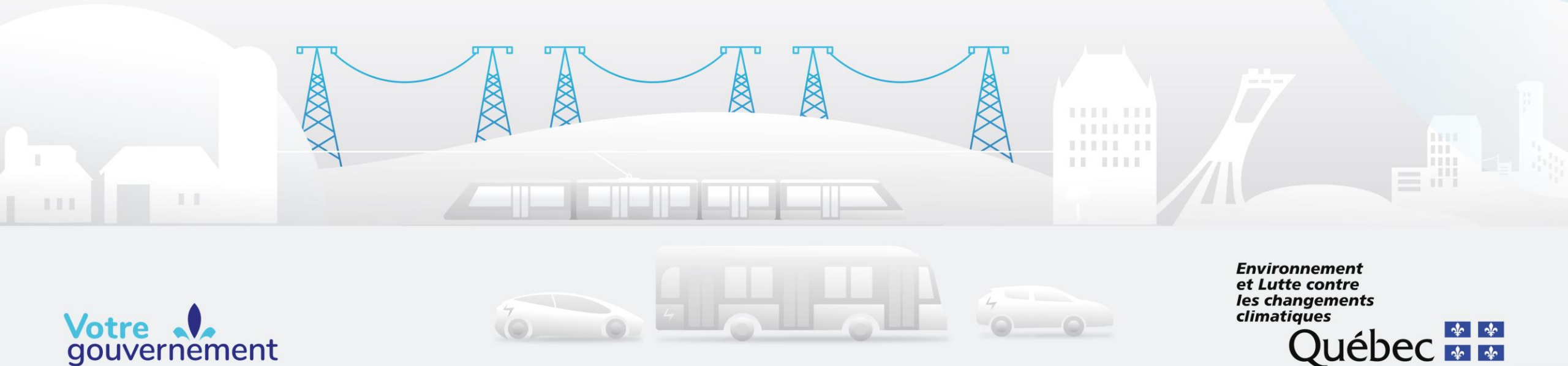


Québec Cap & Trade Revenue Use

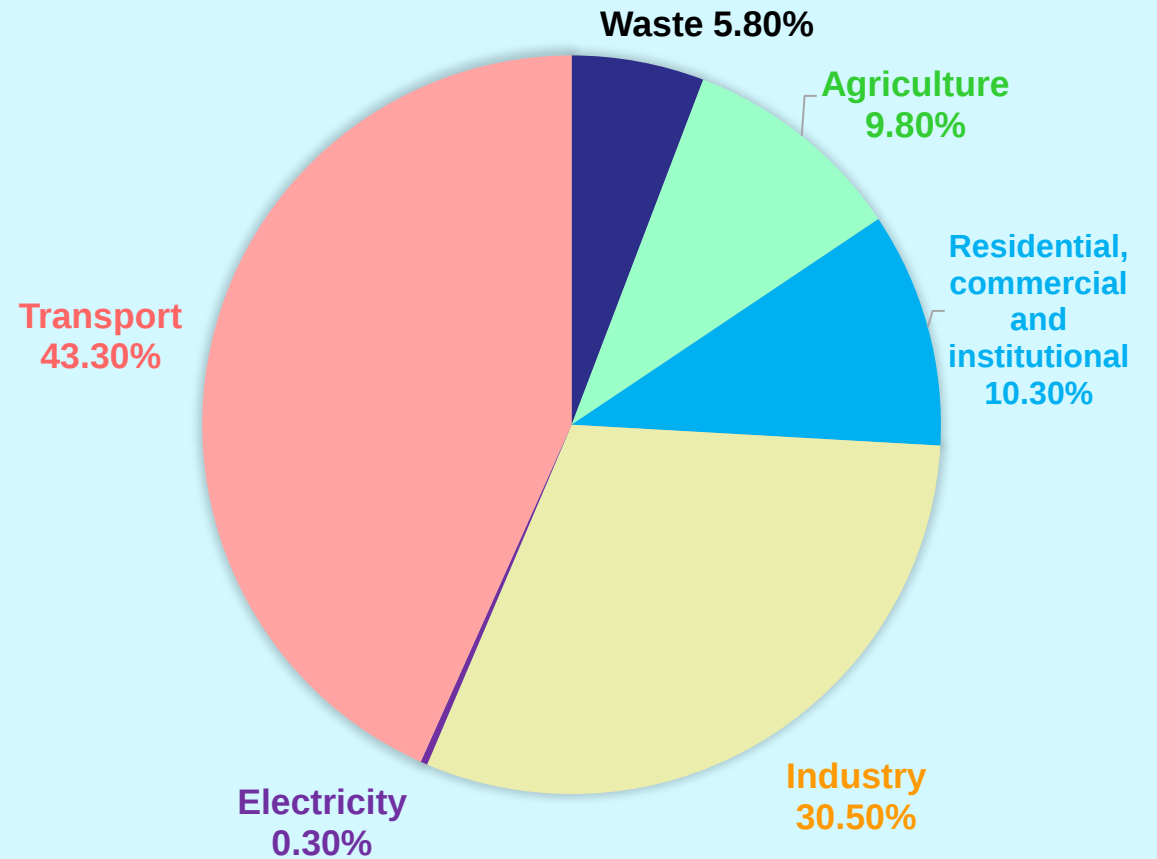
By Anaïs Jalbert, Ministère de l'Environnement et de la
Lutte contre les changements climatiques



