



**yukon
energy**

5-YEAR STRATEGIC PLAN
2019–2024

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Introduction

BACKGROUND

Yukon Energy is the principal generator of electricity in the Yukon, directly and indirectly serving the territory's 21,000 electricity consumers. Yukon Energy has a clear mission, a reputation for good corporate citizenship and strong community partnerships. With almost all of Yukon Energy's electricity produced from hydroelectric facilities, our energy production is among the greenest in the world. Additional thermal generation capacity (both LNG and diesel) ensures we can deliver a reliable supply of electricity.

As an "islanded" utility with no connection to a neighbouring power grid and dispersed populations, Yukon Energy faces many unique challenges. To inform future-generation choices, a comprehensive resource plan was completed in 2016, the result of two years of extensive stakeholder engagement, research and scenario planning. The resource plan is used to guide Yukon Energy's annual business plans.

In the years ahead, Yukon Energy's operating context will be no less complex, featuring growing electricity demand, aging infrastructure, discernable climate change impacts and public concerns about Yukon Energy's level of greenhouse gas emissions.

Yukon Energy must also demonstrate its commitment to establishing and nurturing the strategic partnerships with Yukon First Nation people envisioned in the Yukon land claim agreements.

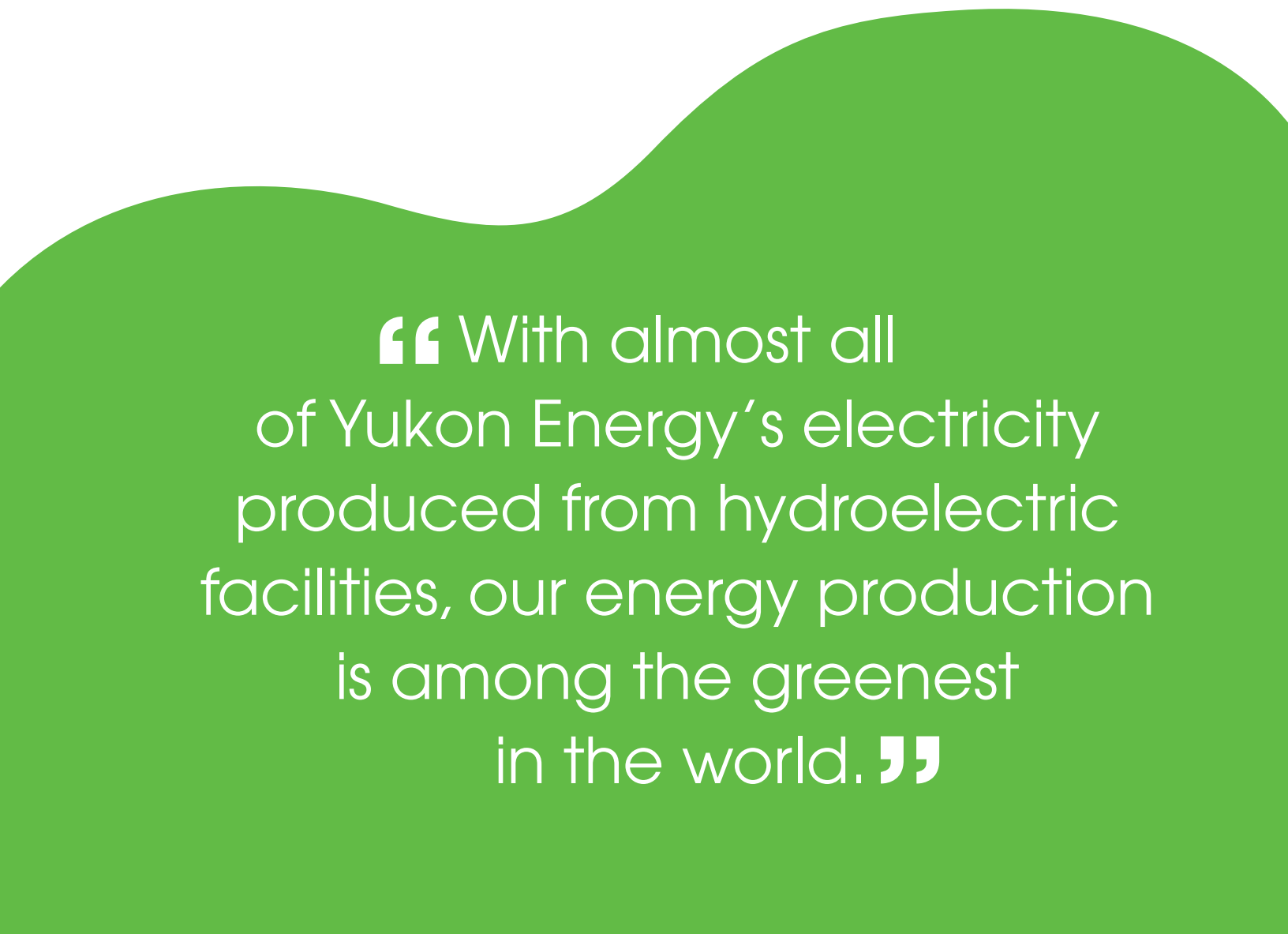
The Yukon Energy Board of Directors recognized this as an ideal time to build on our solid foundation with a clear, long-term vision and strategic directions for the future. On November 26th and 27th, 2018, Yukon Energy Board and Management met off-site for a two-day planning retreat to co-design strategic priorities for the next five years.

