Building a Resilient and Renewable Energy Future: Chapter 1

a reliable and robust grid

reinforcing our foundation

Building a Resilient and Renewable Energy Future:
Chapter 1

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Cover: Northern lights over downtown Whitehorse. *Pi-Lens*

building a resilient and renewable energy future

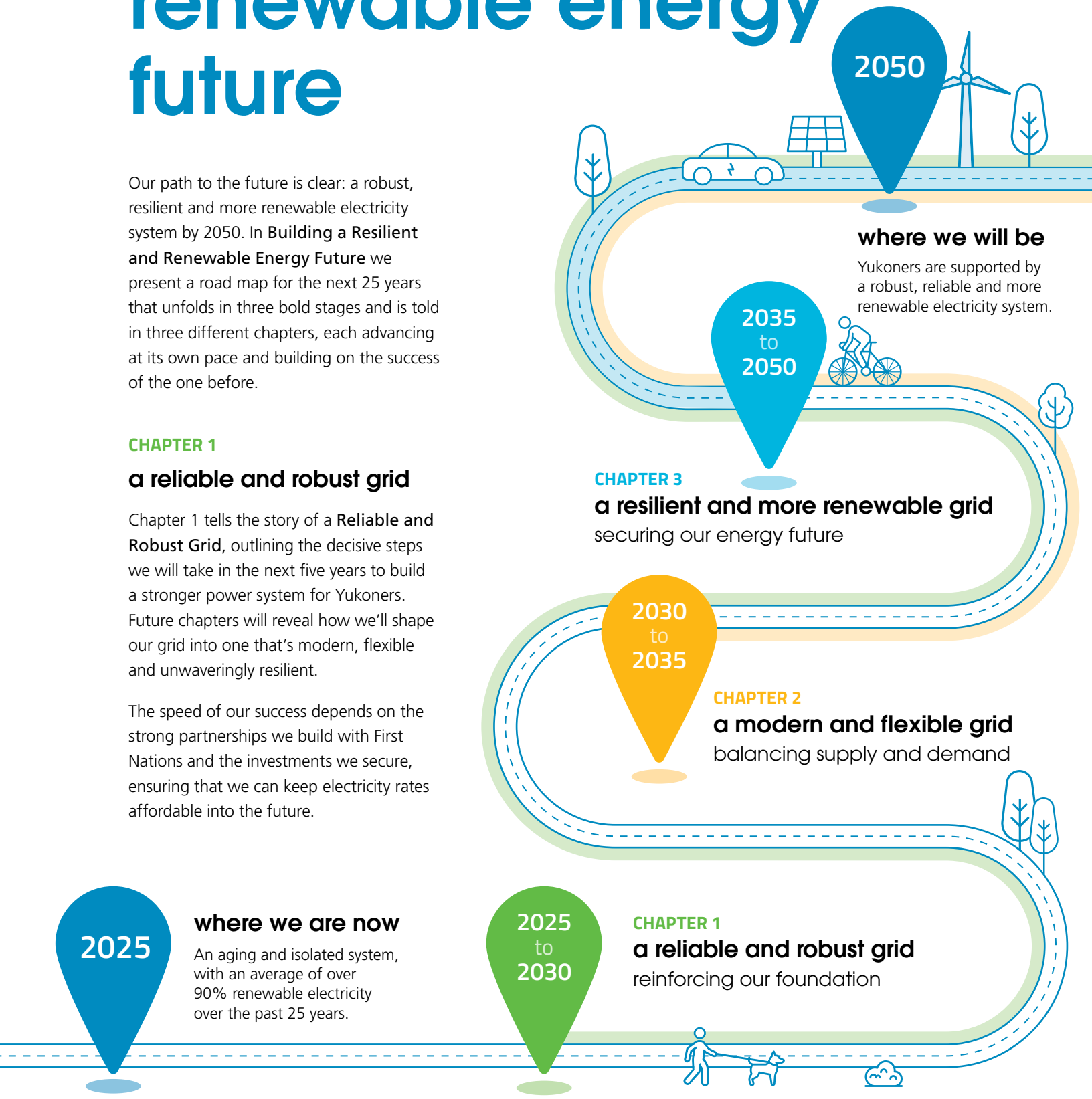
Our path to the future is clear: a robust, resilient and more renewable electricity system by 2050. In **Building a Resilient and Renewable Energy Future** we present a road map for the next 25 years that unfolds in three bold stages and is told in three different chapters, each advancing at its own pace and building on the success of the one before.