2030 target :
Reduce our
greenhouse gas
(GHG) emissions by

37.5%.*

*Below the 1990 level.



QUÉBEC C&T SYSTEM – The basics

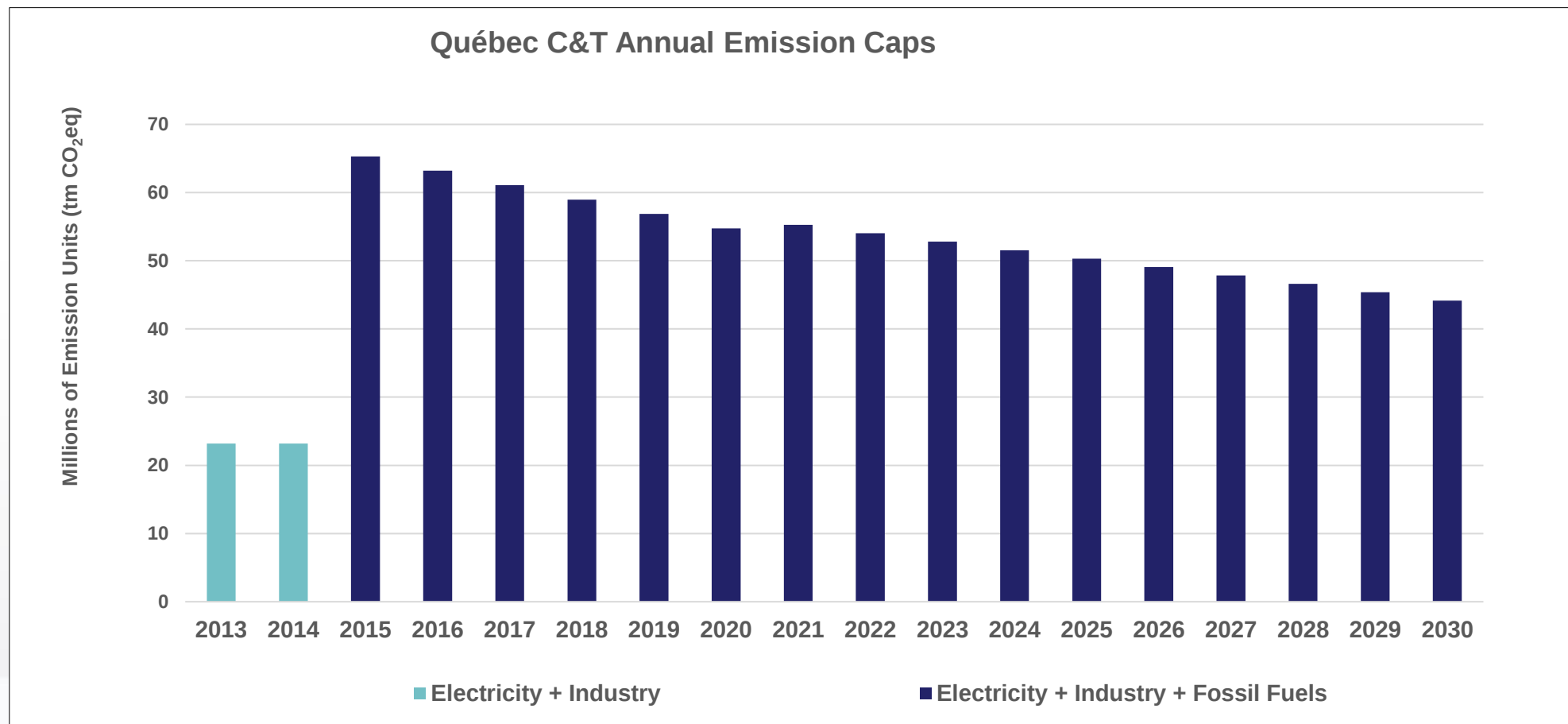
- Québec Cap-and-Trade is a Sub-national Compliance C&T system, in operation since Jan 1st, 2013
 - Became linked with California's on Jan 1st, 2014
 - Emissions units are fully fungible within the joint market
- $\pm 80\%$ of GHG emissions in Québec are covered by the C&T system
- Emitters from covered sectors must fulfill their compliance obligation.
 1. Electricity and industry (threshold: ≥ 25 kt CO₂eq per year)
 2. Fuel distributors (threshold : 200 liters per year)
 3. Voluntary participants (≥ 10 kt < 25 kt CO₂eq per year)
 - Other participants (Individuals, non governmental organizations, banks, brokers, etc.) may also register to the system and trade allowances (no compliance obligation) OR develop offset projects.