This strategic plan sets out the strategic priorities. Detailed operational plans will be developed by staff and presented to the Board for approval before autumn 2019.

METHODS

In preparation for the planning retreat, Convergence Strategies conducted preliminary scoping and assessment interviews with several leaders, representing a range of perspectives and experience. These included Board Chair Lesley Cabott, President and CEO Andrew Hall, Board directors Curtis Shaw, Clint McCuaig, Wendy Shanks and Simon Lapointe.

Vector Research also developed a comprehensive “Big Picture Analysis,” based on an additional set of interviews, to support a shared understanding of Yukon Energy’s complex social, political and financial operating context. The analysis was circulated in advance and presented to the Board on the first day of the planning retreat.



“ With almost all of Yukon Energy’s electricity produced from hydroelectric facilities, our energy production is among the greenest in the world.”

MISSION, VISION AND VALUES


Over the next five years and beyond, all aspects of Yukon Energy's operations will be guided by our mission, vision and core values:

Our Mission

Our mission is to enable Yukon's prosperity with sustainable, cost-effective and reliable electricity.

Our Vision

Our vision is to establish a sustainable energy legacy for future generations of Yukon people.



Our Values

- » Safety
- » Accountability
- » Continuous Improvement
- » Teamwork
- » Professionalism
- » Good Corporate Citizenship

“ Building respectful relationships takes time and effort. ”

our story

opportunities and challenges



📷 Our employees work hard to build, operate and maintain a safe and reliable power system. Photo: Jim Petelski



“ Yukon Energy’s electricity production is already among the greenest in Canada. ”

Yukon Energy is an industry leader in sustainable energy production in Canada.

Plans are in place to support the electricity requirements for the Yukon’s forecasted economic and population growth. Yukon Energy is poised to build truly beneficial relationships and strategic partnerships with Yukon First Nations.

At the same time, however, Yukon Energy is facing some unique challenges. The Yukon is growing and Yukon Energy is attracting more customers while our generating facilities and transmission infrastructure are aging. Generation capacity will need to grow if we are to meet future residential and industrial demand for electricity. While previous investments in electricity infrastructure by the federal government have kept electricity prices very low in comparison to other northern jurisdictions, the Yukon government is now first in line to finance future infrastructure investments. To avoid double-digit increases in electricity prices in the future, Yukon Energy needs to secure external funding for capital projects and infrastructure upgrades.

“ Yukon Energy is poised to build truly beneficial relationships and strategic partnerships with Yukon First Nations. ”

While Yukon Energy's electricity production is already among the greenest in Canada, we need a short-term capacity strategy to reach our long-term sustainability goals. Any delay in initiating a short-term capacity strategy will jeopardize energy reliability for Yukon people and businesses. Reliable electricity is crucial to supporting the region's economic growth. And as Yukoners know, reliable winter electricity is also a matter of survival.