CHAPTER 1

a reliable and robust grid

Chapter 1 tells the story of a **Reliable and Robust Grid**, outlining the decisive steps we will take in the next five years to build a stronger power system for Yukoners. Future chapters will reveal how we'll shape our grid into one that's modern, flexible and unwaveringly resilient.

The speed of our success depends on the strong partnerships we build with First Nations and the investments we secure, ensuring that we can keep electricity rates affordable into the future.



a message from our President and CEO

Electricity is vital for fostering healthy and thriving Yukon communities. Looking to the future, we need to move ahead with urgency to safeguard the energy infrastructure we have today while building new assets to meet growing demands for power in the near term.

Creating a more resilient energy future will require more sources of renewable and reliable electricity to become available in the Yukon by 2050. This will help reduce our reliance on non-renewable resources used in the territory's heating, transportation, mining, aviation and other industrial and commercial sectors. Doing this means that the Yukon's electricity system must become more robust, modern and flexible – all in less than half as much time as it took for our existing electricity system to be built.

"For the next five years, Yukon Energy will focus on increasing the supply of dependable winter power to meet growing demands and building a stronger, more resilient power system."

For the next five years, Yukon Energy will focus on increasing the supply of dependable winter power to meet growing demands and building a stronger, more resilient power system. This work will meet the needs of Yukoners today and set us up for success in the future. Most importantly, it will ensure that we have an adequate supply of electricity in the winter, and a robust transmission and distribution system to deliver that electricity to Yukoners.

Large-scale, longer-term projects will take time, meaningful partnerships with First Nations governments and corporations, and critical funding to explore and implement. With an isolated grid and just 23,000 electricity customers, funding partners for these capital investments are imperative for electricity rates in the Yukon to remain affordable. Advancing these generational projects demands strategic planning, government and community collaboration, and securing the necessary funding. Given the long planning timeline, it's crucial that we take immediate action – starting with the first phase of our road map – to set the foundation for tomorrow's resilient energy future.

Chris Milner
President and CEO, Yukon Energy Corporation

the Yukon's energy transition

One thing is certain – the Yukon's population is growing and, with it, the demand for electricity. As we continue to transition away from fossil fuels for heating and transportation, that demand will only rise.

Between 2015 and 2020, peak electricity demands from Yukon homes and businesses (excluding mines) surged by 25%. This upward trend shows no signs of slowing, with non-industrial peak demand projected to rise by 40% by 2030, and 50% by 2035 compared to 2020.

At Yukon Energy, we're rising to the challenge by building a robust and dependable system that can meet our electricity needs today and set us up for the next generation of community renewable energy projects.

What are thermal resources?

When we say thermal, we mean LNG and diesel, or fossil fuel-based electricity generation.

What are intermittent renewable resources?

They are renewable resources that are not available all the time due to external factors – like the wind not blowing or the sun not shining.

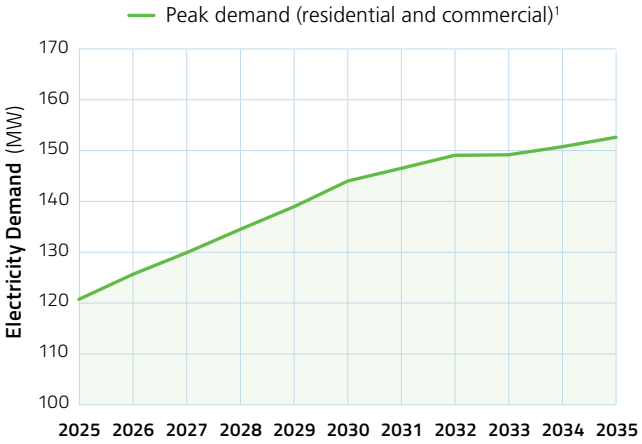
Ensuring an adequate electricity supply for Yukoners today and into the future requires a clear focus on:

- Re-investing in our existing hydro facilities – the renewables we depend on today – and the existing electricity system;
- Increasing the capacity of our grid and the supply of electricity we can depend on during the winter;
- Reducing winter demands for power; and
- Strengthening our electricity system by building critical infrastructure like substations, transmission loops and new power lines to provide redundancy to current assets.

