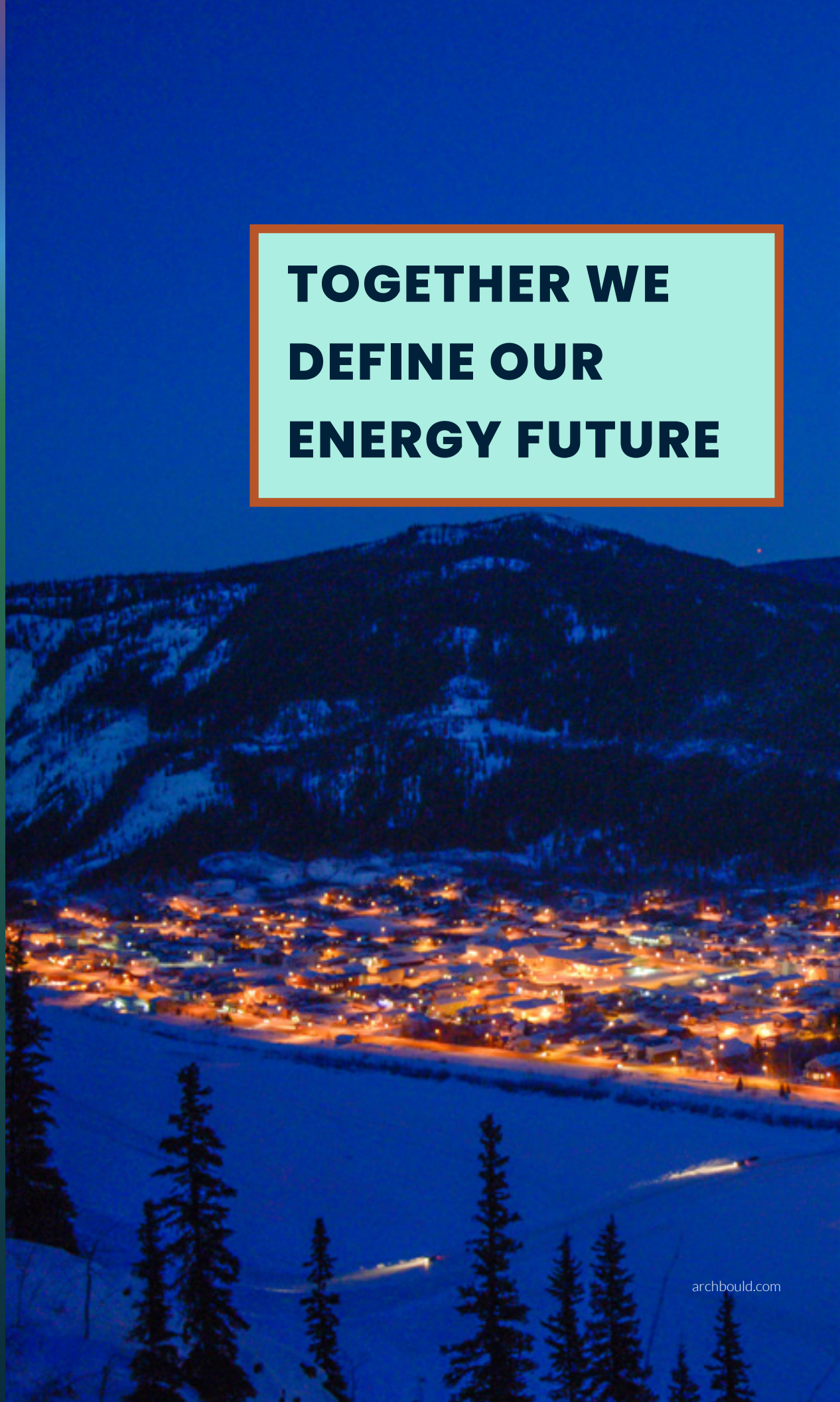




# Yuhke Hwëdëk

*Northern Lights Story*

**TOGETHER WE  
DEFINE OUR  
ENERGY FUTURE**



## PRONUNCIATION

*YooH-kay*

*hweh-dëck*

## YUHKE HWËDËK MEANING

Yuhke Hwëdëk means Northern Lights Story. The Northern Lights illustrate the interconnectedness between the earth and the cosmos and can be seen as a river of light, aligning with our identity as Tr'ondëk Hwëch'in, People of the River. This connection to the natural world is profound, as the lights not only represent the beauty of nature but also symbolize energy and creativity, much like a story unfolding in the sky, carrying the voices of our ancestors' and us as we journey towards the next seven generations. We are uncertain where this journey will lead us, but the Northern Lights inspire awe and wonder, encouraging us to look towards the sky and imagine the possibilities that lie ahead.

