Renewable Energy

BE THE CHANGE EARTH ALLIANCE

Indigenous Wisdom

"We slept when it got dark and arose when the light returned. Scientists now know our bodies release melatonin after dusk to help us follow these natural rhythms of life"

-Last Spring Storm (John Thomas), Dene Nation

Background

Renewable energy comes from sources that can be replaced and replenished quickly. Renewable energy resources include solar, wind, tidal, water (hydro), biomass, and geothermal.

- In 2018, renewable energy sources produced 26% percent of global electricity, a 7% increase from 2014. This figure is expected to rise to 45% by 2040.
- In British Columbia (BC), close to 95% of electricity is generated from renewables, the majority being from Hydropower plants.

Renewable energy sources tend to pollute much less than non-renewable energy sources such as oil, coal and natural gas, which are not replaced quickly once they run out.

- In 2019, 42 Billion tonnes of CO_2 emissions were released into the atmosphere, and around 37 Billion tonnes of this came from ***fossil fuels***, such as oil, coal, and gas.

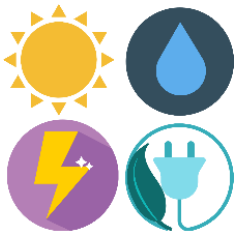
Case Study of Hydropower

Hydropower is one example of a renewable, sustainable energy source. Hydropower uses the energy produced by flowing water to create electricity. Because the water cycle is constantly renewed by the sun, it is a renewable and sustainable energy source.

- Unlike ***fossil fuels***, hydropower has low CO_2 emissions, and creates no air pollution.
- Hydropower is also a reliable energy source that can create and sustain jobs.
- However, hydropower dams can block salmon migration, displace communities, and negatively impact aquatic life. Some dam projects, for example the proposed Site-C project, have been criticized for infringing on Indigenous rights and traditional practices.

Transitioning to Renewable Energy

To stop the climate crisis and other environmental catastrophes, it is important that society transitions away from non-renewable, high-polluting energy resources such as oil, coal and natural gas. Yet there are challenges associated with this transition:



- Existing electricity grids were built for energy sources such as oil, coal and natural gas, and transitioning from one ***energy system*** to another is expensive.
- While powerplants can provide energy at all times, solar and wind power only provide high volumes of energy during sunny or windy periods.
- Though they are becoming increasingly affordable, solar farms are on average twice as expensive as natural gas plants to construct.

Indigenous Communities & Energy Systems

It is important for Indigenous communities to have control and make decisions about their own ***energy systems***, to ensure that these systems are aligned with Indigenous culture, traditions, values, and knowledge. This also allows for Indigenous communities to be more resilient, by allowing them to make choices on solutions that are best suited and beneficial to their community members.

Glossary

Energy system. An energy system is the way energy is supplied to a community of users, for example, through a powerplant or hydro-plant powering an electricity grid.

Fossil fuels. It is a substance formed from the decomposition of ancient plants and animals over millions of years. It is the most commonly used energy source. Examples of fossil fuels include oil, coal and natural gas.

Learn More and Take Action

Learn about everyday steps you can take to reduce your energy consumption:

- **BC Hydro's Tips to Save Electricity** (https://www.bchydro.com/powersmart/residential/savings-and-rebates/everyday-electricity-saving-tips.html?WT.mc_id=rd_21tips)

Have your voice heard and join a network of youth from around the world, advocating for divestment and clean new jobs:

- **Sunrise Movement** (https://www.sunrisemovement.org/)

Learn more about and support Indigenous-owned renewable energy projects:

- **Indigenous Clean Energy Projects** (https://indigenouscleanenergy.com/ice-projects/)
- **W Dusk Energy Group** (https://wduskgroup.com/)

Follow, support, and volunteer at Canadian organizations that are promoting sustainable energy:

- **BC Sustainable Energy Association** (https://www.bcsea.org/)
- **Clean Energy Canada** (https://cleanenergycanada.org/)
- **Heart and Solar** (https://www.heartandsolar.ca/)
- **TREC Canada** (https://www.trec.on.ca/)

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