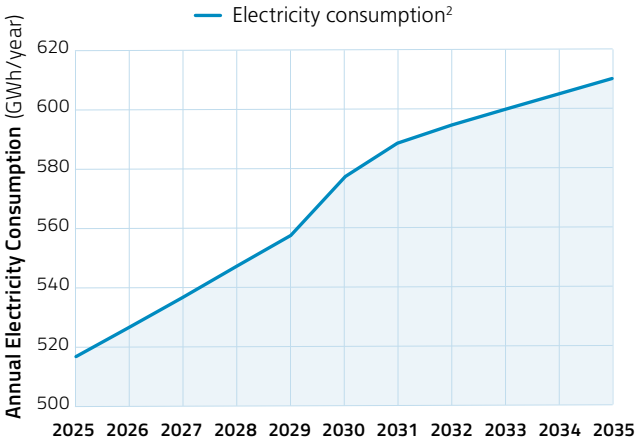
This means we will be:

- Renewing licences and permits for our existing hydro, liquefied natural gas (LNG), and diesel power plants;
- Replacing generation and transmission infrastructure and equipment that is nearing end-of-life;
- Increasing our supply of winter capacity resources, and strengthening our existing transmission and distribution systems to allow more power to flow to communities;
- Balancing resources in the North and South Yukon regions to meet community needs in the event of emergencies;
- Reducing the environmental and socio-economic impacts of existing power production;

load forecast 2025–2035



1 Peak demand projections are under N-1 planning criteria. Projections do not include industrial demand because in the event of an emergency, industrial customers are disconnected from the grid.



2 Annual electricity consumption projections include residential, commercial and industrial customers.

- Continuing to deliver our Peak Smart programs to shift electricity use and reduce peak demand; and
- Working with partners to research and assess potential energy solutions for the future.

Yukoners will experience the immediate benefits from this work – access to more sources of electricity and improved reliability – but its impact will reach far beyond the next five years. A stronger, more robust grid is necessary to meet growing electricity demands, safely integrate the next generation of community renewables, and provide consumers with more options to better manage their electricity use. At the same time, it will enhance the Yukon's contributions to Canada's critical mineral sector, support Arctic security, and help position the entire nation for a more resilient energy future.

Collaboration and forward planning will be critical as we progress to Chapter 2 of our road map outlined in **Building a Resilient and Renewable Energy Future**, where we will be modernizing the grid to make it more flexible and adaptable.

By bolstering our electricity supply and investing in system upgrades today, we will lay the foundation for a more reliable and robust electricity system – one that is ready to meet the challenges and opportunities of the coming decades.

3x

A single-dwelling home, on average, requires three times the amount of electricity when it converts from a propane or diesel heating source to electric heat.

6x

When electric vehicles are factored in, a household's electricity consumption can increase by five to six times.

why now?

60+ year-old
critical infrastructure

Did you know that some of our hydro assets have been in operation since the 1950s? Their long-term reliability has allowed our electricity supply to be over 90% renewable on average over the past 25 years. With continued investments and upgrades, these assets can support an even more renewable electricity future.

25%↑
increase in peak demands

The Yukon's population grew by 26% between 2014 and 2024[3]. Between 2015 and 2020, peak demands for electricity increased by 25%, and this trend is expected to continue with an additional 40% increase in non-industrial peak demand between 2020 and 2030.

evolving customer needs

The Yukon's electricity system was originally designed to deliver electricity one way to customers. Now, as more options to use and self-generate electricity become available, the system needs to be ready and equipped to deliver, accept and respond to variable sources of electricity supply and demand at a moment's notice. New infrastructure and upgrades to existing transmission lines, feeders and substations are needed to boost our resiliency and reliability.

electricity use in the winter

During peak times of electricity use in the winter, homes and businesses connected to the grid (excluding mines) need more electricity than what can be produced by our hydro generating stations and other renewable resources. That's one of the reasons why we use thermal generators each winter.

80%
of power supply is used during winter peaks on an average day

During winter peaks on an average day, homes and businesses connected to the Yukon grid (excluding mines) use about 80% of all the power Yukon Energy can generate at a point in time[4].

3 Based on the Yukon Bureau of Statistics' Population Report First Quarter, 2024.

4 Based on a winter day at an average temperature of -19 degrees celsius. Measured in megawatts (MW).

energy and capacity needs for the years ahead

Yukon Energy's short-term action plan

Over the next five years, Yukon Energy will be working to address our energy and capacity needs. The capacity (or size) of the Yukon's main electricity system is approximately 162 megawatts[5]. Most of this capacity is from the three hydro facilities we have in Whitehorse, Mayo and Aishihik, as well as the LNG and diesel power plants that Yukon Energy and ATCO Electric Yukon have in on-grid communities across the territory. The dependable capacity of these power plants decreases in the winter months to approximately 131 megawatts mainly because of lower water levels and downstream flow restrictions during winter months required to prevent flooding[5].

