Key Topics

A summary of priority questions from two Information Meetings in December 2025

Additional information available at:

xaxlip.ca/content/green-hydrogen-utility/

Land designation

Q *What does a yes vote mean for Xaxli'p?*

The referendum is to change *Lot 9-2-1 IR 1b* from general use to an economic development designation. The Xaxli'p hydrogen utility is how the economic development designation might be realized, although any venture might be considered for the land.

Xaxli'p governance

Q *Who is* Salish Elements *and what is the contract with them?*

Salish Elements is a majority Indigenous owned business startup founded by Rueben George (member of Tsleil-Waututh Nation) to provide energy independence to First Nations communities. The partnership with Xaxli'p came out of an existing relationship between Rueben and Chief Darrell Bob over several years as an early opportunity for getting a hydrogen utility off the ground.

While no formal contract is in place, the legal partnership agreement frames the governance principles for the rights of the partners — the equivalent to a contract.

Q *What is the potential employment opportunity for Xaxli'p during construction?*

While construction will be led by another company, estimated numbers range from 20 to 50 positions over the construction period, which will fluctuate during development depending on the type of work needed, with about half of those positions being permanent. Some skills will need to be provided from third-party certified professionals.

Q *How much liability insurance will be required?*

The Xaxli'p-Salish Limited Partnership (XSLP) will follow the industry standard for any business and operation of this nature. For the project, liability insurance is a prerequisite for permits and financing, although it is one part of a larger insurance package. The XSLP reviews all requirements with the project's insurance brokers and risk management consultants, to ensure that there will be little to no impact to the Xaxli'p community's home insurance policies.

Business case and financial

Q *How can Xaxli'p receive benefits from the utility with no dependencies?*

Energy independence and mitigating climate change are the fundamental drivers for this project. While the electrolysis process for the XSLP utility seeks to use local hydroelectric capacity, the facility will produce fuel for fuel cells producing clean power that can replace diesel and gasoline in many remote Indigenous communities. Sourcing alternative power for this plant might be feasible in the future, such as geothermal, solar, and photovoltaic power, but using BC Hydro's existing renewable electricity contributes to making this project green.

Q *If Salish Elements doesn't have the money, can another company step in?*

Any project of this scale requires substantial capital investment and will follow the same stages and protocol for funding. Salish Elements has proved its ability to source funding from Natural Resources Canada (NRCan) and others and is uniquely positioned as an Indigenous-led company with a vision to build the first ever First Nations hydrogen production facility in Canada.

Salish Elements is actively looking to raise capital. Some initial commitments from Canada Infrastructure Bank, Vancity, and letters of intent for equity that have already provided. Funding still needs to be finalized before construction begins.

If needed, the partnership has the option to find another partner and purchase the shares held by Salish Elements. However, bringing in another development partner might dilute the project's reputation, and may not serve the project's long-term goals.

Q *Who's paying for this project?*

At this stage of development, Salish Elements is taking on all the development costs and Salish Elements is funded through private investors and NRCan grants. The phased 25 MW XSLP project is expected to cost about $175 million and will be funded in several ways:

- For startup, Natural Resources Canada provided just under $4.5 million to conduct a feasibility study and get the XSLP project through the Front-End Engineering and Design (FEED) stage and increase production capacity of clean fuels in Canada.
- Costs for construction, equipment, and further development costs (after FEED) will require further investments from equity providers, banks, and government.

Q *How will the partnership provide transparency with financial transactions?*

There are many community benefits to the project, not all of them financial. However, the Xaxli'p are 51% owners in the project, which is an exceptional position to have when dealing with development and operations.

A model of profit distribution will need to be determined, as well as how much equity can be drawn out of the company at any given time. Again, Xaxli'p are the majority ownership in the business. Regardless, XSLP is prepared to regularly disclose and submit financial reports through the Xaxli'p Development LP on an annual and/or quarterly basis (to be decided).

Operation

Q *How will the building meet code requirements?*

The XSLP utility building will exceed or meet certification standards for safety and operational integrity, and stringent protocols guide all operating procedures. Here are some topline examples:

a) Fire Life and Safety Plan – The XSLP utility will include anti-fire space, like control room building to protect operators in case of fire related incidents. Further, the fire water system has monitored hydrants to cool surroundings.

b) Pipes and valves – All plant piping that contains hydrogen are Stainless Steel 304 is the most common austenitic stainless steel, which is compatible with hydrogen. All piping segments have shutdown valves to isolate that piece of pipe. Pressure Safety Valves (PSVs) have an overset point at 110% of design pressure.

c) Venting – Released hydrogen runs to an elevated central vent stack system. On top of the stack, sensitive high-pressure sensing equipment monitors for hydrogen leaks, complete with automatic shutdown triggers and alarms to inform operators on site.

Q *How does hydrogen production hold up during extreme hot and cold weather?*

Hydrogen production is optimized for temperatures between minus 23 to plus 40 Celsius (9 to 104 F), which is typical for the Lillooet region, and the utility's equipment is designed to run best in colder temperatures. During extremely hot conditions, production decreases to match the demand of the cooling system.

