CleanBC for Local Governments and Economic Developers: A Clear Path to a Cleaner Future
Outlines B.C.’s plan to reach our 2030 climate targets

Lays out actions that credibly reduce our emissions, with sector-by-sector approach to transportation, buildings, and industry

It creates more opportunities for people and businesses as we make things more efficient and use more clean energy
WHAT’S IN CLEANBC

Government is committed to:

• Meeting our GHG reduction targets
• Growing a prosperous low-carbon economy
• Making sure cleaner options are affordable
• Working towards reconciliation with Indigenous peoples
• Creating more opportunities for businesses
• Helping workers get the skills they need
ELECTRIFYING KEY SECTORS

• Meeting our GHG targets may be achieved by electrifying key sectors
  • Including housing, transportation, industry

• By 2030, CleanBC policies will require an additional 4,000 gigawatt-hours of electricity
  • This demand is over and above projected BC Hydro demand growth
  • It is equivalent to an 8% increase, and roughly the same as the electricity demand for the City of Vancouver
  • Existing and planned projects that harness B.C.’s vast wealth of clean, renewable power can meet this growth

• Meeting our 2040 and 2050 targets will require substantial additional volumes of new clean electricity
ACCELERATING THE SWITCH

Changing how we use energy

% change

-40% -20% 0% 20% 40% 60%

2010 2015 2020 2025 2030 2035 2040 2045 2050

Clean energy use Fossil fuel use

cleanBC
<table>
<thead>
<tr>
<th><strong>Bring down the price of clean vehicles</strong></th>
<th>Just over 20 years from now, every new car will be a zero-emission vehicle (ZEV) with phased-in increases to the ZEV standard</th>
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<tbody>
<tr>
<td></td>
<td>Help people to afford cleaner cars and save money on gasoline bills with ZEV incentives</td>
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<td></td>
<td>Make it easier to charge or fuel a ZEV</td>
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<td><strong>Speed up the switch to cleaner fuels</strong></td>
<td>Make our fuel cleaner by increasing the low carbon fuel standard to 20% by 2030 and increasing the production of renewable transportation fuels</td>
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<td>Make vehicles run cleaner by increasing tailpipe emissions standards for vehicles sold after 2025</td>
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## IMPROVE WHERE WE LIVE AND WORK

<table>
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<tr>
<th><strong>Better buildings</strong></th>
<th>Make every building more efficient by improving the Building Code and increasing efficiency standards</th>
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<tbody>
<tr>
<td><strong>Support for better buildings</strong></td>
<td>Incentives to make homes more energy-efficient and heat pumps more affordable</td>
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<td></td>
<td>Upgrade public housing to make it more comfortable and energy-efficient</td>
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<td>Make residential natural gas consumption cleaner by putting in place a minimum requirement of 15% to come from renewable gas</td>
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<tr>
<td><strong>Support for communities</strong></td>
<td>Help remote communities reduce dependence on diesel and support public infrastructure efficiency upgrades and fuel switching to biofuels with the CleanBC communities fund</td>
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### CLEANER INDUSTRY

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<th>Description</th>
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<tr>
<td><strong>Ramp up the CleanBC program for industry</strong></td>
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<td><strong>Improve air quality by cutting air pollution</strong></td>
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<td><strong>Reduce methane emissions from natural gas development</strong></td>
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<td><strong>Industrial electrification</strong></td>
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<td><strong>Carbon capture and storage</strong></td>
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<td><strong>Cleaner fuels for industry</strong></td>
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<tr>
<td>Reduce waste and turn it into a clean resource</td>
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WHAT THIS MEANS --

• By 2040, every new car will be a Zero-Emission Vehicle:
  • That means building out ZEV charging stations in homes, workplaces, and public sites
  • Service, R&D marketing and design in ZEV sector will expand

• Helping people make home energy efficiency improvements to cut their energy use and costs
  • Will include tens of thousands of new heat pumps installed every year, insulation improvements, and appliance upgrades.
  • New construction will adapt as Building Code is updated
  • CleanBC Better Homes and Better Buildings
WHAT THIS MEANS --

• Technical innovation across industrial sectors
  • R&D work, efficiency improvements, monitoring and evaluation
  • Developing and refining cleaner fuels

• Increasing recycling and waste management infrastructure
  • Industrial innovation to move to a “circular economy” where waste is eliminated
  • Meeting demand for consumer options for better recycling and waste reduction

• Keeping our communities healthy and strong
  • Adapting and preparing for a changing climate – work needed to assess risks and make infrastructure improvements

And more...
CREATING NEW OPPORTUNITIES

CleanBC training and retraining for new and mid-career workers

• Trades training for the construction industry
• ZEV training for mechanics and electricians
• Ongoing labour market analysis will support further initiatives

CleanBC Workforce Readiness Plan

• Will examine future career opportunities in the low carbon economy - where jobs may be located, supports needed, and opportunities for mid-career workers to develop new skills
CONSULTATION WITH COMMUNITIES

In 2018, nearly 30 communities were consulted on CleanBC through:

- UBCM Special Committee on Climate Action
- Intentions papers: Clean Transportation, Clean, Efficient Buildings, and a Clean Growth Program for Industry
- Email submissions
- Online discussions
- Telephone townhalls
Feedback from B.C.’s communities was included in CleanBC and work is well underway.