## OUR VISION

Yuhke Hwëdëk is our energy initiative that seeks to deepen our community's understanding and capabilities in energy consumption, conservation, efficiency, generation, infrastructure, etc. By fostering collaboration within our community, Citizens and Tr'ondëk Hwëch'in Government will co-create tools and resources for educational partnerships and programs. These initiatives will empower us with knowledge and skills, guiding Citizens towards future career opportunities and shaping our collective energy future.

Inspired by the interconnectedness symbolized by Yuhke Hwëdëk, the Northern Lights Story, we will leverage Citizen visioning and energy literacy to identify and pursue holistic partnerships and investment opportunities. These efforts will focus on programs, infrastructure, and renewable energy projects that honor our environmental, cultural, and stewardship values. By integrating traditional knowledge with innovative solutions, we aim to create a sustainable and resilient energy future for our community, ensuring that the voices of our ancestors and the needs of future generations are respected and upheld.

# OUR CLIMATE IS CHANGING



## Our Traditional Territory is experiencing the localized impacts of these broader climate trends which threatening our natural world and our way of life.

Climate change is driving global temperature increases, extreme weather events, and ecosystem transformations, with Canada experiencing these changes at an accelerated pace. The Yukon is warming rapidly, leading to thawing permafrost, shifting vegetation, and heightened wildfire risks. Recent reports indicate that the Yukon is warming at twice the global rate, with annual temperatures rising by 2.3°C since 1948<sup>1</sup>. This warming trend is causing more precipitation and melting Arctic Sea ice. These changes are evident in our Traditional Territory, posing threats to our natural environment and traditional way of life. Projections suggest that annual precipitation could increase by up to 17% by 2072<sup>2</sup>, further impacting the region's landscape and ecosystems.

<sup>1</sup> <https://www.cbc.ca/news/canada/north/2021-annual-state-of-environment-report-yukon-1.6273024>

<sup>2</sup> <https://www.cbc.ca/news/canada/north/yukon-2022-state-of-the-environment-1.6660840>

In 2019, Tr'ondëk Hwëch'in and the City of Dawson recorded the following energy and greenhouse gas emissions data:





Energy consumption: 350,474 GJ

GHG emissions: 19,899 tonnes of CO<sub>2</sub>e




Energy expenditures: \$13,579,256

Heating oil is the biggest source of greenhouse gas emissions in the community. It provides 32% of the community's energy, followed by gasoline at 23% and electricity at 21%. The residential sector is the largest energy user (64%), the biggest emitter of greenhouse gases (70%), and the highest in fuel expenditures (59%). Although electricity is less polluting, it still faces reliability issues like brownouts and blackouts. To meet the Intergovernmental Panel on Climate Change's climate targets for 2030 and 2050, significant reductions in emissions are necessary. Managing energy use and emissions is crucial for combating climate change and improving Yukon's energy infrastructure.

**1 GJ (Gigajoules) is approximately equivalent to:**

-  6-8 days household gas heating
-  1.5 tanks of gasoline for small car
-  8-10 days of household electricity use
-  3000 hours of physical labour

**One tCO<sub>2</sub>e (tonnes of carbon dioxide equivalent) is created from:**

-  4-5 months of household natural gas heating
-  9.5 tanks of gasoline for a small car
-  8-10 homes' electricity use for a year

Source:

Community Energy Association. (2023). Community energy and emissions inventory report for Champagne and Aishihik First Nations and the Village of Haines Junction. Kluane First Nation and Destruction Bay and Burwash Landing. Tr'ondëk Hwëch'in and the City of Dawson/White River First Nation and Beaver Creek.

