



cleanBC

our nature. our power. **our future.**

# ACTION NEEDED TO SLOW CLIMATE IMPACTS

## Projected by 2050



At least 1.3° to 2.7° C warmer



Up to 70% of glacier loss by 2100



Average annual rainfall increase by 2-12%



Rising sea levels

## Increasing Risks



Forest fire severity



Shift in species ranges

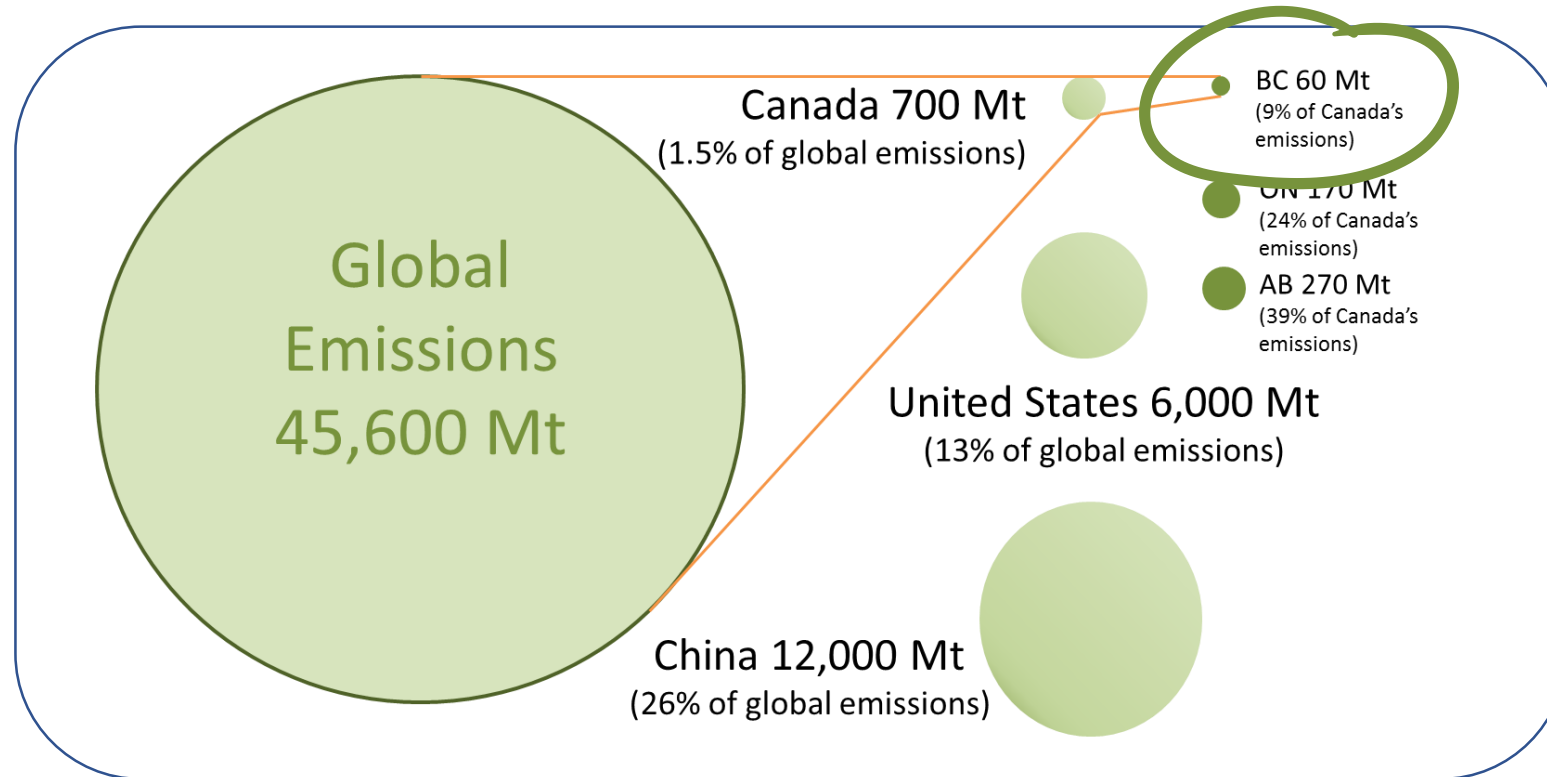


Drought or heavier rains



Coastal flooding

## - TOTAL GREENHOUSE GAS EMISSIONS



1 Mt = 357,000 cars driven for a year by the average BC driver

# cleanBC

- 1 Outlines B.C.'s plan to reach our 2030 climate targets
- 2 Lays out actions that credibly reduce our emissions, with sector-by-sector approach to transportation, buildings, and industry
- 3 Is fully funded, with program specific details in the 2019/2020 Budget

