



# Our Electrified Future

Presentation to Nanaimo City Council

April 24th, 2023

 **BC Hydro**  
Power smart



## Today's System

5 million customers

30 hydro facilities

300+ substations

80k of transmission line

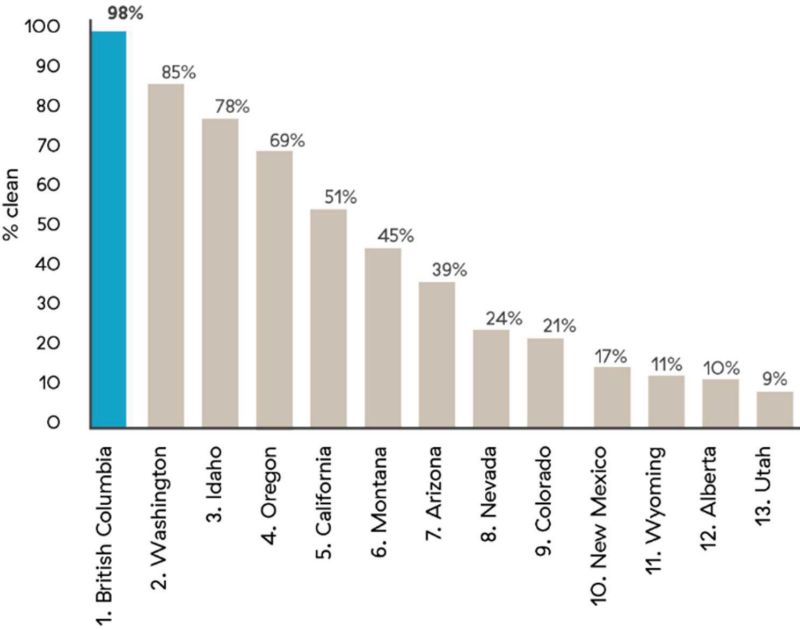


## The Climate Imperative

United Nations IPCC noted that to address the climate crisis, electricity will need to supply as much as **80%** of our energy needs.

## Clean Power Advantage

Cleanest electricity generation in western North America



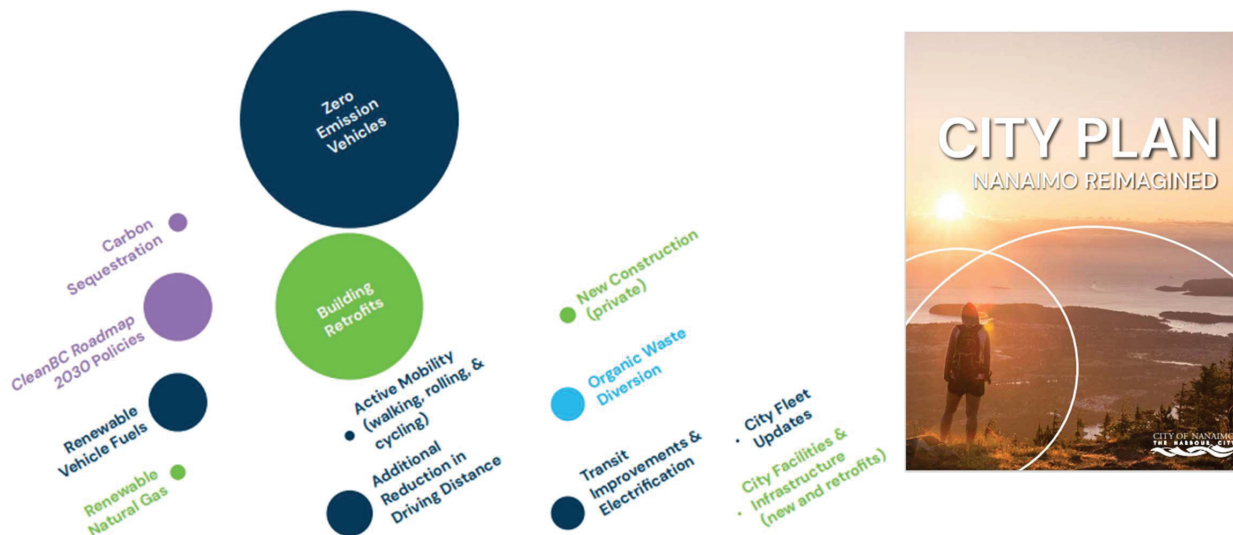


# Hydro's Electrification Plan

5-year plan that supports CleanBC targets:

- Programs to help customers switch to clean electricity across buildings, transportation and industry
- Attracting new businesses to B.C. that want to be powered clean
- Making it easier for current and future customers to connect to our grid