QUÉBEC C&T SYSTEM - The basics

- For a compliance period, each covered emitter must acquire a number of emission units corresponding to its reported GHG emissions for that period.
 - ☑ The 1st and 2nd compliance period were **100% compliant**, the 3rd period compliance event is scheduled for November 1st 2021.
- The annual decreasing caps are designed to help Québec meet its GHG emission reduction target for sectors covered under the C&T system
 - Each annual cap determine the annual emission units budget
 - Every year, the pool of available emission units (capped) shrinks

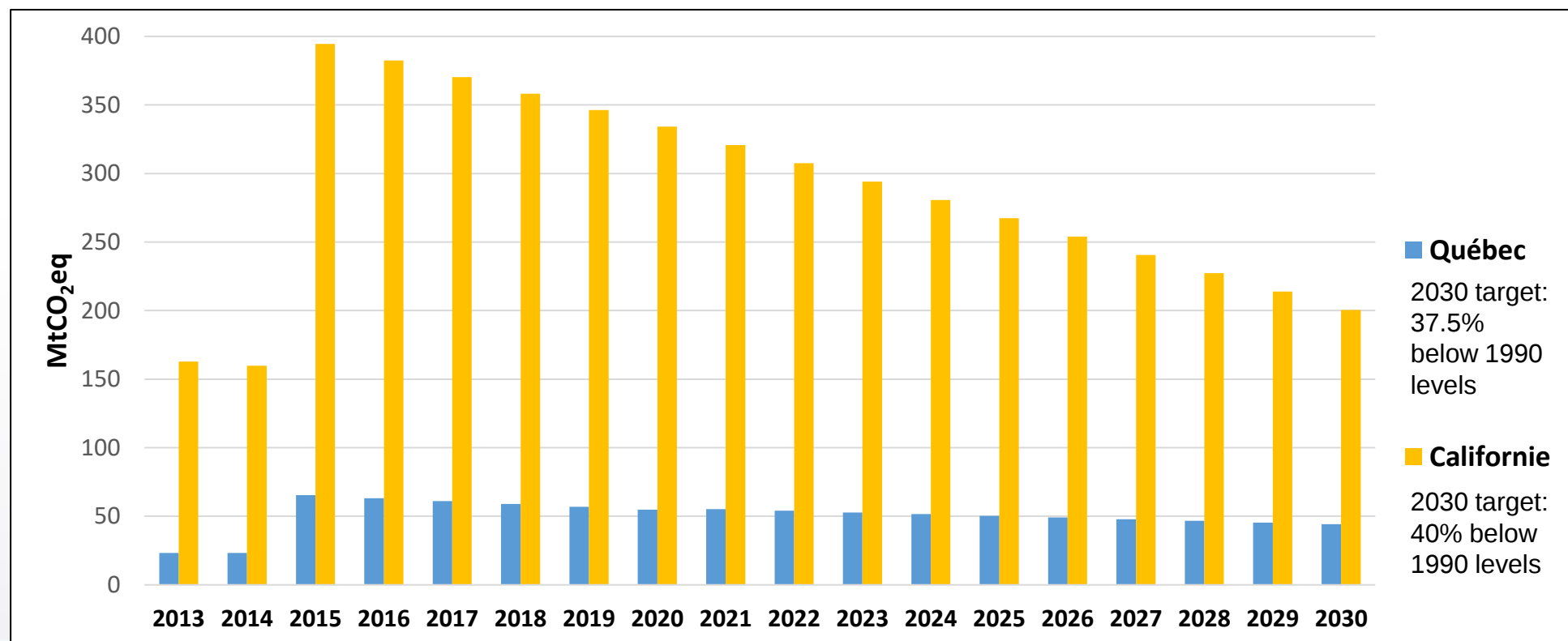
ANNUAL CAPS ON EMISSION UNITS (2013-2030)

