



# Clean Canada: Protecting the environment and growing our economy



# 2018: A Year of Action on Climate Change

- Canadians know there's a cost to climate change and that taking action is the key to succeeding in the new, low-carbon economy
- That's why the Government continues to work hard to build a healthier, cleaner future
- Last week, Canada joined nations from around the world to finalize the rules for **the Paris Agreement**
- At the G7 Leaders' Summit last June, Canada championed the Ocean Plastics Charter and committed to **reducing plastic waste**
- This year, Canada also played a leadership role here at home
  - from Budget 2018's historic \$1.35B **Nature Legacy**
  - to regulatory **action on major emissions** sources like coal-fired electricity, methane, heavy-duty vehicles, and refrigerants
  - to October's announcement on the federal **price on pollution** and Climate Action Incentives

# Clean Canada: Canada has an ambitious plan to build a healthier future

Clean Canada: a snapshot of how Canada is taking climate action

- Putting a price on carbon pollution across Canada so it's no longer free to pollute
- phasing out traditional coal-fired power plants and investing in renewables
- expanding public transit across the country
- investing in energy efficiency to help families and businesses save money
- investing in made-in-Canada technologies and clean solutions
- improving building codes and standards so our homes and buildings use less energy
- finding cleaner alternatives to diesel in remote communities
- raising standards so our cars run on cleaner fuels and cost less to operate
- doubling the amount of nature we protect
- keeping plastic waste out of our environment



# Second Annual Synthesis Report

- Report to First Ministers gives a detailed accounting of progress on climate action over the last year



# Today, the Government is taking further action, by publishing:

- 2018 Canada's Greenhouse Gas and Air Pollutant Emissions Projections Report
- Next Steps in Implementing the Federal Pollution Pricing System for Large Industry (the "Output Based Pricing System")
- Clean Fuel Standard Regulatory Design Paper

# 2018 Emissions Projection Highlights

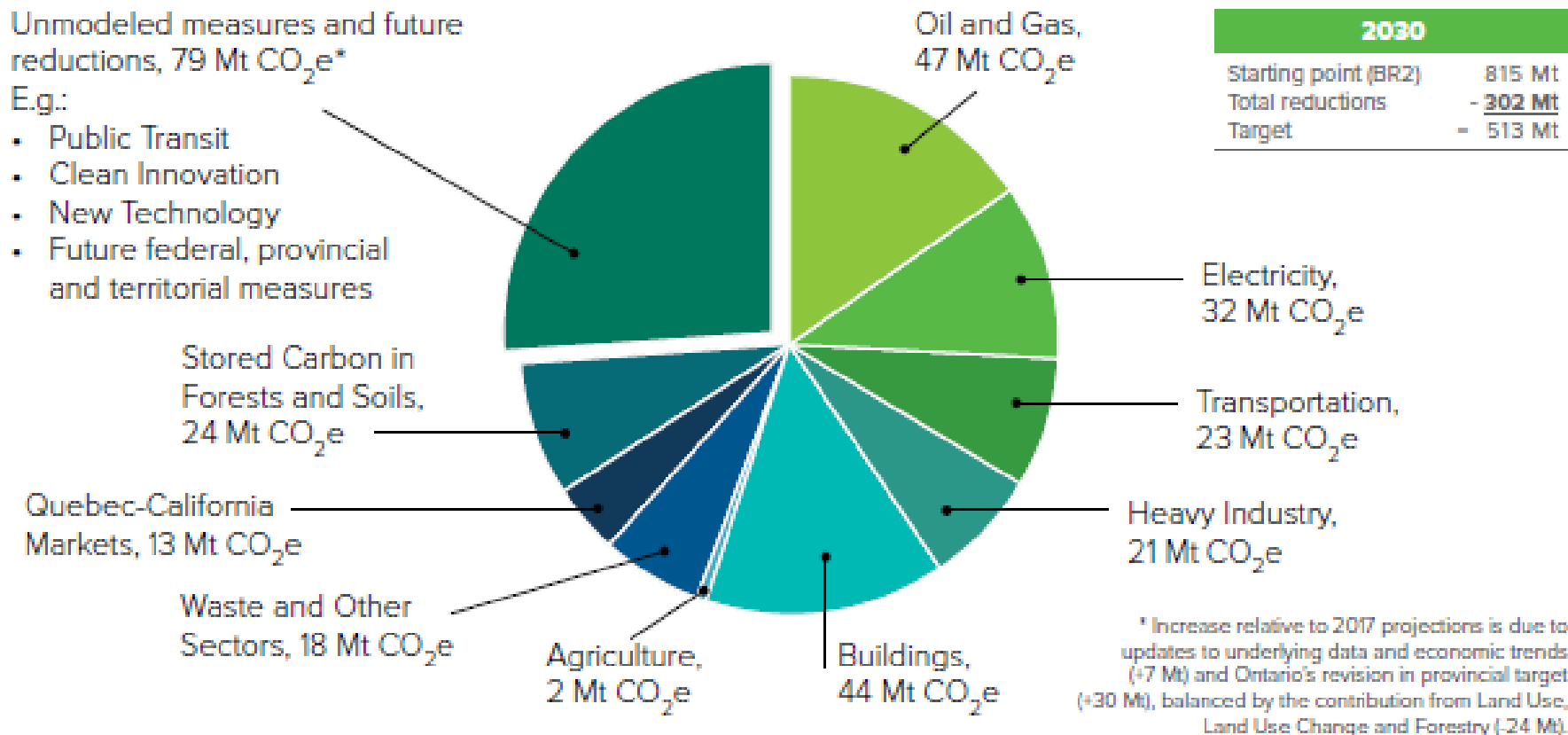
- Relative to what we projected in 2015, emissions in 2030 are projected to decline to 592 Mt vs increasing to 815 Mt
  - Updated and new federal and provincial policies
  - The land sector's contribution to Canada's 2030 target
  - Updates to historical data
  - Current forecast assumptions, e.g. GDP growth rate, population growth rate, oil and gas prices and production projections
  - Modelling improvements
- New to this year's report:
  - Air pollutant projections, including Black Carbon (a short-lived climate pollutant)
  - Technology Case scenario provides indication of potential impact of more rapid technological progress