Yukon Energy rents diesel generators each winter to keep homes warm and electricity running during cold days, and to fill the gap between the amount of power Yukon homes and businesses (excluding mines) need during peak times and the amount of power we are able to generate using our own resources alone during an emergency. For planning purposes, we define an emergency as the loss of the Aishihik Generating Station, our largest source of winter power.

During the winter of 2024–2025, we rented nearly 40 megawatts of diesel power and located those units in Whitehorse, Faro and Mayo. Based on current forecasts, by 2035, we will need about an additional 45 megawatts of dependable winter capacity to meet peak demands for power and protect against prolonged outages during an emergency.

Demand for power is expected to grow the fastest in the Yukon's major load centre – Whitehorse. As a result, our plan is to install the new winter capacity we need in and around the Whitehorse area. At the same time, we plan to move some of the thermal resources that exist in the North Yukon region closer to Whitehorse. This will help us ensure that we have an adequate and balanced supply of winter power in both the North Yukon and South Yukon regions. This type of regional planning is crucial in the event that an issue causes our electricity system to split and supplies of power in the North and South regions cannot be delivered to each other.

Winter Capacity Gap in 2025

- Supplied by 40 MW of rental diesel generators

Winter Capacity Gap in 2035[6]

- Supplied by around 85 MW[7] of a mix of modular generation assets and rental diesel generators

New Winter Capacity Needed by 2035

- Around 45 MW
- This will be needed in the Whitehorse area, the Yukon's largest and fastest growing electricity load centre.

5 Based on nameplate capacity. Summer and winter output of the grid is less than the nameplate capacity of the grid. Does not include rental diesels and Independent Power Producers. Includes ATCO diesel and capacity from currently committed projects, such as diesel replacements in Faro and Whitehorse, new diesel units in Callison, battery storage, and demand-side management programs. The dependable capacity for thermal units also reflects adjustments for effective load carrying capacity.

6 The capacity deficit accounts for emergency situations and includes capacity from currently committed projects, such as thermal replacements, battery storage, and demand-side management programs.

7 Based on 2024 load forecasts. Load forecasts are updated regularly and subject to change based on actual and projected changes to population, housing and commercial development, and pace and scope of electrification.

so, what are we doing about it?

In the short term, Yukon Energy will be increasing thermal resources, as we need dependable capacity now, and adding critical pieces of infrastructure to our grid, primarily in and around Whitehorse. Thermal resources are the fastest and most cost-effective solution to meet our current needs, and we are firmly committed to providing Yukoners with electricity they can count on today to fuel their homes, businesses, hobbies and interests. At the same time, we are championing renewables by reinvesting in our existing hydro resources and strengthening our grid to support the next generation of community renewables.

In the next 12 to 24 months, we plan to work with our shareholder, the Yukon Development Corporation, to issue one or more Calls for Power to build new community renewables that will help us reduce our reliance on thermal resources.

Reflecting on the past 25 years, on average over 90% of the electricity we have generated has come from renewable resources. To maintain this position, we will need another 90 gigawatt hours of renewable winter energy built and connected to the grid by 2030. If the new energy comes from intermittent renewable resources, we will also need more battery storage to provide grid stability for when it comes online. Maintaining the 90% average until 2035 would require us to connect an additional 40 gigawatt hours of renewable winter energy between 2030 and 2035.

Intermittent renewable resources need dependable capacity like hydro and diesel in the background to support sudden fluctuations in their electricity production, as well as to prevent power outages when the wind isn't blowing or the sun isn't shining.

capacity vs energy

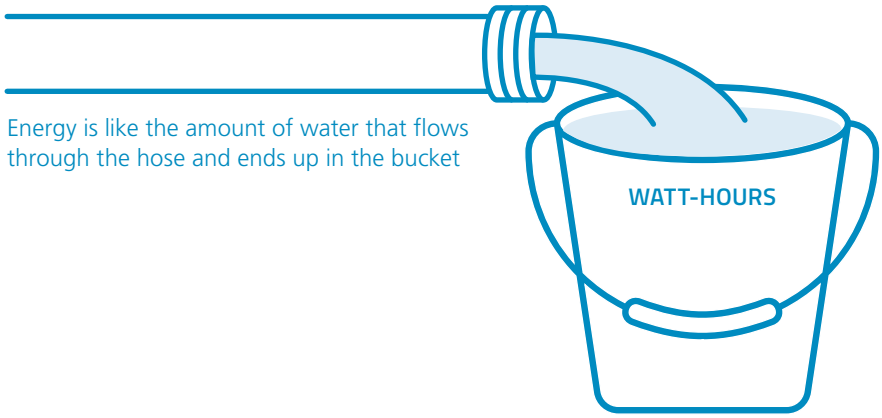
CAPACITY

The potential to generate electricity at a single point in time, measured in watts

Capacity is like the size of the water hose

ENERGY

Electricity available over a period of time, measured in watt-hours



Energy is like the amount of water that flows through the hose and ends up in the bucket

As we advance a Call for Power, we will work to build new power centres in the Whitehorse area to meet electricity needs over the next 10 years. The new power centres will serve three main purposes.