# TR'ĚHUDĚ

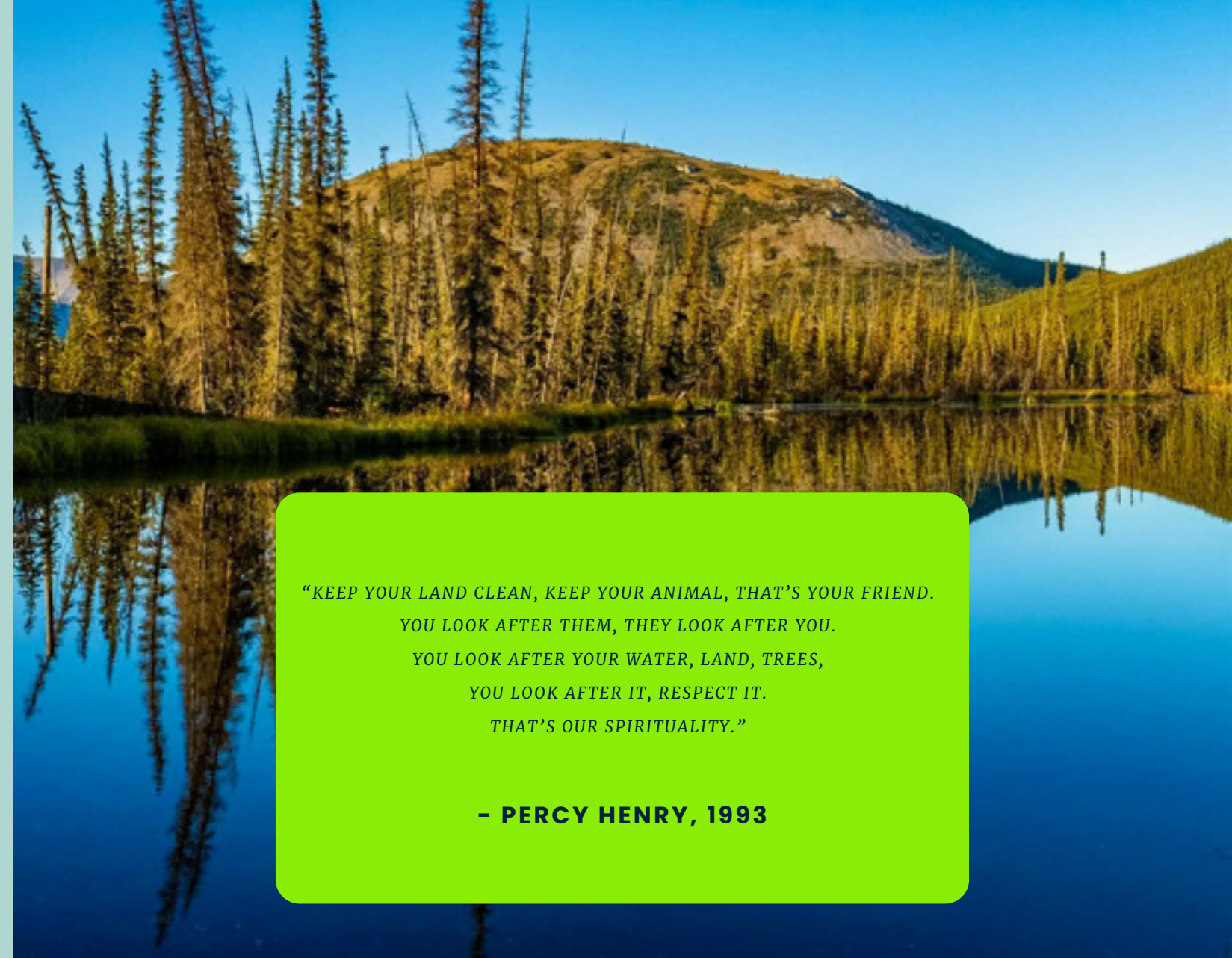
As Dēnezhu, the people of this land—salmon people and caribou people, weather-watchers and story people—our identity is deeply intertwined with the land we've inhabited since time immemorial. Tsà' Wēzhè, through his travels, fostered connections between our people and the natural world, establishing the principles that guide our interactions with the environment and each other.

These principles form the core of Tr'ēhudè, our way of life and laws. Tr'ēhudè emphasizes our duty to maintain balance with nature and honor our interconnectedness with all living beings. By adhering to these teachings, we've developed a profound understanding of our territory's ecosystems and our role within them.

Our traditional knowledge is invaluable in addressing the climate crisis. It offers unique perspectives that complement

scientific approaches to environmental challenges. As stewards of our Traditional Territory and a Self-Governing First Nation, we're uniquely positioned to develop and implement adaptive strategies that respect both our cultural heritage and the changing landscape.

The climate crisis poses a significant threat to the delicate balance of our world, but by drawing upon our identity as Dēnezhu and the wisdom of Tr'ēhudè, we can work towards restoring harmony and ensuring a sustainable future. Our commitment to these principles not only preserves our cultural legacy but also offers a model for responsible environmental stewardship in the face of global challenge.



*“KEEP YOUR LAND CLEAN, KEEP YOUR ANIMAL, THAT’S YOUR FRIEND.  
YOU LOOK AFTER THEM, THEY LOOK AFTER YOU.  
YOU LOOK AFTER YOUR WATER, LAND, TREES,  
YOU LOOK AFTER IT, RESPECT IT.  
THAT’S OUR SPIRITUALITY.”*

**- PERCY HENRY, 1993**

## 01

### **Indigenous ways are crucial for addressing climate change.**

Our Energy Initiative must align with Tr'ēhudè and Dēnezhu identity and values. Focus on sustainability and using fewer resources.