# Reductions to achieve 2030 target

Unmodeled measures and future reductions, 79 Mt CO<sub>2</sub>e\*

E.g.:

- Public Transit
- Clean Innovation
- New Technology
- Future federal, provincial and territorial measures



2030	
Starting point (BR2)	815 Mt
Total reductions	- 302 Mt
Target	= 513 Mt

\* Increase relative to 2017 projections is due to updates to underlying data and economic trends (+7 Mt) and Ontario's revision in provincial target (+30 Mt), balanced by the contribution from Land Use, Land Use Change and Forestry (-24 Mt).

Note: Carbon pollution pricing is estimated to achieve 50-60 Mt of reductions in 2022 across all economic sectors.

# Next Steps in implementing the federal pollution pricing system for large industry

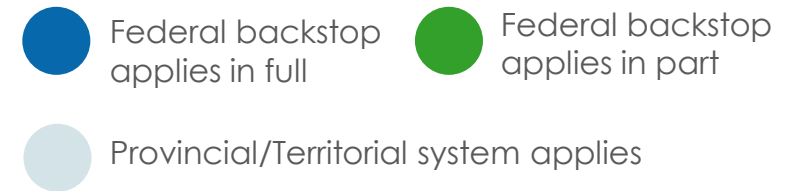
- Draft regulations published today for the Output Based Pricing System for large industry
- Also publishing related regulatory documents for consultation and to enable the regulations to come into force in 2019
  - Notice of Intent
  - Amendment to October Information Order
  - Opt-In Policy
    - for smaller facilities that can demonstrate competitiveness, carbon leakage concerns



# The federal carbon pollution pricing system

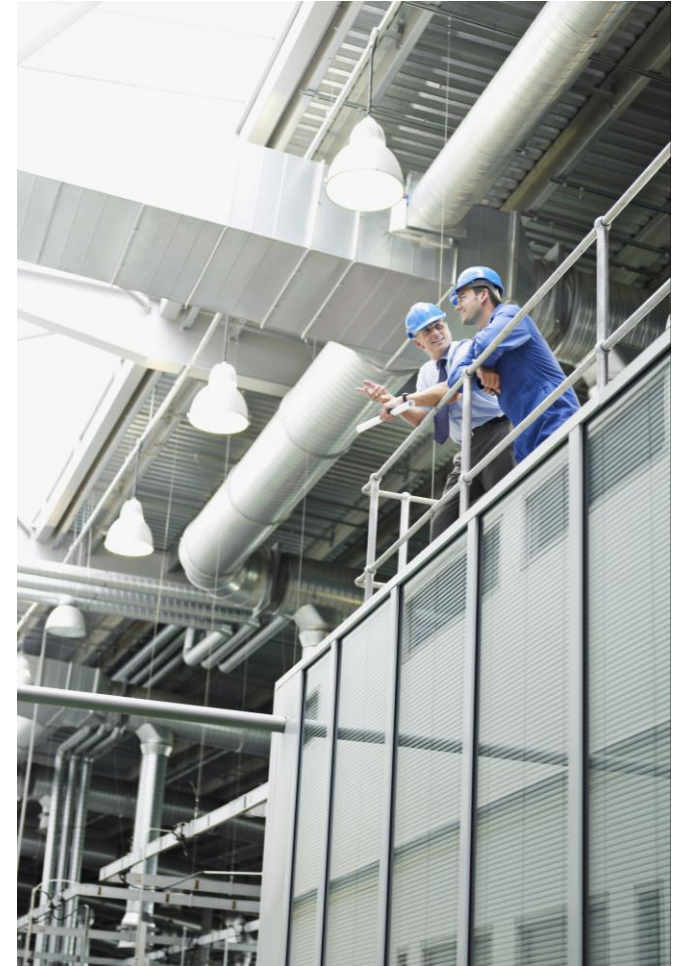
Under the *Greenhouse Gas Pollution Pricing Act* the federal “backstop” system has two parts:

- Regulatory charge on fuel – will apply starting in April 2019 in ON, NB, SK, and MB; and in July 2019 in NU and YT
- Regulatory system for large industrial facilities – the federal Output-Based Pricing System or OBPS – will apply starting January 1, 2019 in ON, NB, MB, PEI, and partially in SK; and in July 2019 in NU and YK



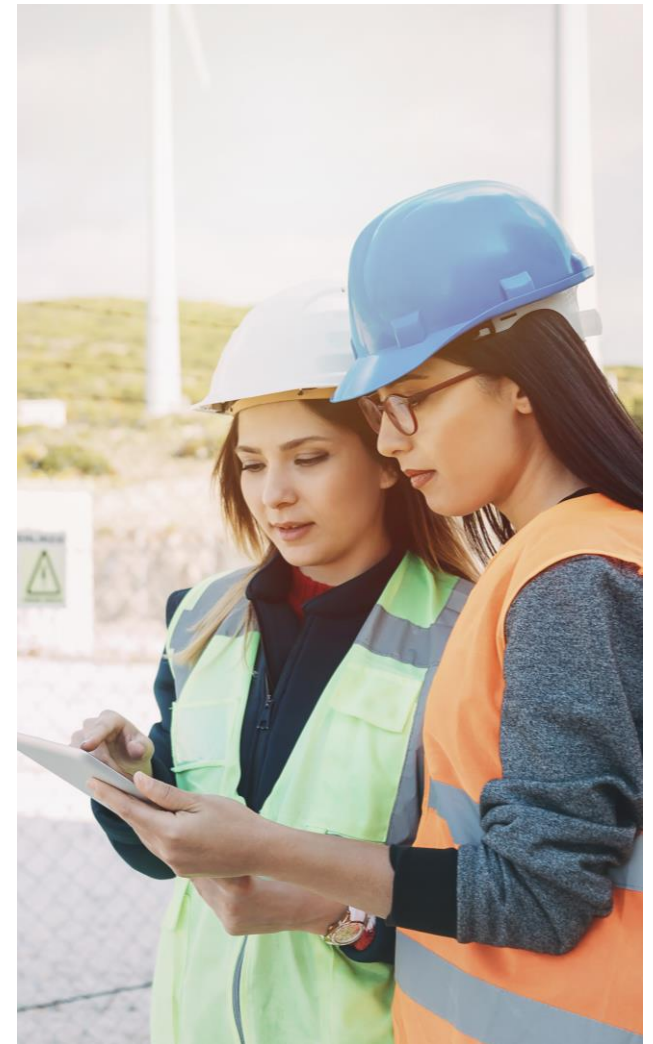
# How the OBPS works

- When pollution costs money, businesses are motivated to pollute less. And when there's a pricing system in place, a company that offers clean technology will find plenty of eager buyers.
- The OBPS is designed to galvanize companies to make emissions reductions and to innovate **while maintaining competitiveness** and avoiding carbon leakage



# How the OBPS works

- Creates a **strong financial incentive** for the least efficient facilities to **reduce emissions** per unit of output and for strong performers to **continue to improve**
- Emissions-intensity standards (output-based standards)
  - Facilities that emit less earn credits they can sell
  - Facilities with emissions above limit have three options
    - Pay carbon pollution price (\$20/t in 2019, rising to \$50/t in 2022)
    - Submit surplus credits purchased from facilities that beat their limit
    - Submit eligible offset credits



# Output-based standards

- Approach is recognized as a best practice – similar mechanisms used around the world, including here in Canada
- Each facility complies with an OBS tailored to its sector
- The draft regulations contain more than 70 OBS, applying to a wide range of industrial activities
- Most standards set at 80% (20% below) sector's average emissions intensity
- Based on competitiveness impacts, some are set at different levels
  - Petrochemicals: 90%
  - Lime and Cement: 95%
  - N-fertilizers, Iron and Steel: 90% (announced in July 2018)
- The federal standards are **as or more stringent** than those in other systems