Yukon Energy must also demonstrate its commitment to establish mutually beneficial strategic partnerships with Yukon First Nations, as envisioned in the Yukon land claim agreements. Building respectful relationships takes time and effort. Partnered investment requires fiscal responsibility. We must balance our responsibilities to government and ratepayers in the process.

“ We are aligned with the public's priorities for reliable, sustainable and cost-effective electricity. ”


Yukon Energy is working to electrify the Yukon's long-term prosperity. We are aligned with the public's priorities for reliable, sustainable and cost-effective electricity. We will work with our partners at ATCO Electric Yukon, federal, Yukon and First Nation governments, and other stakeholders on a shared vision of sustainable, reliable and abundant energy for the Yukon.

context

Yukon Energy must navigate a set of complex factors over the next decade and beyond if it is to continue to be an industry leader in sustainable and affordable energy production. Several of the factors are highlighted in the pages to come.





 A storm brews over the Mayo substation. Photo: Yukon Energy

“over
90%
 of Yukon Energy’s power
 is derived from clean,
 renewable hydroelectric
 facilities.”

ENERGY SUPPLY

The vast majority of Yukon Energy’s power – over 90% – is derived from clean, renewable hydroelectric facilities. However, much of that infrastructure is aging, having been built and paid for by the federal government over 50 years ago to support mining operations before being transferred to the Yukon government. Current capacity is already insufficient to keep pace with demand, particularly during winter peak events. All electricity utilities, especially those like Yukon Energy operating islanded transmission systems in northern regions, must plan for worst-case scenarios. For Yukon Energy, the system must have sufficient redundant capacity to meet demand in the event of a failure of our largest generation and transmission facilities. Yukon Energy is currently safeguarding the supply of reliable year-round energy by renting mobile diesel generators during the winter months.

ENERGY DEMAND

Yukon is experiencing population growth and an expanding economy. Electric heat is being installed in most new homes and commercial buildings, resulting in higher winter demand peaks – Yukon’s energy consumption record was broken three times in 2017 alone. Demand for electricity is forecast to continue to grow for the foreseeable future.

FINANCING

Yukon Energy is not currently positioned to self-finance long-term infrastructure development. This point is further complicated by the absence of any ability of the Yukon Development Corporation to generate revenue for potential investment in Yukon Energy. Yukon Energy is also subject to price regulation by the Yukon Utilities Board and, as such, may only charge electricity prices allowed by the Yukon Utilities Board. For decades, the Yukon public has been shielded from the true cost of electricity by the federal government’s initial investments in Yukon’s electricity infrastructure and various rate stabilization bill subsidies. Any debt that Yukon Energy takes on to finance new investments falls under the Yukon government’s “debt cap” imposed by the federal government. Access to funds within the debt cap is shared with all other Yukon government departments and entities.

FIRST NATION PARTNERSHIPS

Yukon Energy is committed to establishing mutually beneficial and strategic partnerships with Yukon First Nation governments, as envisioned in the Yukon land claim agreements, through respectful and thoughtful collaboration. Yukon Energy is working to create economic opportunities for Yukon's First Nation people through First Nation procurement and employment policies.

GOVERNANCE

Yukon Energy is a wholly owned subsidiary of the Yukon Development Corporation, which in turn is owned by the Yukon government. The Yukon Development Corporation and Yukon Energy recently signed a Protocol Agreement setting out roles and responsibilities of each Corporation, streamlining communications and supporting good governance.

CLIMATE

Yukoners are deeply concerned about climate change. As the extensive public consultations of the 2016 Resource Plan showed, the vast majority of Yukon residents prefer renewable low-carbon energy when made available at current prices. With more than 90% of its electricity already generated from non-carbon producing sources, Yukon Energy is well aware of the benefits of renewable electricity production. To ensure the safe and reliable supply of energy throughout the year, however, Yukon Energy will need to meet near-term demand growth with generation from fossil-fuelled thermal sources. Yukon Energy understands and embraces the challenge ahead, to return to a low-carbon optimum as quickly as possible within the constraints of operating an islanded electricity generation and transmission system.