1. Increase the size of our electricity system and provide additional sources of dependable capacity that Yukoners can rely on during the winter to keep homes warm and lights lit on the coldest of days, in drought years, and when intermittent renewable resources aren't available.

2. Reduce our reliance on rental diesels. Renting diesel units each winter, while cost-effective over a short period of time, comes with risks such as limited supply chain, lower reliability, and reliance on an external contractor for maintenance. The capacity installed at these new power centres will account for the capacity that rental diesels provide us each winter, plus additional capacity needed to address growing demands for power.

3. These power centres will also include the construction of substations and transmission structures needed to support the increased loads of power we are expecting in each of these regions, and the potential for additional batteries to enhance grid stability and flexibility as more intermittent renewable resources are added to the grid.

Generators at the Faro diesel plant. *Yukon Energy*

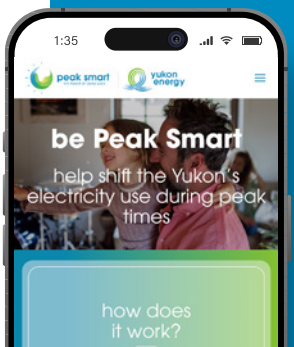
Renting vs owning diesel

A third-party analysis found that renting generators is the most cost-effective option in the short term, while permanent thermal options offer similar cost-effectiveness over the long term. However, additional factors like reliability, availability, risks of market increases, emissions, and matching the best engineered solutions for our use and climate must be considered. This analysis is one input into Yukon Energy's resource planning process.

peak smart
THE POWER OF DOING GOOD

Did you know?

Yukon Energy's Peak Smart programs help to shift electricity demand away from peak times to reduce pressure on the grid. First of the programs is Peak Smart Home, which uses utility-controlled thermostats and hot water tank controllers to shift peak demand. More information is available at **peaksmart.ca**.



strategic priorities

Our success over the next five years will be guided by strategic priorities that will shape our decisions and actions as we navigate the challenges and opportunities ahead. These priorities will keep us focused on what matters most.

strategic priority	actions
Be an industry leader in safe work practices.	Achieve zero safety incidents that have fatality potential. Continually strengthen our employee, public and facility safety programs.
Invest in people and technology.	Attract, develop and retain talent. Improve business processes with new and existing technologies. Continue to build and utilize our asset management program to improve asset decision making and realize value from our assets.
Ensure an adequate and dependable supply of electricity.	Invest in aging assets. Maintain and renew authorizations to safeguard current supplies of electricity. Rebuild the Mayo hydro facilities. Build electrical infrastructure to meet winter demand, protect against emergencies, and support future renewables. Advance initiatives and programs to reduce winter peak demand.
Strengthen our electrical infrastructure to adapt to evolving customer needs.	Increase the capacity and reliability of our transmission, distribution and substations to deliver more electricity. Complete a grid-modernization plan that identifies the people, processes and technologies required to meet the evolving needs of the utilities and Yukoners.

strategic priority	actions
Plan the renewables of tomorrow.	Continue to explore options to advance renewable electricity in the Yukon. Support the Yukon Development Corporation as they lead the development of a resource plan that will identify the resources needed to meet electricity demands and climate goals by 2050.
Secure financing to build and maintain a reliable electricity system.	Secure construction financing to deliver projects. Develop a strategy to attract partners, grants and investments that lower the cost of projects and minimizes impact on electricity rates.
Grow and develop partnerships with Yukon First Nations.	Work together with Yukon First Nations, governments and communities to plan, develop and manage future electricity projects. Seek opportunities for Yukon First Nations communities, businesses and Citizens to benefit from projects. Identify and implement stewardship actions that give back and show respect for the environment.
Build understanding of Yukon's electricity system and planning.	Take the lead in sharing information and raising awareness about the Yukon's unique energy challenges and solutions. Engage Yukoners in discussions about Yukon's electricity future and energy security. Engage governments and partners in the development of policies, regulations, and the investments required to advance projects.

building a reliable and robust grid

2025–2030

A reliable and robust grid is the cornerstone of our road map to building a resilient energy future. This will be made possible through a dependable local supply of electricity and backup capacity, capable of meeting growing winter demands and withstanding challenges like droughts, emergencies and fluctuations in solar and wind energy production.

what does this look like once achieved?