Québec

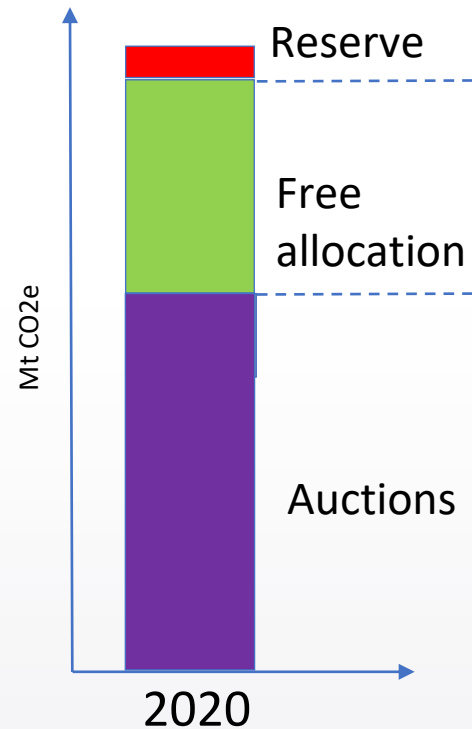


ANNUAL CAPS ON EMISSION UNITS (2013-2030)

Québec-California



ANNUAL EMISSION BUDGET ALLOCATION



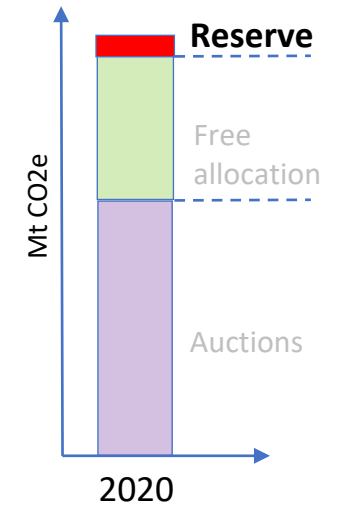
Ministry reserve (4%) for cost-containment purposes

Free allocation (≈ 30%) to prevent carbon leakage

Auction: Government auctions emission units for the registered participants (≈ 66%)

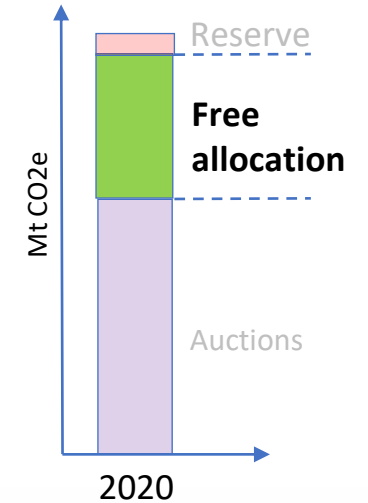
RESERVE (4%)

- 4% of annual caps are placed in a reserve for cost-containment purposes:
 - If necessary, could be used to mitigate the effect of price fluctuations on the carbon market by creating a new supply of emission units
- 3 Price categories in 2013: A: CA \$40 B: CA \$ 45 C: CA \$ 50 with a yearly increase of 5% plus inflation (new price category starting 2021 – pending regulation approval)
- Only covered emitters that don't hold enough allowances to cover their GHG emissions for a particular compliance period can purchase reserve units.
 - HOW? **Sales by mutual agreement**

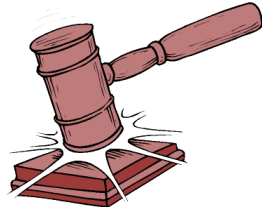


FREE ALLOCATION ($\pm 30\%$)

- Under certain conditions, emission units are **distributed free of charge** to some covered **trade-exposed emitters** to take into account national and international **competitiveness issues** in their sector of activity.
- Distribution of free allowances are designed around **emission intensity target** based on **real annual output** to allow for sustainable growth.
- The proportion of free allocation to eligible entities **decreases yearly** by approximately **1% or 2%** to encourage continuous reductions of emissions.
- **Electricity producers and fossil fuel distributors are not eligible** because they are able to pass the cost of carbon pricing onto consumers.
- **CHALLENGE : if QC can't decrease its free allocation volume overall, the decreasing caps will create emission units shortage for auctions**
→ fewer revenues (new allocation rules under development/ negotiations)