Reducing emissions

Preparing for Climate Change



Infrastructure, buildings & transportation



Communities, social services, recreation



Ecosystems & biodiversity



Industry



Waste



Extreme weather, natural disasters



Natural resources & agriculture



Transportation



Buildings

Building the Clean Economy

# What's in cleanbc

## Desired outcomes of CleanBC:

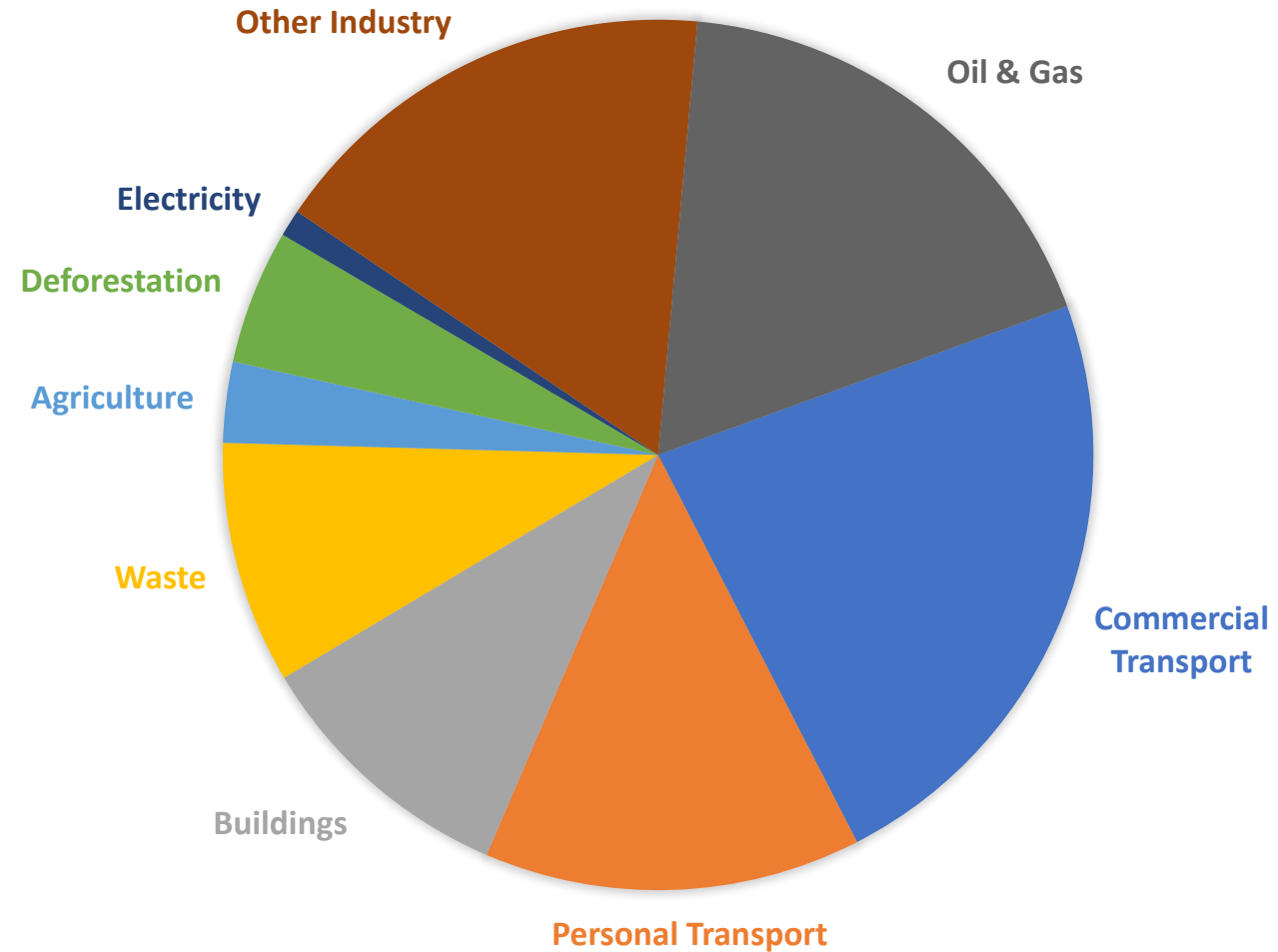
- Meeting our GHG reduction targets
- Growing a prosperous low-carbon economy
- Making sure cleaner options are affordable
- Creating more opportunities for businesses
- Helping workers get the skills they need