We've secured an adequate supply of electricity and upgraded power lines within and between communities to ensure the reliable delivery of this electricity across the territory. We've built partnerships and engaged with First Nations governments and developed comprehensive plans to address Yukoners' evolving electricity needs. We've also conducted in-depth research into emerging technologies and future renewable energy sources with support from our partners. And we've minimized the impacts of existing operations and developed new solutions that support better outcomes.

1,500+
kilometres of power lines

14,000+
power poles

Yukon Energy crews work hard to maintain around 1,500 kilometres of power lines and over 14,000 power poles across the Yukon.

what's needed to get there: three key pillars

An Adequate and Dependable Supply of Electricity

- Renew permits for the continued operation of existing hydro and diesel facilities.
- Invest in aging infrastructure, including the rebuilding of Mayo's hydro facilities.
- Build new power centres in the Whitehorse area to provide dependable sources of winter power today, add redundancy and strengthen our grid, and support the safe integration of future community renewable energy projects.
- Deliver programs that help Yukoners reduce peak-time power demands.

A Strong Electricity System

- Expand the capacity of power lines and substations to meet growing demand.
- Build new transmission lines and substations in high-demand areas.
- Upgrade business systems to improve efficiency and support automation.
- Invest in developing a skilled workforce equipped to address the challenges of the future.

Building Tomorrow's Plans and Partnerships

- Issue one or more Calls for Power for the development of dependable winter energy and capacity resources.
- Complete a grid modernization plan.
- Work with our shareholder, the Yukon Development Corporation, to release a resource plan with input from First Nations governments and community stakeholders that identifies the resources needed in the long term.
- Develop partnerships with First Nations governments to manage existing resources in a way that reduces effects on the environment, and to build new sources of electricity.
- Secure critical investments and construction financing to move projects forward.

our commitment to working with First Nations

As we move forward on our road map to 2050, there are exciting opportunities for First Nations collaboration and investment in a wide range of projects. Yukon Energy is committed to fostering strong partnerships at every level of our business, and sourcing locally, when economical, to ensure shared growth and success.

As a public utility, we strive to fulfill commitments as outlined in Chapter 22 of the Umbrella Final Agreement including economic development, employment, procurement and investment, amongst others.

We acknowledge that the historical development of our hydro facilities has had lasting effects on both the environment and the traditional use of the land by Yukon First Nations. Today, we are actively conducting studies, adjusting operations, and implementing mitigation strategies to reduce the environmental and socio-economic impacts of these existing facilities. Through our work to relicence the hydro facilities in Mayo, Whitehorse and Aishihik, we will draw on past agreements with First Nations as a powerful example of the positive outcomes that can be achieved through meaningful partnerships and collaboration.

Building a reliable and robust grid means taking a new approach – one that considers the needs and values of the communities we serve. Our relationship with First Nations governments and businesses is vital to our success, and we deeply value the trust, knowledge and expertise that these partnerships bring. We look forward to strengthening these ties and working together to build an electricity system that we can all count on.

Battery energy storage system located on Kwanlin Dün First Nation Settlement Land in Whitehorse. *GBP Creative*

Ongoing partnerships

Yukon Energy has entered into agreements with First Nations for the battery energy storage system in Whitehorse. These agreements lay the foundation for future financial partnerships for this initiative.

Yukon Energy has also entered into an agreement with a First Nation partner to support our LNG generation capacity.

our five-year capital investment priorities

To meet the growing demands and future needs of the territory, significant and urgent investments are required in every aspect of the Yukon's electricity system in the next five years. This includes power generation, stability and storage, transmission and distribution, as well as end-use electrification. We estimate that more than $100 million per year in targeted capital infrastructure funding will be needed over the next five years. This investment will be spread throughout the territory and will support the three key pillars of Chapter 1, which represent our focus for the next five years:

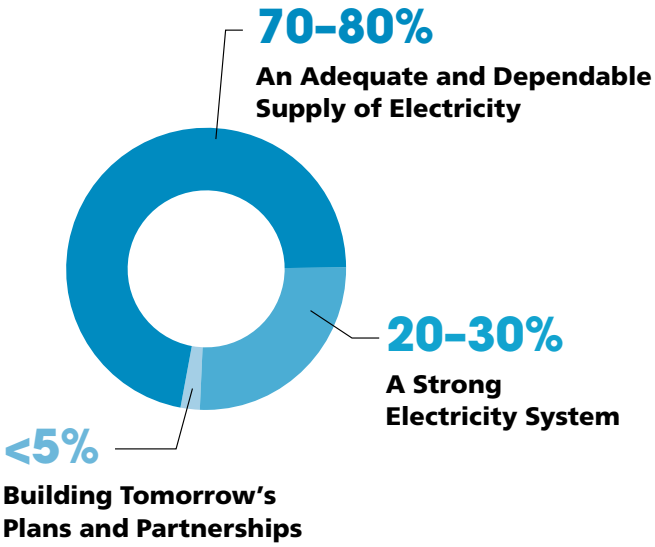
An Adequate and Dependable Supply of Electricity

A Strong Electricity System

Building Tomorrow's Plans and Partnerships

From 2025–2030, the planned work to build a robust and resilient grid will cost more than $500 million[8]. More than 70% of that cost will go towards ensuring an adequate and dependable supply of electricity is available locally to meet growing demands for power, particularly in the winter.

Five-year investment breakdown



Yukon Energy is committed to working with partners to explore strategies that minimize rate impacts.

8 Based on Class 5 estimates in 2024. Estimates will change based on market conditions and as each project's design and development is advanced.

project spotlights

2025–2030

Whitehorse power centres

Estimated Capital Cost: $100 million+

As we build a more reliable and robust grid, we know that thermal capacity, new substations and more transmission and distribution assets are required to meet the needs of Yukoners. While it might seem counterintuitive, thermal resources will play a crucial role in providing the stability needed to safely integrate more community solar and wind resources to the Yukon grid. As part of our resilient future, balancing resources like diesel generators and battery storage systems will help to stabilize the frequency of the power supply and provide power when other resources are not available.

Our plan is to build two new thermal power centres near Whitehorse. The power centres will provide up to 85 megawatts of winter capacity to our system. Of this total, up to 45 megawatts will be new capacity.

Once complete, these power centres will provide the dependable capacity that Yukoners can count on during the winter and serve as a reliable source of backup power to new intermittent renewables. By investing in the thermal resources we need today, we can ensure a long-term, reliable and cost-effective solution by reducing the number of rental diesel generators in operation. These power centres will also be built considering the space and electrical infrastructure needed to install more battery energy storage systems in the future.

On our path to 2050, we want the flexibility to be able to respond to our electricity needs and integrate emerging technologies as they become available. If we reach a point where these thermal assets are no longer required, we will be able to sell or move them, given their modular set-up.

The lights of Whitehorse in mid-winter. *Government of Yukon*

This work will be carried out in phases, starting in 2025[9].

Phase 1

In 2025, we will focus on the selection of sites for the power centres, engagement with First Nations, stakeholders and the public, and environmental and socio-economic assessments.

In 2026, we will begin construction of a 15-megawatt thermal power centre in South Whitehorse. This capacity will come from existing rental diesels that will be relocated from other sites.

Phase 2

In 2027–2028, we will start construction of the second new power centre in North Whitehorse, with up to 30 megawatts of thermal capacity.

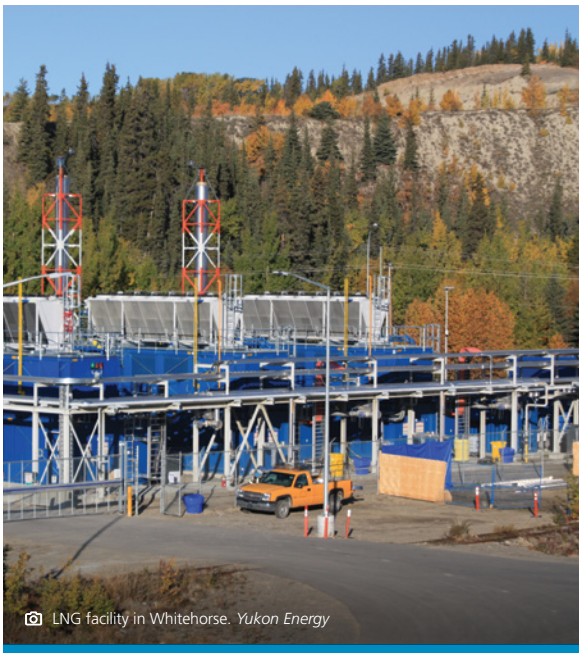
At the same time, we will start upgrading transmission and substation infrastructure around the Whitehorse area. Of the 30 megawatts installed at this location, up to 15 megawatts will be net-new.