AUCTIONS ($\pm 66\%$)



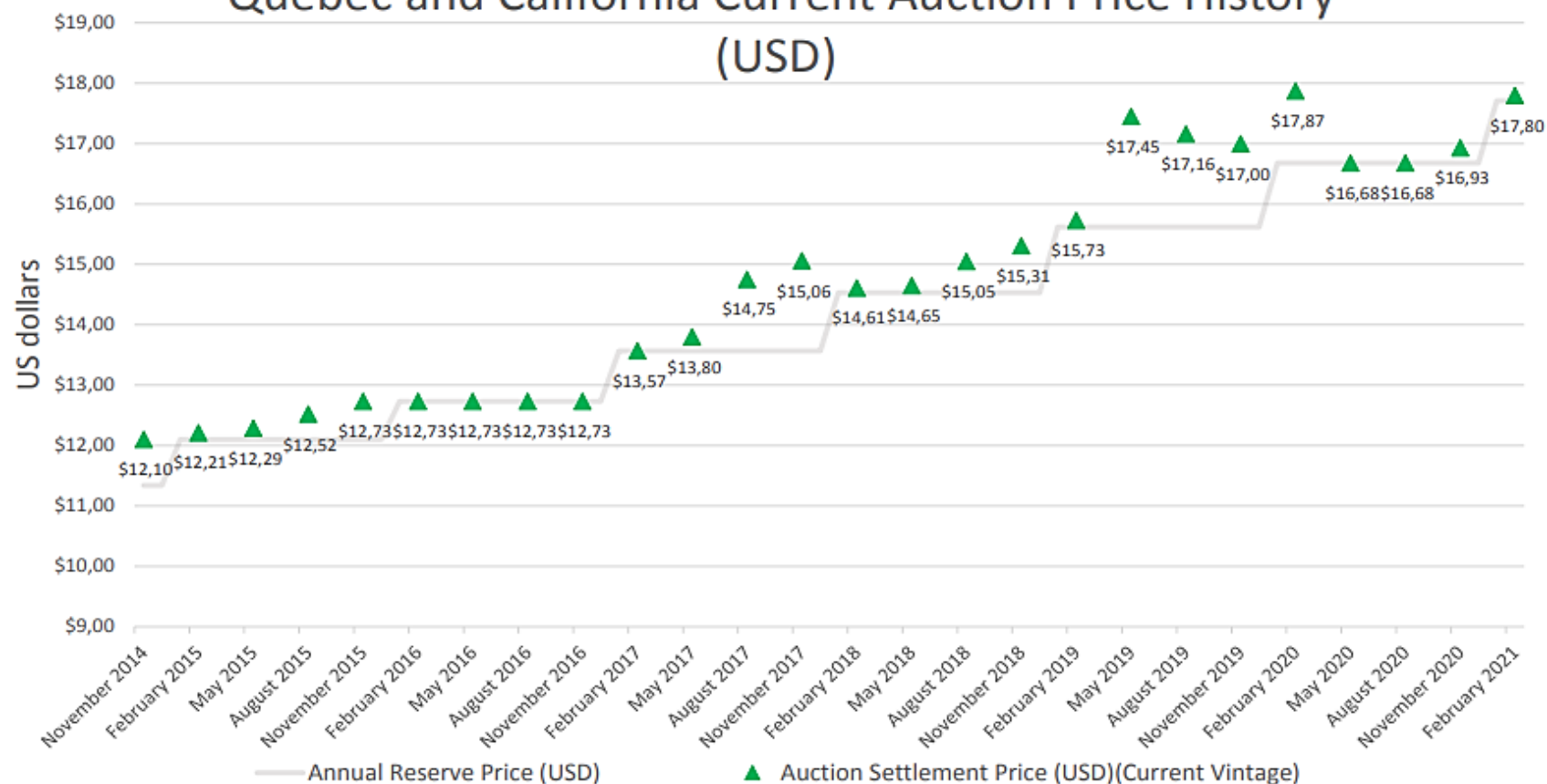
- Minimum price of \$10 in 2012, increasing by 5% plus inflation per year until 2020
- Annual minimum price in 2021: CA\$ 17,36 in Québec and US\$ 17,71 in California
 - Minimum price at auction = Highest of the two jurisdictions' minimum prices
 - Final sale price = lowest bid for which the last unit is sold
- **Very resilient to supply & demand fluctuations (price floor, 2 jurisdictions, unsold emission units mechanism)**
- 26 joint auctions were held by California and Québec since 2014