## 02

### **Look at natural and innovative solutions**

Together we can discuss all the options in different energy types, conservation of natural habitats and new energy project feasibility.

## 03

### **Indigenous Governments working together**

Collectively we can share knowledge and support each other to achieve self-determination, and self-reliance.

# ENERGY LITERACY

**AS A GOOD FIRST STEP, YOU ARE INVITED TO JOIN A FREE ONLINE COURSE EXPLORING ENERGY SYSTEMS THROUGH A NORTHERN INDIGENOUS LENS.**

### Course Details

Energy Literacy is a free, online, self-guided, interactive course. It takes approximately 15 hours to complete and can be finished within 90 days. There are no prerequisites, and it is relevant to anyone interested in energy literacy. This course is a first step in learning a new language together, discussing, reflecting, and sharing our progress along the way.

### Learning Journey

#### This energy journey introduces:

- How the electricity grid works
- Challenges and opportunities of our energy infrastructure
- Challenges and benefits of integrating renewables
- Equipment and technologies suited for remote northern communities

#### By the end of this journey

##### you will:

- Understand basic electrical concepts
- Describe how the power grid works
- Evaluate renewable energy options for your community
- Understand the language of energy efficiency and conservation
- Strengthen our self-reliance
- Gain new skills and work together to shape our energy future in the North.

Gain the knowledge to make informed energy decisions and actively participate in shaping your community's energy future.

For more information about the course, contact Paul Butterworth (details on back page) or go to:

[www.yukonu.ca/programs/continuing-studies/energy-literacy](http://www.yukonu.ca/programs/continuing-studies/energy-literacy) for instructions on how to register.

#### Why It Matters:

This course empowers us to:

- Combine Dënezhu and Tr'èhudè ways of knowing and being with modern energy systems
- Protect our traditional territories
- Explore and create sustainable and renewable energy options

### Who are Northern Energy Innovation?

Northern Energy Innovation (NEI) is an applied research program at Yukon University dedicated to enhancing the reliability, sustainability, and renewable energy integration of electrical power systems in northern communities. NEI's key purposes include assessing and integrating renewable energy sources, improving energy efficiency and reliability in northern power systems, exploring energy storage options, and collaborating with regional power companies. Through innovative research, NEI aims to enhance environmental stewardship and support the transition to sustainable energy in remote communities.

## WHAT FOLLOWS NEXT?

### Your Energy Future.

Energy Literacy is not a prerequisite to this next opportunity, but it is a valuable tool for building knowledge and understanding in preparation of.

#### Community Energy Systems

The Community Energy Systems course is an Immersive, multi-day program specifically designed for Northern and Indigenous communities. This course includes a mix of lectures, round table discussions, panels, and practical hands-on or field-based activities. Its primary goal is to provide participants with a foundational understanding of electrical terminology, concepts, and equipment, while also addressing current energy issues and projects within their community. By doing so, the course aims to empower us to actively

participate in and manage our community's energy systems, including renewable energy projects and related infrastructure.

A distinctive feature of the CES course is that it's collaboratively developed by our community and Northern Energy Innovation. This approach ensures that the course content is tailored to meet our specific needs and goals as a community, making the material both relevant and timely. Additionally, this process promotes the sharing of knowledge, the building of relationships, and the creation of mentorship opportunities.

The CES course also counts for university credits, making it an excellent opportunity for those interested in furthering their education while gaining practical skills. It is open to anyone who wishes to participate and learn more about community energy systems.

#### History of the CES Course

The CES course was initially co-developed with the Vuntut Gwitchin First Nation (VGFN) to support their Sree Vyah (Old Crow Solar Energy) project. VGFN recognized a need to build local capacity to support their renewable energy initiatives and approached Northern Energy Innovation for assistance. The CES course was designed to address several key challenges:

- Developing a skilled local workforce capable of supporting community energy projects.
- Enhancing basic energy literacy to enable meaningful community engagement in renewable energy governance.
- Providing opportunities for knowledge sharing and engagement with energy industry experts.

The first CES course was launched in 2020 at Yukon University's Alice Frost campus in Old Crow, with support from various organizations

involved in the Sree Vyah project, including ATCO Electric Yukon, Yukon Government, Beyond Consulting, and Solvest.

By participating in the CES course, we can blend our traditional knowledge with modern energy systems, protect our traditional territories, and explore sustainable energy options. This strengthens our self-reliance and helps us shape a sustainable energy future together.



## **We tell this story together.**

Energy is fundamental to our worldview, our natural world, and creation and plays a crucial role in every part of our lives.  
Start your Energy Literacy journey with us.

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