# bC's emissions profile

## 64.5 million tonnes CO<sub>2</sub>e in 2017

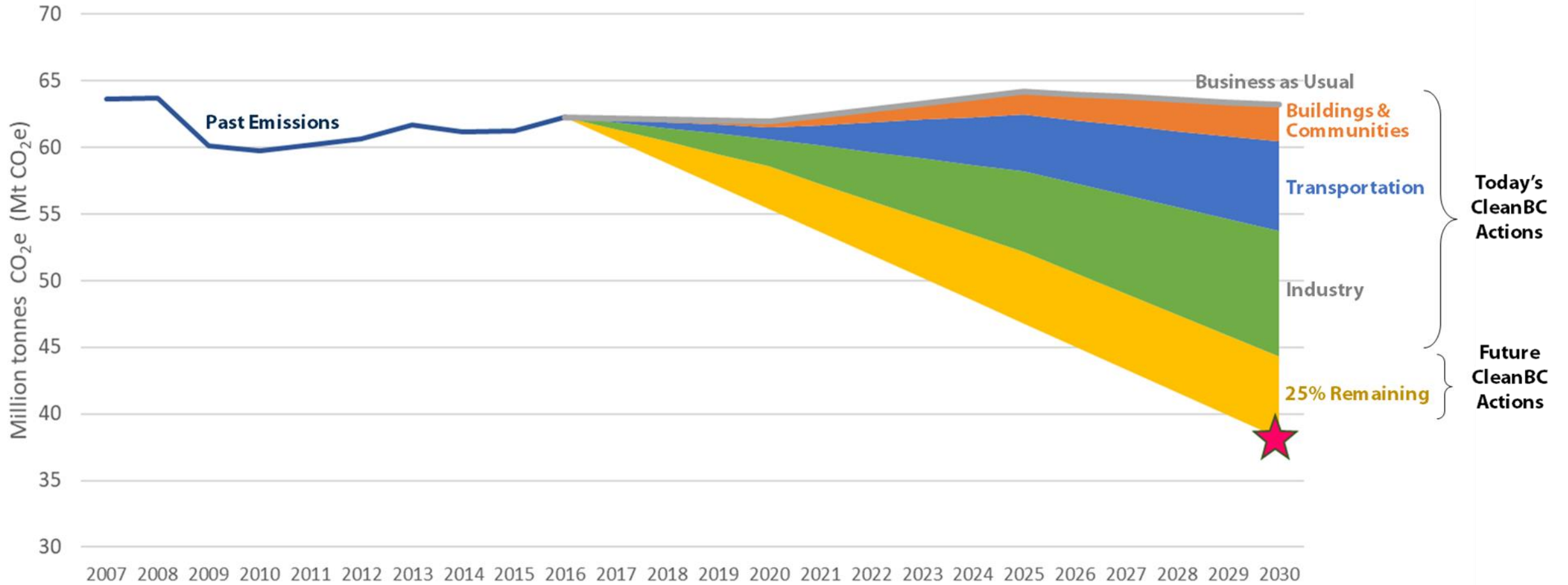
- ~95% hydroelectricity
- No coal-fired electricity
- Limited heavy manufacturing
- Largest sector is transportation
- Growing natural gas sector