AUCTIONS ($\pm 66\%$)



Québec and California Current Auction Price History (USD)



AUCTIONS PROCEEDS

- Each jurisdiction receives a percentage of revenues corresponding to its share of emission units up for sale
- All proceeds from auctioning emission units go to the [Electrification and Climate Change Fund](#) and are 100% earmarked to support climate actions.
- QC 2013-2020 revenues : CAD \$4,54 billion (USD \$3,58 billion)
→ Plan Against Climate Change (no longer in effect)
- QC 2021-2030 revenues : ?
→ *Plan for a Green Economy* CAD \$6,7 billion announced for 2021-2026 period



Plan for a Green Economy 2030

- Under the responsibility of the Ministry of the Environment with support from other Ministries
- Will be executed through 5-years **implementation plans** and updated every year to assess needs and provide new relevant data.

4 key actions

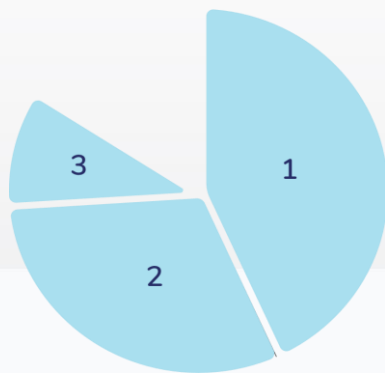
1. **Electrify** : Electrify transportation, industry and buildings
2. **Innovate** : Improve performance and supplement the hydroelectric network with other sources of clean energy
3. **Adapt** : Prevent from flooding, coastal erosion, permafrost thawing, heat islands and more
4. **Work in unison** : Lead by example - Governments, businesses, municipalities and private citizens must work together.

Plan for a Green Economy 2030

OBJECTIVE: To leverage our hydroelectricity to become the *battery of Northeastern America* & thus replace imported fossil fuels with green energy produced here in Québec.

- With the lowest GHG emissions per capita in North America, **99.8%** of the electricity Québec already produces is clean and renewable.
- **\$8.5B/year** in imported oil is **57%** of Québec's trade deficit and pumps out more than **50%** of our GHG emissions.

➤ Main focus:



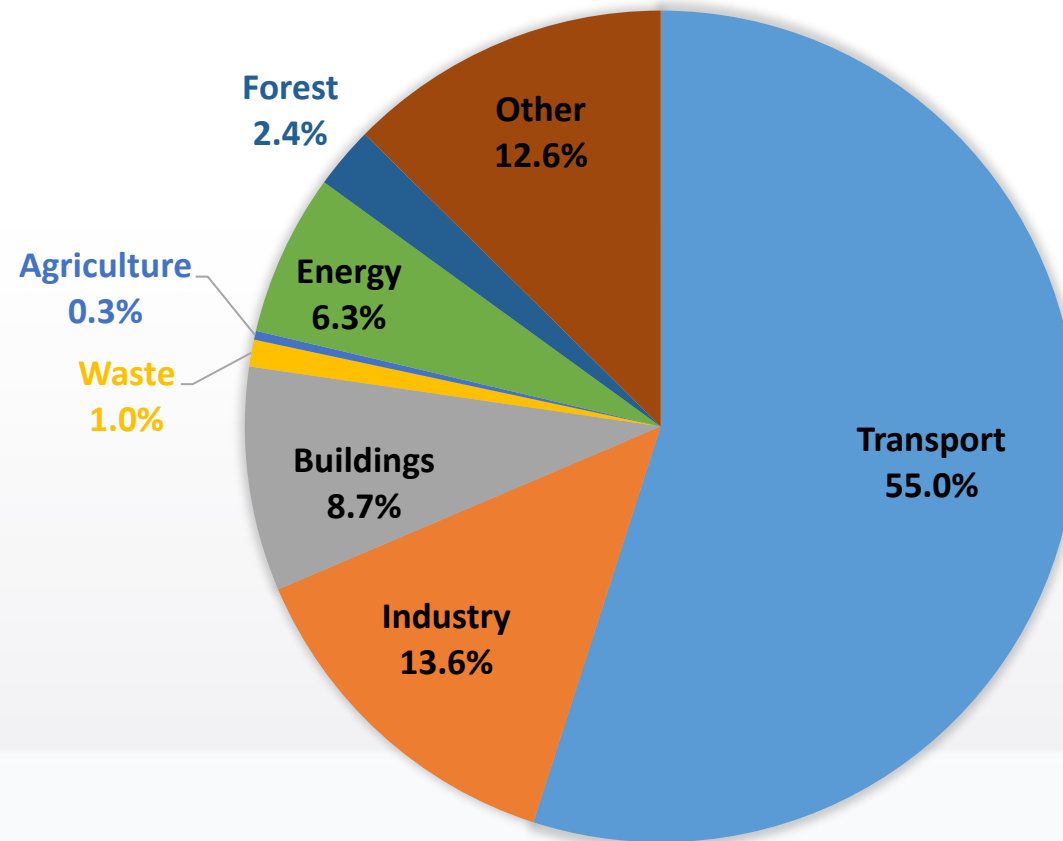
1. Transports (43%)