# Carbon pollution pricing next steps

- **January 1, 2019:** OBPS applies in MB, ON, NB, PEI, partly in SK
- **Early 2019**
  - Details on use of revenues from OBPS and the 10% of fuel charge funds dedicated to SMEs, municipalities, schools, hospitals and Indigenous communities
- **April 2019:** Federal fuel charge applies in MB, ON, NB, SK
- **Climate Action Incentive** payments in ON, SK, MB, NB
- **Spring 2019:** Publication of final OBPS regulations
- **July 1, 2019:** federal backstop applies in NU and YK

# Clean Fuel Standard Regulatory Design Paper

- The CFS will require fossil fuel producers and importers to reduce the **lifecycle carbon intensity** of the fuels they supply
  - From feedstock production to fuel use (combustion)
- Will set carbon intensity requirements for liquid, gaseous, solid fuels
- Will achieve annual GHG reductions of 30 million tonnes by 2030 from transportation, industry and buildings
- Will complement carbon pollution pricing by driving investments in cleaner fuels and the significant decarbonization of transportation
- Regulatory Design Paper sets out main proposed design elements of the CFS regulations for liquid fuels
  - Draft regulations planned for Spring 2019
- Carbon intensity of liquid fuels to be reduced by 11% by 2030
  - Equivalent to up to 23 Mt of incremental reductions in 2030

# Credit trading system

- Compliance will be based on a system of tradeable credits.
  - will enable low cost reductions, and encourage innovation and investment in renewable and low carbon fuels and clean technology
- Companies can generate credits by:
  1. Reducing the carbon intensity of fuel throughout its lifecycle
    - e.g., process changes to reduce emissions at refineries
  2. Producing or importing renewable and other low-carbon fuels
    - e.g., ethanol or biodiesel for fuel blending
  3. Replacing a fuel with a cleaner fuel
    - e.g., when a liquid transportation fuel is replaced by natural gas, propane, hydrogen or electricity



# Annex

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# Emissions projections: Canada's reporting commitments

- The Government of Canada has a commitment to publish GHG emissions projections annually, and has been doing so since 2011
  - Our web page on GHG emissions projections:  
<https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/projections.html>
- Regular updates of Canada's emissions projections are necessary to fulfill international reporting requirements under
  - The United Nations Framework Convention on Climate Change (UNFCCC)
  - The Convention on Long-Range transboundary Air Pollution (CLRTAP), and
  - The Arctic Council Framework for Action on Enhanced Black Carbon and Methane Emissions Reductions

# Emissions projections: three scenarios

- Reference case
  - Reflects federal, provincial and territorial policies and measures in place as of September 2018 and assume no further government action.
- Additional Measures
  - Includes federal, provincial and territorial policies and measures that have been announced but are not yet fully implemented.
- Technology case
  - Explores impacts of accelerated development and adoption of certain clean technologies such as heat pumps, electric vehicles (EVs), steam-assisted gravity drainage (SAGD) solvent extraction, use of inert anodes in aluminum smelting, increased renewable electricity generation, and greater inter-provincial transmission connections.

# Air pollutant emissions projections

- Most air pollutant emissions are projected to decline, reflecting a large number of policies and measures that Canada has already implemented to reduce air pollution
- While not yet incorporated in the air pollutant projections, measures to reduce GHG emissions under the Pan Canadian Framework that are in the Additional Measures Case are expected to have positive impacts on air pollutants

# Draft OBPS regulations

- Criteria for facilities to be covered by the OBPS
- 74 output-based standards
- Methodology to calculate a facility's annual emissions limit
- Quantification, reporting and verification requirements
- Compliance and compensation rules

# Output-based standards (OBSs)

Sector	# of OBSs	Sector	# of OBSs
Activated Carbon	1	Light Manufacturing	5
Base Metal Smelting and Refining	6	Lime	3
Brick	1	Mining	7
Carbon Black	1	Methylpentamethylenediamine	1
Cement	3	Nitrogen Fertilizer	4
Char	1	Nylon	2
Chemicals (Ethanol)	2	Oil and Gas	8
Electricity	3	Petroleum Lubricant Refining	1
Food Processing	6	Petrochemicals	6
Iron Ore Pelletizing	2	Pharmaceuticals	1
Iron and Steel	6	Potash	2
		Pulp and Paper	2
<b>Total OBSs = 74</b>			

# Other OBPS publications released today

- Notice of Intent
  - The Notice of Intent ensures that the requirements in the final OBPS regulations will apply retroactively to January 1, 2019
- Amendment to the Information Order published in October
  - Adds requirements for sectors not explicitly listed in October Order
- Opt-In Policy
  - Facilities that emit 10kt or more annually may apply to join the OBPS if they can demonstrate that carbon pricing creates risks to competitiveness and carbon leakage

# CFS: starting with liquid stream