WORKFORCE

Yukon Energy faces the same demographic challenges as all other electric utilities in Canada in recruiting and retaining workers with the specialized skills needed to generate, transmit and distribute electricity. Yukon's remote northern location, as well as competition for talent from major resource development projects in Western Canada, serves to create an additional layer of recruitment challenges.

ten-year vision

by 2030, Yukon Energy
will be a Canadian leader
in sustainable energy





We envision a robust and affordable energy system that:



is based on
**sustainable, renewable
and low-carbon** sources



abundantly **supports Yukon's
growth** and prosperity



is **reliable enough** to keep the lights on **in -45°C weather conditions** during the winter, even if a major hydroelectric facility or system component fails



exemplifies **respectful, mutually beneficial** and truly collaborative **partnerships with Yukon First Nations**



To reach these goals, we will implement a short-term capacity strategy, supplementing renewable systems with lower carbon diesel and LNG energy sources, as we pivot back towards a more sustainable energy system.

strategic priorities

for 2019–2024

Board discussions have identified six strategic priorities for the next five years:

- 1 **Generate** reliable and renewable energy
- 2 **Secure** long-term sustainable financing
- 3 **Develop** mutually beneficial First Nations partnerships
- 4 **Achieve excellence** in employee engagement
- 5 **Streamline and clarify** governance
- 6 **Provide** outstanding, reliable customer value





Marsh Lake control structure. Photo: Yukon Energy

1

GENERATE RELIABLE AND SUSTAINABLE ENERGY

- » We will plan and build a 10-year portfolio of projects to meet Yukon's future energy and capacity needs.
- » We will successfully secure water license renewals for our hydro facilities at Aishihik (2019), Whitehorse and Mayo (both 2025).
- » We will collaborate with the Yukon government to implement its newly established Independent Power Production policy.
- » We will continue to ensure that we meet our worst-case scenario (N-1) capacity requirements each year through innovation and sound planning.

2

SECURE LONG-TERM SUSTAINABLE FINANCING

- » We will develop and receive government approval for a 10-year capital plan, including capital for both new projects and to sustain our existing asset base.
- » We will secure federal funding to build a 10-year portfolio of projects.
- » We will develop models and options for First Nations investment in relevant projects within the 10-year capital plan.
- » We will work with our shareholder, the Yukon Development Corporation, to facilitate access to flexible financing in the future.
- » We will work with our partners to streamline the annual budget approval process to ensure budget and capital plans are approved prior to the start of Yukon Energy's fiscal year.

3

**DEVELOP MUTUALLY BENEFICIAL
FIRST NATIONS PARTNERSHIPS**

- » We will strengthen our relationships with First Nations where we have existing or planned operations.
- » We will develop a framework of partnership options with First Nations, including consideration of equity buy-in, corporate partnership and Independent Power Production investment, on a project-by-project basis, by 2019.
- » We will share opportunities for First Nation-owned businesses and create a workplace pipeline for Yukon First Nations people to join our team.

4

**ACHIEVE EXCELLENCE IN
EMPLOYEE ENGAGEMENT**

- » We will develop a succession plan for our Senior Management Team, by December 2019.
- » We will implement an annual employee survey to increase engagement and measure success as an employer, by December 2019.
- » We will inspire the Corporation with a goal of zero lost time incidents each year.

5

**STREAMLINE AND
CLARIFY GOVERNANCE**

- » Continue to work on good governance practices between Yukon Energy and the Yukon Development Corporation, with improved communication, support and mutual solution-building.
- » All Yukon Energy budgets and capital plans will be approved prior to December 31 of each year.

6

**PROVIDE OUTSTANDING,
RELIABLE CUSTOMER VALUE**

- » We will examine options to simplify electricity distribution to customers, streamline operations and reduce overhead.
- » We will collaborate with the Yukon government on the delivery of energy conservation programs for Yukon homeowners and businesses.
- » We will establish and achieve a measurable reliability target in electrical supply to the customers that we serve directly.
- » We will collaborate with ATCO Electric Yukon to improve communications with customers during outages.

**Our vision
is to establish
a sustainable
energy legacy
for future
generations
of Yukon
people.**



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