2. Industry (31%)

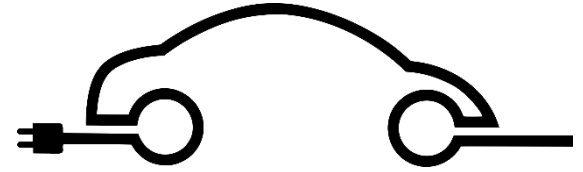
3. Residential, commercial and institutional (10%)

2021-2026 Implementation plan : \$6,7 BILLION

PLAN FOR A GREEN ECONOMY -
2021-2026 DISTRIBUTION OF SPENDINGS *(UNCONFIRMED)*



Transport – key measures



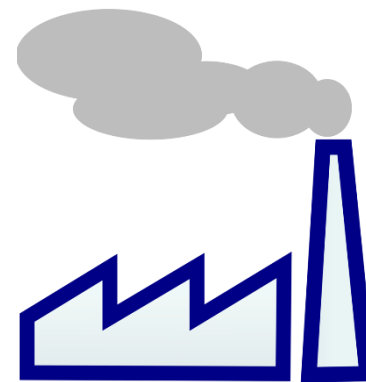
- Electric vehicles rebate *-Roulez vert Program-* and charging stations (\$1,306,5M)
- Electrification of school buses (\$350M), trucks, rail and maritime transport (\$265M), city and intercity buses (\$276M) and taxis (\$11,5M).
- Other support measures for public, active and shared transportation (\$1,383M).

TARGETS:

- ✓ No sales of new gasoline-powered vehicles as of 2035.
- ✓ Have 1,5 million electric vehicles on the road in Québec by 2030.



Industry – key measures



- Aid for energy efficiency and conversion (\$629,2M)
- Défi GES: Call for projects from major emitters (\$90M)
- GHG reduction and carbon sequestration R&D (\$48,7M)

GHG intervention group

NEW

- Specialised, multidisciplinary governmental team to accompany entities in order to promote GHG reduction investments

NEW

- Aid through consignment mechanism (2024-2030):
 - C&T covered emitters will be asked additional efforts ($\approx 3\%$) per year, where associated revenues would be reserved for industrial facilities to invest in GHG emissions reduction projects.



Consignment *(under consultation for 2024-2030)*

- Units sold at auctions
 - Amounts collected reserved in the name of each eligible entity in order to finance GHG reduction projects or R&D
- Realise a GHG reduction technico-economical potential study
 - Determine possible GHG reduction projects (cost, reduction potential)
 - Third-party verified
- Consigned funds could be shared amongst multiple covered establishments operated by the same emitter or linked entities in a corporate group
- Unused funds expire after 5 years (returned to Electrification and Climate Change Fund)
- Eligibility criteria : GHG reduction project, research and development (R&D) projects, can be combined with existing GHG reduction programs

Building – key measures



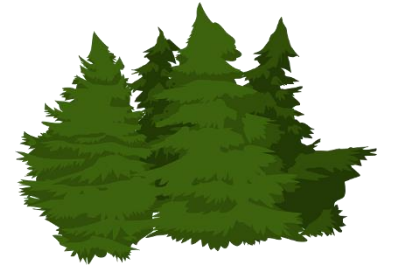
- Conversion of residential buildings (\$134.5M), commercial and institutional buildings (\$113.4M) to electricity
- Support for conversion to electricity bi-energy (\$125M)
- Aid for converting off-grid communities (\$25M)

TARGETS:

- ✓ 50% reduction of emissions related to heating for buildings by 2030
- ✓ 60% reduction in emissions from government buildings by 2030
- ✓ 70% of off-grid systems energy supply from renewable sources by 2025



Additional measures of interest



- Indigenous community leadership in climate transition (\$19,2M)
- International mobilization and cooperation
- Afforestation and reforestation (\$88,3M)
- Flood risk prevention (\$120,5M)
- Governance (support the wages of $\approx$ 130 government employees, CC expert committees, etc.)
- Green hydrogen and bioenergy innovation (\$47.9M).