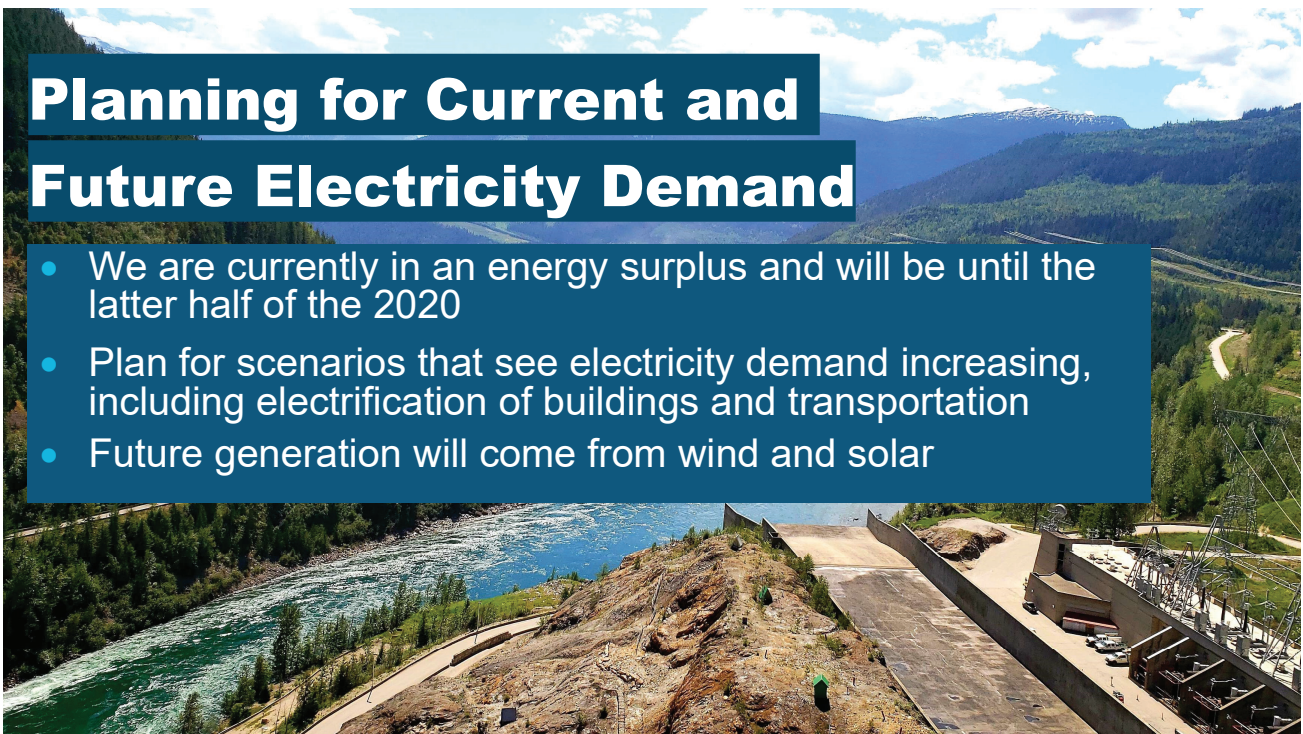
# Nanaimo's Need for Electrification





## The Electrified Future

- Current and future energy supply
- Grid capacity
- Connection costs



## Planning for Current and Future Electricity Demand

- We are currently in an energy surplus and will be until the latter half of the 2020
- Plan for scenarios that see electricity demand increasing, including electrification of buildings and transportation
- Future generation will come from wind and solar





## Efficiency is Important

Continue to encourage through programs and incentives  
Historical savings from our programs amount to the capacity of Site C  
Efficiency of new technologies like heat pumps will reduce demand



## Demand Reduction and Response

Demand response programs allow us to shift demand out of peak times  
Invest in energy efficiency in high growth areas  
Optional residential time of use rate



## Grid Capacity

Investing in capacity upgrades

Updating our planning criteria

Advancing major underground projects



## Electrification Costs – Updating our Distribution Extension Policy

Development Industry Challenges

Free riders

Cost unpredictability

Cost inequities





## Strong Partnership with Nanaimo

Position co-funding for a Community Energy Manager  
Providing support for your step code engagement  
Funding a study looking at the local government role in decarbonizing rental buildings



## Strengthening our Partnership

- Gain a better understanding of climate and land use plans
- Inform distribution system upgrades
- Efficiently deliver electrical infrastructure