# REACHING OUR 2030 TARGETS

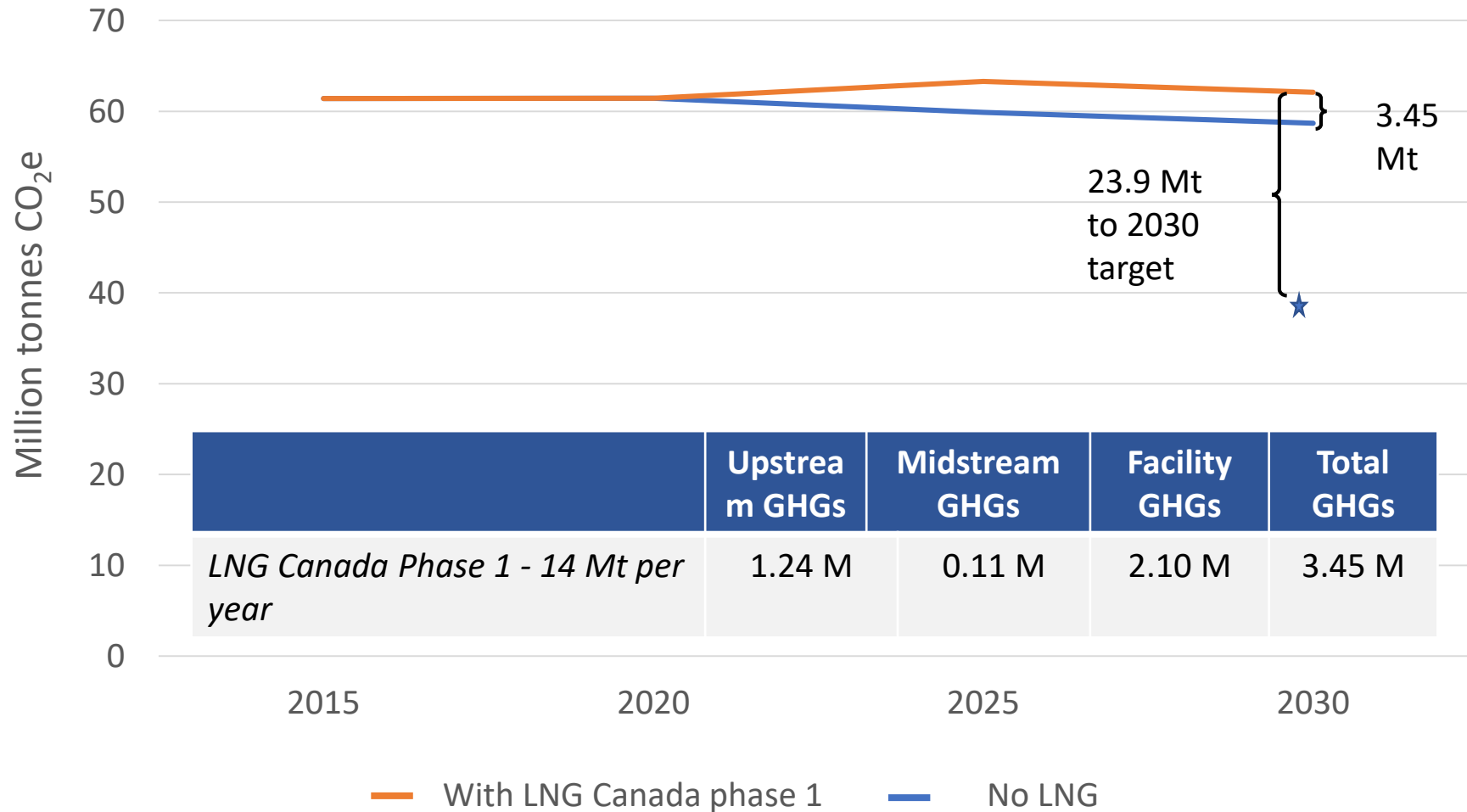


## Pathway to meeting our climate goals

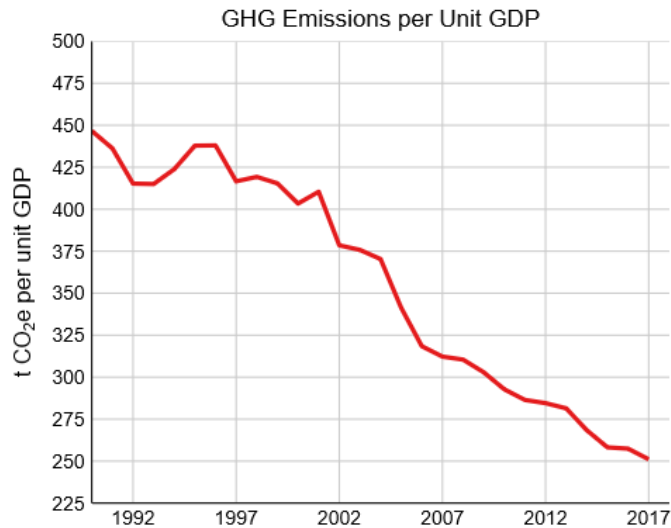
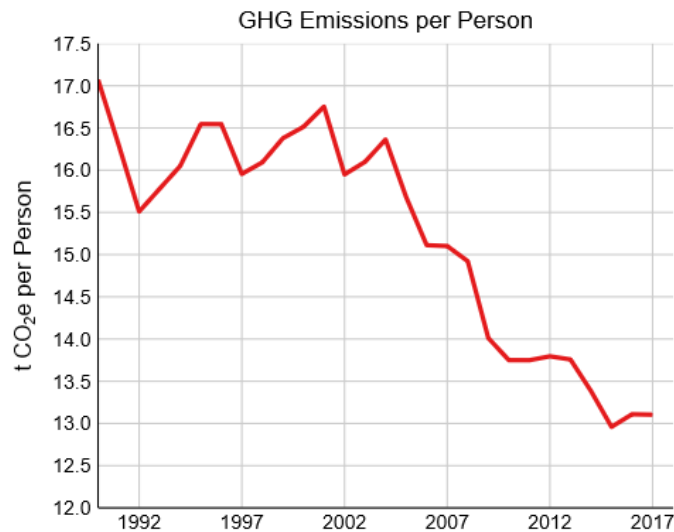
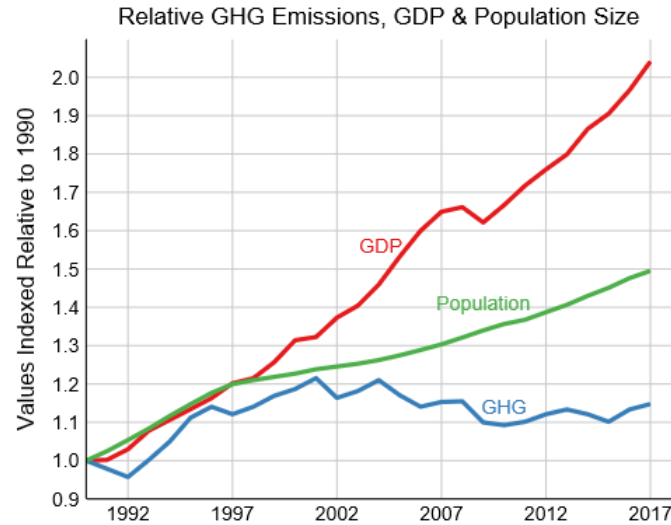
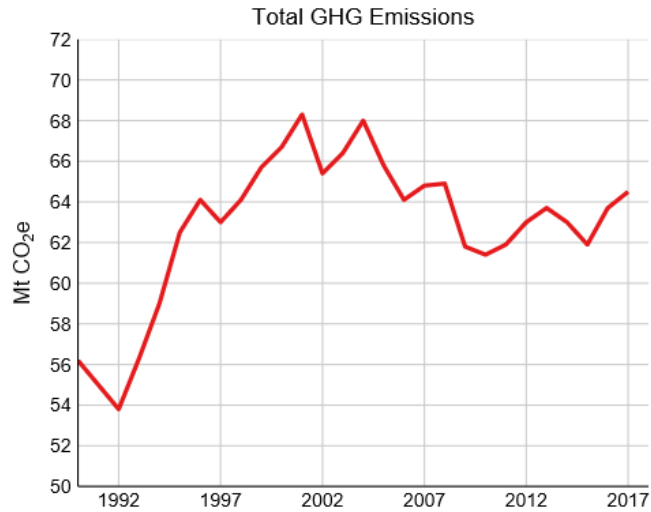