Phase 3

In 2028–2029, we will expand the thermal capacity of the power centre built during Phase 2 in North Whitehorse and continue upgrades to transmission and substation infrastructure around Whitehorse.

By 2030, we will add up to 15 megawatts of net-new thermal capacity to the site, and by 2035, we will add up to an additional 15 megawatts of net-new thermal capacity on-site.

9 These numbers are based on planning estimates from Q1 2025. Planned capacity numbers are subject to change based on load growth and as the project's planning and design is advanced.



LNG facility in Whitehorse. *Yukon Energy*

Why more thermal resources in Whitehorse?

Currently, around 75% of electricity used on the Yukon grid is in the Whitehorse region. To ensure the lights and heat stay on in Whitehorse during a transmission line fault, it is essential to have a backup power source within or near the community.

Although the exact site locations in the Whitehorse area have not been determined, we will be closely considering residential noise impacts, emissions and air quality, and environmental and socio-economic impacts. We will also be working to identify partnerships for this project. Reliability is our priority, so we know that the site must be in proximity to where most of the electricity in the Yukon is consumed today – Whitehorse. We look forward to engaging with First Nations and the public as we work together to advance these essential projects.

Mayo hydro facility upgrades

Estimated Capital Cost: $200 million+

Over the next five years, we need to complete major upgrades to the Mayo hydro facility, ensuring it remains a keystone of dependable and renewable energy for the Yukon. Some of the critical infrastructure at the facility is almost 75 years old and requires significant investment to maintain its reliability and efficiency. This work will include renewing our existing water use licence, stabilizing the Mayo A slope and replacing the surge tank, replacing the Wareham dam spillway, modernizing the Mayo Lake Control Structure and renewing the Mayo A plant. Throughout the development of these projects, we will continue to work with the First Nation of Na-Cho Nyäk Dun and the Village of Mayo to ensure that local knowledge and priorities are respected, and that the benefits of these upgrades are shared with the community.

3,200 homes

Since coming online in the early 1950s, the Mayo A plant generates enough electricity each year to power approximately 3,200 homes.

Gate control system at the Wareham dam in Mayo. *Jim Petelski*

looking ahead

In collaboration with our shareholder, the Yukon Development Corporation, First Nations and community stakeholders, Yukon Energy is committed to advancing renewable electricity projects as a core component of our vision for the future. We will be carrying out system planning and future load forecasting to support the Yukon Development Corporation as they map out the long-term resource needs for the territory and explore a grid connection with British Columbia. We will also be working with the Yukon Development Corporation to issue one or more Calls for Power to identify and request new projects that can provide reliable winter energy in the near-term.

By conducting the necessary research and planning now, we can accelerate our progress towards a resilient, reliable and renewable electricity system in the future.

Climate Change Adaptation

As we move forward, Yukon Energy is acutely aware of the impacts of climate change and is prioritizing these challenges while we build a reliable and robust system. Changing weather patterns and environmental conditions, specifically floods, ground instability, snow variability, icing and wildfire, will directly impact how we plan our resources and carry out our work.

Over the next five years, many of Yukon Energy's planned capital projects will incorporate climate change adaptations. To learn more about this work, please refer to our **Climate Change Adaptation Plan**, which outlines the steps we are taking to adapt our operations in response to a changing climate.

conclusion

Chapter 1 tells the story of the first stage of our road map: building a reliable, robust grid. Yukon Energy's vision is clear – we know the path that is required for success.

Over the next five years, we will work collaboratively to achieve an adequate and dependable electricity supply, a reliable system, and actionable plans that advance future energy goals. At the heart of this effort will be strong partnerships with First Nations, which are essential for a resilient energy future for the territory. The work we do now to stabilize the system is essential for the next generation of community-driven renewable energy projects, paving the way for a resilient electricity system by 2050.

Ongoing investment in infrastructure and winter capacity will be crucial to meeting our immediate power needs and supporting renewable energy growth. While our long-term goal is to create a robust, resilient and more renewable electricity system, our focus today is on laying the foundation for a modern and adaptable system, one that can integrate emerging technologies and new resources. We can't wait to share this story in **Chapter 2: A Modern and Flexible Grid – Balancing Supply and Demand**, which will be released once our grid modernization strategy is complete.

Our commitment to a reliable and resilient electricity future is unwavering. The time is now to act boldly and embrace new approaches, ensuring our system is not only ready for the challenges ahead but prepared to embrace the opportunities of the coming decades.

Northern lights over transmission lines in Aishihik. *Jim Petelski*

yukonenergy.ca