (MWh)/Year	87,600	78,840	8,760
Total Cost/MWh	\$300	\$200	\$100
Total Delivered Cost/Year	\$26,280,000	\$15,768,000	\$10,512,000

Operating Cash Flows through Offtake at \$300/MWh after delivering at new lower \$200/MWh

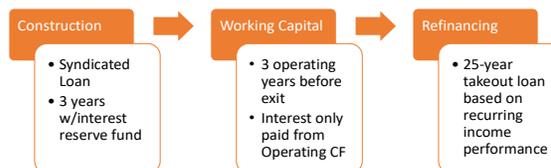
Annual Cash Flow Analysis	Construction	Set-Up	25-Yr Takeout
	2022-24	2025-27	2028-60
Operating Cash Flow	-	\$10,512,000	\$10,512,000
Annual Debt Service	\$6,000,000	\$6,000,000	\$7,123,514
CF after Debt Service	-	\$4,512,000	\$3,388,486

Valuation and Credit Summary	
Cash Flow from Operations	\$10,512,000
Discount Rate	8%
Valuation of CFO (35 years)	\$122,512,821
Biomass CAPEX (\$10 million/MW) + Interest Reserve	\$120,000,000
NPV of Biomass Investment @ 8%	\$2,512,821
DSCR on First 3 Operating Years	1.75x
DSCR on 25-Year Takeout	1.48x

The **Indigenous Sustainability Fund** is launching an initial \$125 million private credit offering. This capital is backed by the strength of a government-backed 25-year offtake agreement to buy 10MW of electricity at \$300/MWh. **Five** 2MW biomass projects are shovel ready, with highly experienced biomass developers in place. Once operational, our biomass management partners will help 5 Indigenous owned energy utilities deliver biomass generated electricity at \$200/MWh total delivered cost.

Investment Thesis

There is significant economic, social, and environmental value to be unlocked through scalable access to capital for Indigenous investments. Our partnership framework enables upfront capital to be pooled, earn competitive risk-adjusted returns and be taken out after 6 years based on recurring income and improved impact performance.



Sources of Proceeds		Uses of Proceeds	
Equity in Place	\$10 million	Feasibility, Design and Development	\$10 million
Senior Lenders	\$125 million	Construction and Interest Reserve	\$120 million
Standby Grants	\$10 million	Working Capital	\$5 million
		Contingency Funds	\$10 million
Total	\$145 million	Total	\$145 million

Indigenous Sustainability Fund

Syndicated Loan Agreement Terms	
Total commitment	\$125 million
Tenor	6 Years
Interest Rate	LIBOR + 500 bps
Origination/Work Fees	2% + 1%
Use of Proceeds	Construction: \$100 million Interest reserve: \$20 million Working Capital Revolver: \$5 million
Financial Covenants	DSCR 1.2x
Security Package	Federal Government Offtake Contracts, Borrower Guarantees, Biomass Assets + 99-year leases

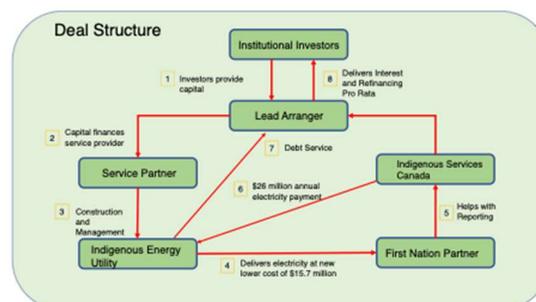
Risk	Mitigation
Cost Escalation	- Fixed price construction - Performance bond & completion guarantee - Procure boiler & turbines in batches on better terms - 10-15% contingency fund from grant sources
Operating	- Third-party management contracts with transition period to Indigenous management - Independent board with strong Indigenous inclusion - Initial tenor accounts for 3 years to smooth out operations
Feedstock Supply	- Primary & backup biomass fibre supply agreements
Refinancing	- Cash sweep for first three years of operations - Equity and grant funding acts as first loss buffer to senior secured

Refinancing Terms	
Amount	\$110 million (~\$22 million per borrower)
Tenor & Amortization	25 years
Interest Rate	4.25%
Fees	1.5%
Covenants and Security	Same as syndicate loan

Target

- **Target investor pools:** Canadian pension plans, university endowments, insurance companies, provincial infrastructure agencies, family offices, philanthropies, banks, and credit unions.
- **Target geography and market:** 140 First Nations, Inuit and Metis remote northern communities that rely on diesel to power their homes represent ~\$2bn total addressable clean energy market

- **Scalability:** Our partnership deal structure uses a lead syndicate lender, or intermediary, to source deals and conduct due diligence for the investor pool. This enables us to replicate investments in biomass, wind, solar, small hydro, geothermal and battery/energy storage solutions



Impact Metrics

We aim to help our Indigenous borrowers access capital to change the narrative by enabling them to bring ownership in cleaner, more affordable energy to their communities. At the same time, the funded projects will create job opportunities and attract increased local investment.

We have a strong government partner backstopping Indigenous investments, as evidenced from Prime Minister Justin Trudeau Speech from the Throne on November 23, 2021, where he vowed **“to go further and move fast on climate action”** while moving to **“close the gaps that far too many First Nations, Inuit, and Metis communities still face today and build a better and more equitable future”**.

Impact will be reported annually in four dimensions:

Economic metrics

1. Number of beneficiary projects and its profitability
2. Monetary savings per kilowatt hour passed on to end-users
3. Return on invested capital for investors

Community metrics

1. Number of jobs created for Indigenous community members
2. Increase in job training hours
3. Number of people taken off social assistance

Environmental metrics

1. Reduction in local GHG emissions due to the biomass projects
2. Air quality improvement
3. Land use and soil health preservation
4. Reduction in energy waste

Sustainable Development Goals