# GHG Attribution to LNG Canada Phase 1



# Progress To Reduce Emissions



**GHG emissions per capita:**  
15 tCO<sub>2</sub> in 2007  
13 tCO<sub>2</sub> in 2017

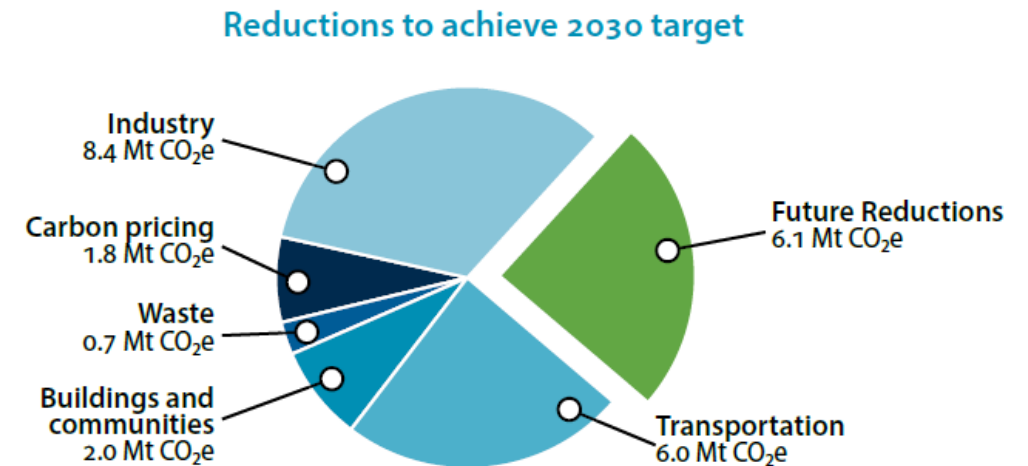
**GHG emissions / \$1M GDP:**  
305 tCO<sub>2</sub> in 2007  
251 tCO<sub>2</sub> in 2017

# WHAT'S IN CLEANBC

- Moving to lower carbon substitutes including clean electricity
- Partnering with business to create a low-carbon industrial strategy
- Clear path to 2030 emissions reduction targets: 40% below 2007
  - describing specific GHG reductions for first 75% of reductions
  - remaining 25% to be identified within 2 years of release of the plan

- **18.9 Mt of GHG reductions:**

- 6.0 Mt reduced from cleaner transportation initiatives
- 2.0 Mt reduced from improving where we live and work
- 8.4 Mt reduced from cleaner industry initiatives
- 0.7 Mt reduced from waste
- 1.8 Mt reduced from carbon pricing



# Cleaner transportation – 6.0 Mt



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## **Bring down the price of clean vehicles**

Just over 20 years from now, every new car will be a zero-emission vehicle (ZEV) with phased-in increases to the ZEV standard

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Help people to afford cleaner cars and save money on gasoline bills with ZEV incentives

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Make it easier to charge or fuel a ZEV

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## **Speed up the switch to cleaner fuels**

Make our fuel cleaner by increasing the low carbon fuel standard to 20% by 2030 and increasing the production of renewable transportation fuels

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Make vehicles run cleaner by increasing tailpipe emissions standards for vehicles sold after 2025

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# improvE where we live and work – 2.0 Mt



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

# Cleaner industry – 8.4 Mt



<b>Ramp up the CleanBC program for industry</b>	Direct a portion of B.C.'s carbon tax paid by industry into incentives for cleaner operations
<b>Improve air quality by cutting air pollution</b>	Clean up air pollution in the lower mainland with a pilot project to test options to switch 1,700 freight trucks to cleaner or zero-emission fuel
<b>Reduce methane emissions from natural gas development</b>	Reduce methane emissions from upstream oil and gas operations by 45%
<b>Industrial electrification</b>	Provide clean electricity to planned natural gas production in the Peace region  Increase access to clean electricity for large operations with new transmission lines and interconnectivity to existing lines
<b>Carbon capture and storage</b>	Ensure a regulatory framework for safe and effective underground CO <sub>2</sub> storage and direct air capture
<b>Cleaner fuels for industry</b>	Make industrial natural gas consumption cleaner with a minimum 15% to come from renewable gas

# CARBON TAX INCREMENTAL REVENUE

Revenues generated from increasing the carbon tax will be used to:

- Provide carbon tax relief and protect affordability
- Maintain industry competitiveness
- Encourage new green initiatives

BC offers [carbon tax programs](#) for businesses and local government

## **CleanBC Program for industry:**

directs a portion of the incremental carbon tax paid by industry above \$30/tonne to incentives for cleaner operations.

- [CleanBC Industrial Incentive](#)
- [CleanBC Industry Fund](#)

# Reduce emissions from waste – 0.7 Mt



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**Reduce waste and turn it into a clean resource**

Help communities to achieve 95% organic waste diversion for agricultural, industrial, and municipal waste -- including systems in place to capture 75% of landfill gas

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Waste less and make better use of it across all sectors of our economy, like forestry, agriculture, and residential areas, including renewing the B.C. Bioenergy Strategy and building out the bioenergy and biofuels cluster