Q *What is the road network plan throughout the reserve boundaries?*

All heavy trucks are expected to travel along highways. We expect little to no traffic on Fountain Valley Road, and only a third of the trucks will be on the road at any given time. While a traffic plan is an ongoing part of delivery and logistics, road capacity and volume studies will be undertaken in the FEED study phase.

Q *How much water is required to produce hydrogen? Is it worth it?*

Water will be used for more than just hydrogen production — during summer months it is needed for cooling, and water will be stored for fire protection and employee safety. However, just fuel production uses a 15 to 1 ratio, meaning that it takes 15 litres of water to make 1 kilogram of hydrogen. To meet market demand and to right size the project with available resources, the roll-out plan may be phased. This means the plant's capacity may start as a 10 MW hydrogen plant requiring 63,000 litres of water per day for 4.2 tonnes per day (4,200 kg) and production may be ramped up over time to potentially reach 25MW (to 10 tonnes per day).

Kala Geosciences in Kamloops in one of many hydrology experts who are expanding upon our water studies to ensure that the water modelling makes business sense for the project, and for the Xaxli'p community. Given that the cost of water is relatively cheap, even with the infrastructure updates to restore existing wells, the project is 'worth it'.

Safety

Q *What protocols are in place to protect the Xaxli'p in the event of an explosion?*

The engineering and design of the hydrogen utility follows strict safety guidelines. The project must go through a time-intensive, step-by-step process, which includes a broad safety assessment (PHA), a rigorous method of hazard identification (HAZOP), Consequence analysis and a risk management review for all aspects of the plant operations (LOPA) from pipes and vents to storage containers.

Further, as part of the Front-End Engineering Design (FEED) study, which has been managed by Ensol, AIM, Graham Construction and Salish Engineering, the project is put through a number of scenarios to test everything that might go wrong — from natural disasters (such as landslides, earthquakes and forest fires) to technology and automated sensor failures. These industry-accepted methods make sure that the facility operates as safely as possible in practically every situation.

British Columbia is a leader in hydrogen fuel innovation, and demand for the delivery of hydrogen in BC — particularly for rural communities — is greater than supply. BC's Hydrogen Strategy establishes policy commitments to ensure regulatory frameworks encourage continued reductions in carbon intensity over time and the BC Energy Regulator (BCER) ensures compliance. The Xaxli'p utility will be one of many projects in BC looking to diversify energy sources to decarbonize the province.

Q *What are the dangers of producing hydrogen?*

There are only three high-level dangers when producing and storing hydrogen fuel at the utility:

1) Flammability – Hydrogen ignites easily, particularly in confined spaces and if exposed to high temperatures or pressure. With outdoor hydrogen storage, like at the utility, the risk drops considerably. The facility will also include automated hazard detection and shutdown sensors.

2) Chemical Change – While hydrogen itself is non-toxic, harmful nitrogen oxides can be produced from combustion, which is true for any fuel. As such, the utility will use flame- and combustion-resistant tanks, as well as chemical sensors with automatic shutdown routines to contain the chemicals if a fire occurs.

3) Pressure – Hydrogen is typically stored at very high pressures and improper handling, or storage failure might lead to an explosion. The utility will only use certified storage containers and pressure-relief valves, as well as undergo consistent inspection and maintenance by trained professionals.

Statistically, risk has been very low in North America over the last 100 years of hydrogen production. This is partly because small hydrogen leaks quickly dissipate, as hydrogen is lighter than air. Comparatively, other fuels, such as oil, diesel, and gasoline tend to pool, spill, and soak into the ground.

Water

Q *Where is the water coming from? What is the current capacity without jeopardizing existing band requirements?*

Water, particularly drinking water, is already a priority for the Xaxli'p community. The proposed water infrastructure upgrade funded by Indigenous Services Canada (ISC) will be decided this Spring, and a consultation and input process is guaranteed, which considers culturally informed impact studies as well as engineering considerations for population growth and future demand.

Water studies are ongoing with *Kala Geosciences* in Kamloops, with previous reviews completed by *Northwest Hydraulic Consultants* and other expert geotech companies. Further companies will be engaged to round out water studies, infrastructure feasibility, and costing.

Community Involvement

Q *How can the community be involved?*

Information sessions: Regular outreach through multiple channels, *especially* with members on the flats and with Elders. Online options are also available.

Community meetings: Feedback from the Xaxli'p community will be critical to the success of the utility. Please come out to any or all the scheduled meetings:

- **Saturday, 13 December**: In Vancouver, Sandman Inn, 180 Georgia, 10am to 2 pm
- **Sunday, 14 December**: In Kamloops, Coast Conference Centre, 850 Rogers Way, 10am to 2pm
- **Thursday, 22 January 2026**: Xaxli'p Community Meeting with ISC, 5pm to 8pm, with dinner
- **Monday, 26 January 2026**: Referendum – Land Vote, Xaxli'p Hall, 9am to 8pm
- *More to be announced*