- Zero-Emission Vehicle (ZEV) mandate, incentives, and improved charging infrastructure
- An active transportation strategy, including transit funding and improvements
- Energy Step Code
- Home energy incentives
- Upgrading public housing
- Establishing CleanBC Communities Fund
- Low Carbon Buildings Innovation Program
UPCOMING WORK

• Transportation fuel standards and renewable supply, including tailpipe emissions standards
• Clean trade corridors and ports
• 15% renewable natural gas
• Clean Communities Fund - $63M investment in infrastructure with a GHG reduction component
• Lower mainland ZEV freight trucks
• Building energy labelling and reporting
• 95% organics diversion, 75% landfill gas capture
• Electrifying remote communities
SUMMARY OF PROGRESS

We’re Taking Action

45 Actions underway

We’re Delivering

3 Actions complete:
• ZEV legislation
• Dawson Creek - new transmission lines/ connect to existing lines
• Climate Risk Assessment

We’re Connecting

Engagements underway and upcoming:
• Indigenous engagement
• Climate Ready BC
• Job Readiness

We’re Connecting
WORK WILL CONTINUE IN 2020

The remaining 6.1 Mt in reductions achieved through initiatives such as:

- cleaner freight and heavy-duty vehicles
- significantly increasing industrial electrification
- improving community planning, active transportation, and transit
- continuing to invest in technology and innovation.
WORK WILL CONTINUE IN 2020

By 2020, province will develop a new strategy to prepare for climate change

• Early work underway in partnership with local governments and Indigenous communities to address impacts of climate change
• B.C. released a preliminary provincial strategic climate risk assessment to lay foundation for future efforts – to inform priorities areas and new strategy
• Climate Ready BC: Preparing Together – Online public engagement site engage.gov.bc.ca/climatereadybc
2019/2020 INDIGENOUS ENGAGEMENT PLAN

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<tr>
<th>Spring/Summer 2019</th>
<th>Fall/Winter 2019/2020</th>
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<td>10 regional sessions in 9 locations</td>
<td>2 day Forum for all Nations</td>
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<td>Ongoing one-on-one meetings</td>
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<tr>
<td>Workshop at Métis Nation BC’s Annual Youth Forum</td>
<td>Proposed presentation at Gathering Our Voice</td>
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<tr>
<td>2 day workshop at Annual BC Elders Gathering in Vancouver</td>
<td>Presentations at Climate Connect</td>
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<tr>
<td>One-on-one meetings</td>
<td>TBD</td>
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<tr>
<td>Communities &amp; Nations</td>
<td>Organizations</td>
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<tr>
<td>Youth</td>
<td>Elders</td>
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We recognize that meaningful engagement takes time and resources.

How can we work together in a good way going forward?
OPPORTUNITIES FOR COLLABORATION

Getting Around

• Ensuring a greater portion of personal and commercial vehicle fleet is powered by clean B.C. electricity and cleaner fuels is one of the most important steps we can take to reduce our carbon footprint.

• As part of the Province’s CleanBC plan, an active transportation strategy aims to double the percentage of trips taken with active transportation by 2030 by cost-sharing cycling infrastructure projects with local government through the BikeBC program.

Improving Where We Live and Work

• The CleanBC Better Homes and Better Building programs were created to help households, businesses and communities reduce climate pollution, save energy, and make buildings healthier and more comfortable.
OPPORTUNITIES FOR COLLABORATION

Reducing Waste and Turning it into a Resource

- Waste is an issue for all communities and can be a challenge to manage. Preventing waste in the first place remains key to emission reductions, however in some cases organic waste can be used to generate cleaner sources of energy for use in homes and transportation. As a result, many local governments in B.C. have organics prevention and/or diversion programs that avoid yard and food waste going to landfills.

Preparing for a Changing Climate

- The Province is looking for public input to help develop a new strategy that will better prepare B.C. communities for the impacts of climate change.
- Online questionnaire, discussion forum and written submissions until January 2020
OPPORTUNITIES FOR COLLABORATION

Remaining 25%

Over the next 15 months, the Province will look to develop other initiatives and innovative approaches to close the gap on the remaining 25%, including new technology breakthroughs, and systems-based approaches.
A NEW RESOURCE FOR LOCAL GOVERNMENT

- **CleanBC Better Buildings/Better Homes**
  - [betterhomesbc.ca](http://betterhomesbc.ca)
  - [betterbuildingsbc.ca](http://betterbuildingsbc.ca)
- **Innovative Clean Energy (ICE) Fund**
DISCUSSION

• What economic opportunities do you see in CleanBC?

• What areas could we explore further for clean economic growth?
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