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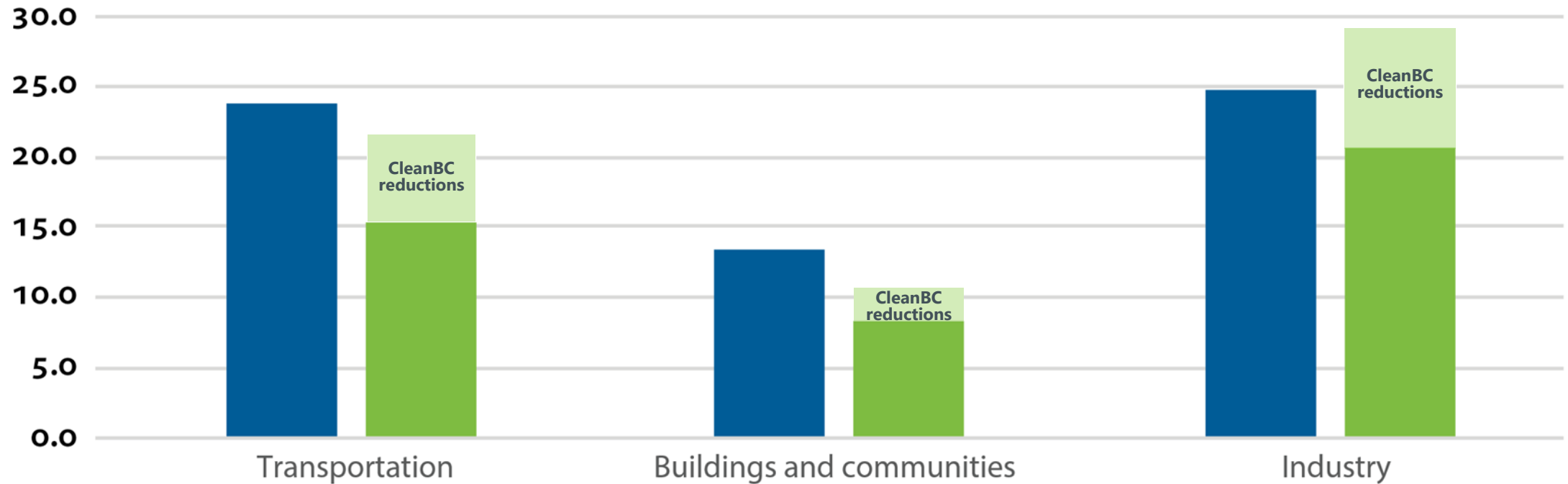


# THESE INITIATIVES WILL HAVE AN IMPACT



## GHG Emission Reductions

2016 2030



# Summary of Progress

## We're Taking Action



41

**Actions underway, with substantial progress on 22 items**

## We're Delivering



2

**Actions complete:**

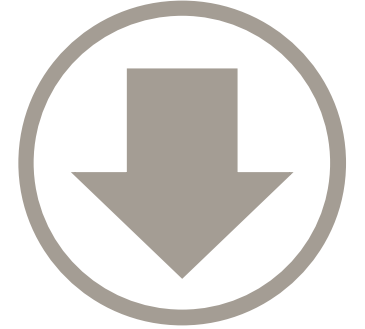
- ZEV legislation
- Dawson Creek - new transmission lines/ connect to existing lines

## We're Connecting



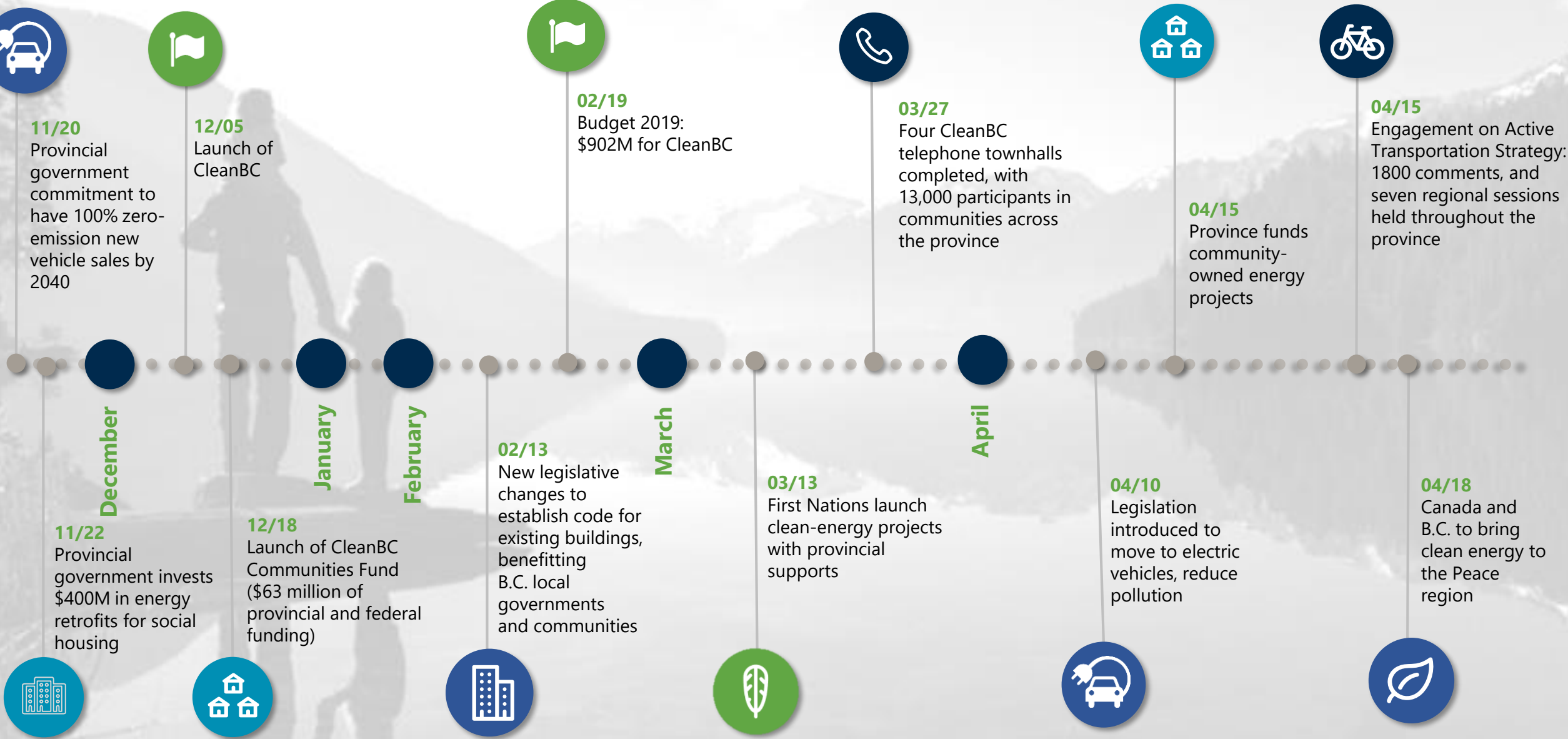
- CleanBC Telephone Townhalls
- Active transportation engagement
- Indigenous engagement
- Adaptation engagement
- Plastics engagement

