

Challenge Brief: Louis Bull Renewable Schools Pilot

What is the initiative?

A collaboration between [Iron & Earth](#) and the Louis Bull Tribe, the Louis Bull Renewable School project will be the first of its kind in Canada, including six renewable energy installations integrated into the community K-9 school. Each of these systems will be complemented by training programs that will ensure members of the Louis Bull Tribe, as well as fossil fuel industry workers from nearby communities, can develop new skills and gain experience through being involved in hands-on installations. Training programs are anticipated to train 60 workers.

1. One grid-tied 20kW solar PV energy system (5-day hands-on training)
2. One solar hot water heating system to supplement the current natural gas (5-day hands-on training)
3. One 2kw wind turbine (5-day hands-on training)
4. One level 2 electric vehicle charging station (3-day hands-on training)
5. Two solar-powered radar speed signs (1-day training)
6. One solar power lighting system for the school's signage (1-day hands-on training)

The project will also feature a number of opportunities for deeper learning of indigenous cultures with a Cross-Cultural Learning Program and a Ribbon Cutting Ceremony & Cultural Celebration.

The intention is that this project is not a one-off, but rather a template replicable for future projects across Alberta and Canada.

Why is this initiative important?

Rural Access to Training. In a lot of indigenous and rural communities, there are a number of unemployed fossil fuel industry and indigenous workers that don't have access to renewable energy training programs. This project can be a model to bring these training programs to these communities so they don't need to go to Edmonton and Calgary to access them.

Excite Youth About Trades. A lot of the younger generation is turning away from the trades due to a lack of employment opportunities, with a sense that the oil and gas industry does not offer the most attractive career opportunities. By building these projects at schools, it introduces the next generation of tradespeople to the renewable energy industry sector.

Tangible Example of Upskilling. There is a lot of talk about the possibility of upskilling oil and gas workers so that they can seek employment in the renewable energy industry, but not a lot of tangible examples. These types of projects make the opportunities explicit and are helpful or inspiring and generating support for further opportunities for upskilling.

Visible Community Success Story. In a lot of communities, there are no highly visible community-driven renewable energy projects. By installing solar PV, wind and EV charging stations at a school the project provides a success story for the community in the form of a highly visible community energy project.

What is the ambition for this initiative?

In the near term, the goal is to **complete a successful pilot** with the Louis Bull Tribe, that builds a community for workers & supporters, develops renewable energy careers, builds support for a prosperous transition, and reduces emissions.

At the same time, the larger ambition is to use this pilot to create a model that can be replicated and scaled to other communities in Canada with the broader goal of training **1,000 fossil fuel industry and Indigenous workers across Canada** into renewables.

How can the Louis Bull Renewable School Project be completed in a way so that it can be replicated in other communities and fulfil this larger ambition?

What challenges are there to achieve the ambition?

The following are four challenges to achieving the ambition:

Project Financing. Currently, the project is raising funds through fundraising from business and government and has been difficult to raise the money to perform the installation and delivery of the program. What are the options to best finance these projects? What are the possibilities to reduce the cost per installation?

Recruiting and Support Trainees. Ultimately, the training program's success is based on how well graduates translated their learning into employment careers. Questions include: How can Iron & Earth ensure they recruit the right trainees who want to establish a career in the industry after the training? How should they support trainees in establishing careers after the training program? How can they play a more active role, but not step on the toes of unions and recruitment agencies? Would an online portal to find trainees who have gone through the programs be useful?

Model and Strategy to Scale Up. The ambition is to consider this pilot as a way to develop a model that can be scaled and replicated in other communities. Questions include: Where should the next renewable school projects take place? Should Iron & Earth act as the prime

contractor for these projects? What does a sustainable and scalable pace of rolling these projects outlook like, e.g. training 1000 workers within the next 5 years? Should Iron & Earth be actively developing these projects or partnering with schools that are already doing it and we bring the training component? What are the stakeholder partnerships that can help us scale this model?

What constraints must be respected?

Iron & Earth is currently in transition with its Alberta-based leadership and will be hiring a new Edmonton Director, who will not be fully onboarded in the role until May 1. This person will be the lead on the Louis Bull Renewable School Project.

Louis Bull project has to be completed this year, i.e. the installation must be completed, including the training. \$40,000 of funding has been secured with \$382,666 that still outstanding as of early March. A number of large funding proposals are being considered.

Iron and Earth is a small entrepreneurial NGO that is very much in “start-up” mode and has a distributed team across Canada. As with many similar organizations, their team capacity is strained.

What has been tried in the past? Has it worked?

Iron & Earth and the Louis Bull Tribe are proud to have partnered on the successful completion of the Louis Bull Renewable Daycare project in October of 2017 where a solar power system was installed on the roof of the community daycare building. In conjunction with the installation, 15 fossil fuel industry and Indigenous workers completed a 5-day solar energy training program together.