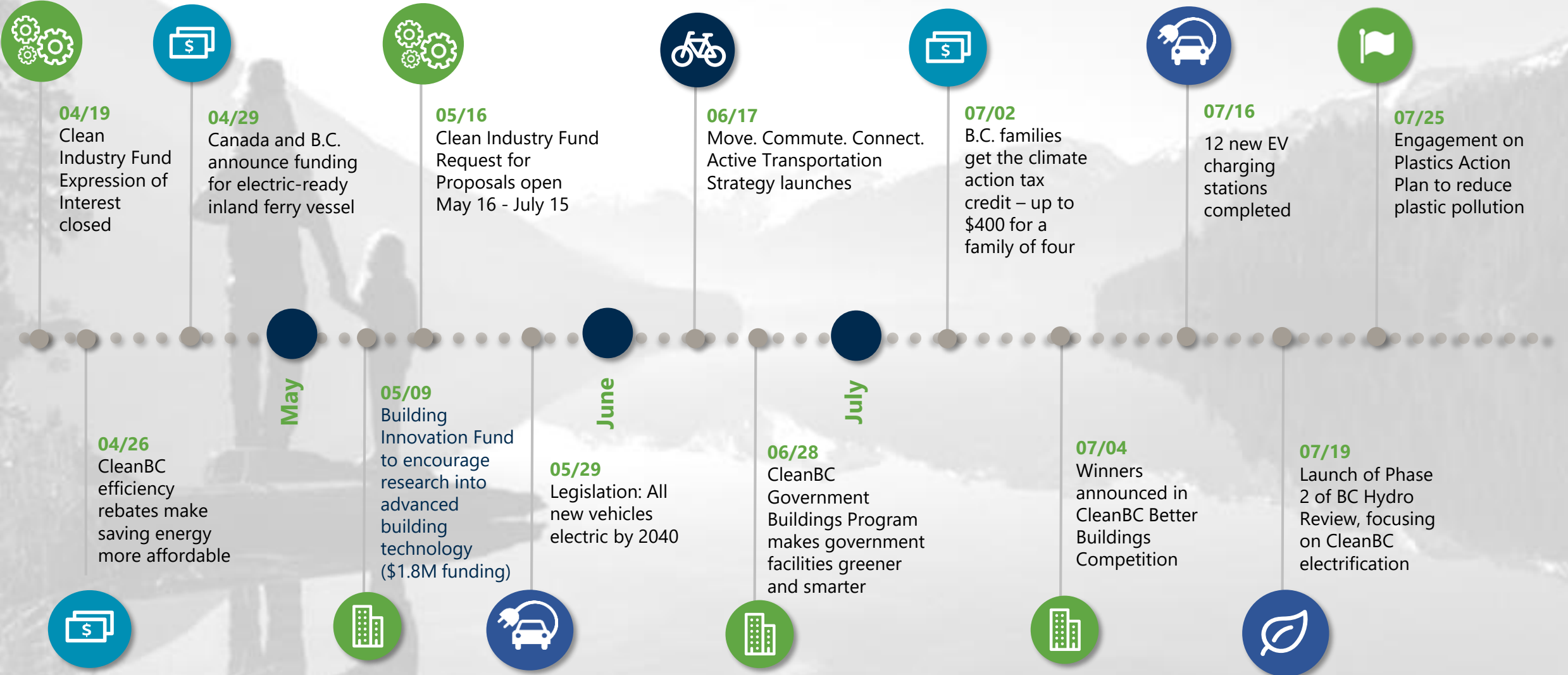
## We're Reducing Emissions



18.9 Mt by 2030

**Actions to date represent progress toward our target**





# FOCUSING ON AFFORDABILITY



- Enhanced climate action tax credit (\$40 million) – up to \$154 per adult, \$45 per child. Credit will be further enhanced in coming years
- Reducing carbon pollution in a way that puts people first -- because people need to manage their budgets
  - Helping people make home energy efficiency improvements to cut their energy use and costs
  - Expanding incentives for zero-emissions vehicles and making rebates more accessible
- Ongoing commitment to ensure CleanBC programs and incentives are accessible, effective and help those who need them the most

Recent amendments to the *Climate Change Accountability Act* strengthen our commitment to accountability and transparency and follow through on a key CleanBC commitment.

These amendments require BC to:

- Establish an advisory committee to provide strategic advice
- Table annual accountability report in the legislature starting in 2020
- Set an interim target on the path to 2030 target by December 31, 2020
- Set sectoral targets by March 31, 2021, following engagement with stakeholders, Indigenous peoples and local governments.

The amendments also add new regulatory authorities to set targets and requirements for provincial public sector buildings, fleets, and fuels to reduce emissions and manage climate risks

# 2019/2020 INDIGENOUS ENGAGEMENT PLAN

## Spring/Summer 2019

- 10 regional sessions in 9 locations
- Ongoing one-on-one meetings

**Communities  
& Nations**



## Fall/Winter 2019/2020

- 2 day Forum for all Nations
- Ongoing one-on-one meetings

- Workshop at Métis Nation BC's Annual Youth Forum

**Youth**



- Proposed presentation at Gathering Our Voice
- Presentations at Climate Connect

- 2 day workshop at Annual BC Elders Gathering in Vancouver

**Elders**



- TBD

- One-on-one meetings

**Organizations**



- Launch of Technical Working Group on Climate Change with the First Nations Leadership Council
- Launch of Indigenous Climate Adaptation Technical Working Group

We recognize that meaningful engagement takes time and resources.

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

# WHAT WE HEARD: SPRING 2019

## 1. Community level learnings:

- Strong interest and support for CleanBC.
- Engagement fatigue, long application processes, capacity issues, interest in Community Energy Planning (more Energy Coaches).

## 2. Adaptation Strategy

- Acute awareness and interest of climate impacts.
- Strong interest in working with Province on Strategy development.

## 3. CleanBC Phase 2

- Desire for on-going and continued engagement.
- IFE funding required streamlined approach for future engagements. commitments.

## 4. Economic development opportunities

- Interest in renewable fuel / bio-energy production opportunities; differences of opinion on LNG opportunities.

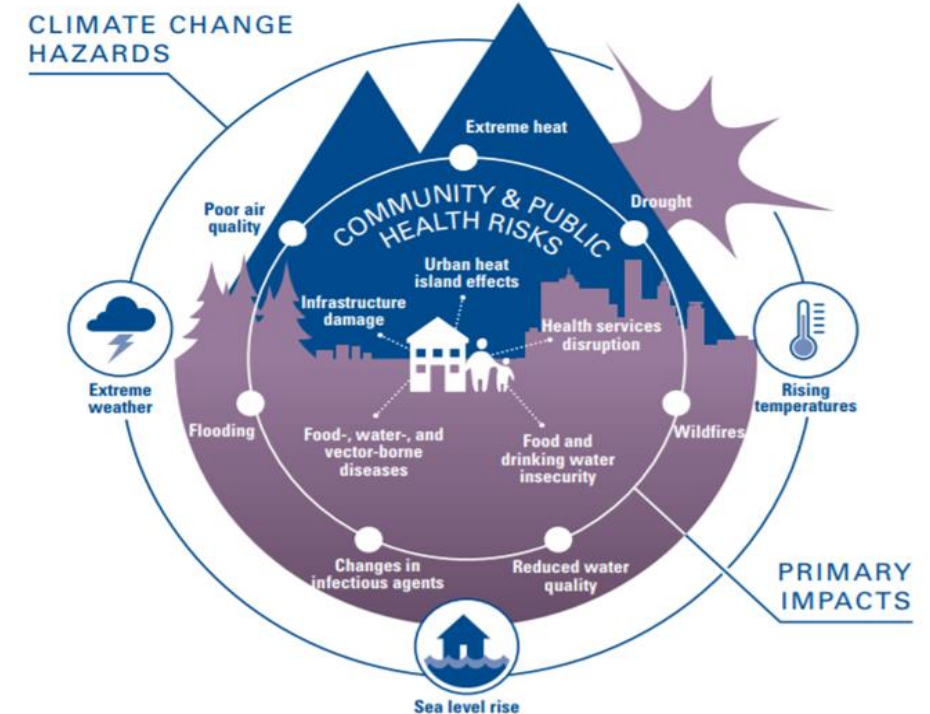


# WHAT'S NEXT FOR CLEANBC? CLIMATE PREPAREDNESS AND ADAPTATION STRATEGY

➔ By 2020, province will develop a new strategy to prepare for 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
- Early work underway in partnership with local governments and Indigenous communities to address impacts of climate change

## Adaptation




## WHAT'S NEXT FOR CLEANBC? (cont'd)

 **Economic development and skills training opportunities, like the CleanBC Job Readiness Plan**

 **Further emissions reductions:**

- Remaining 25% of our 2030 targets – 2020
- New Sectoral Reduction Targets – 2020

 **CleanBC Forum for Indigenous Communities:  
Jan 29 and 30, 2020**

A scenic landscape featuring a calm lake reflecting the surrounding mountains and a dense forest. In the foreground, a person is carrying a child on their shoulders, and another person stands beside them, both looking out over the water. The sky is clear and blue, with a small, faint cloud visible.

[cleanbc.gov.bc.ca](http://cleanbc.gov.bc.ca)

**THANK YOU!**

**QUESTIONS?**