Other key TARGETS:

- ✓ 10% renewable natural gas (RNG) in the network in 2030.
- ✓ 50% increase in bioenergy production by 2030.

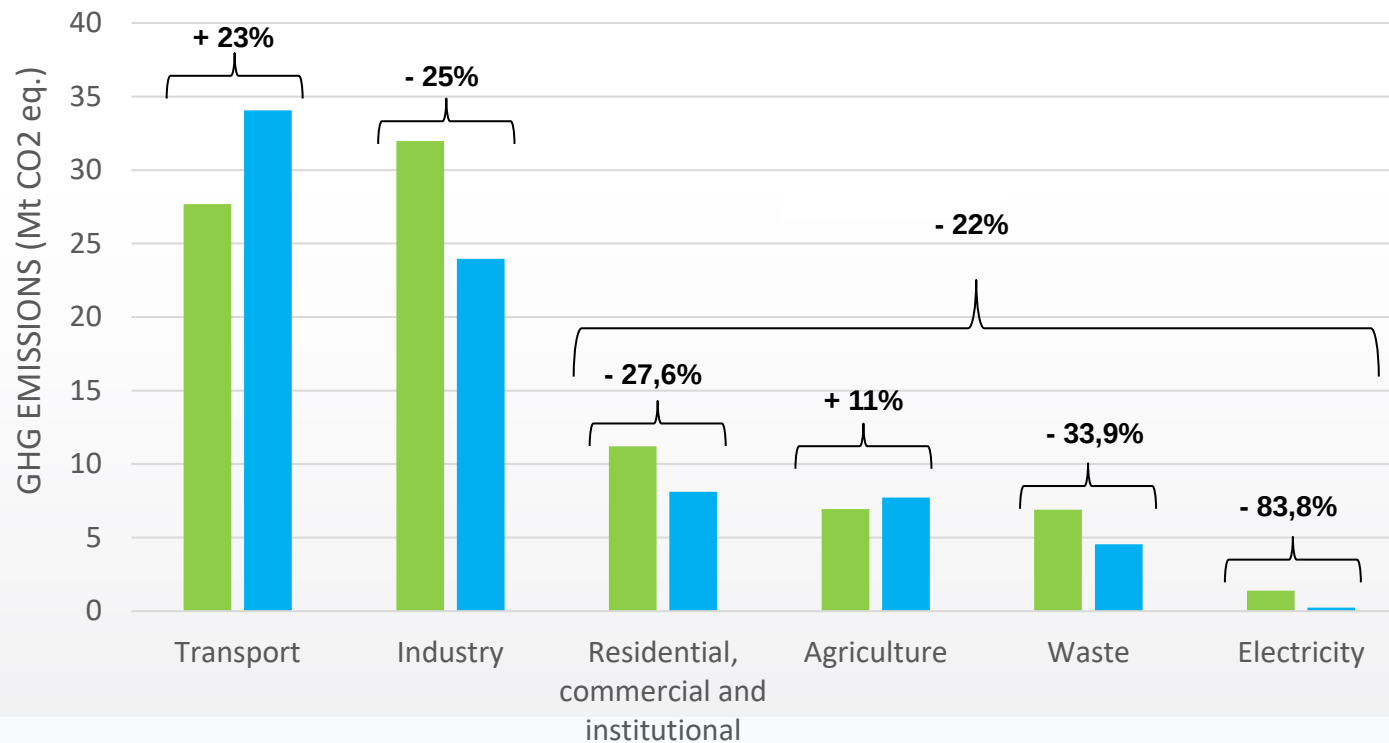
COMPLEMENTARY POLICIES

The Plan will build on complementary policies and action plans such as:

- the [Québec Energy Transition, Innovation and Efficiency Master Plan](#)
- the [2030 Energy Policy](#)
- the [Sustainable Mobility Policy](#)
- the [Québec's strategy for developing the battery sector](#)
- the [Québec Plan for the Development of Critical and Strategic Minerals](#)
- the [Québec's International Vision](#)
- the [Government Sustainable Development Strategy](#).

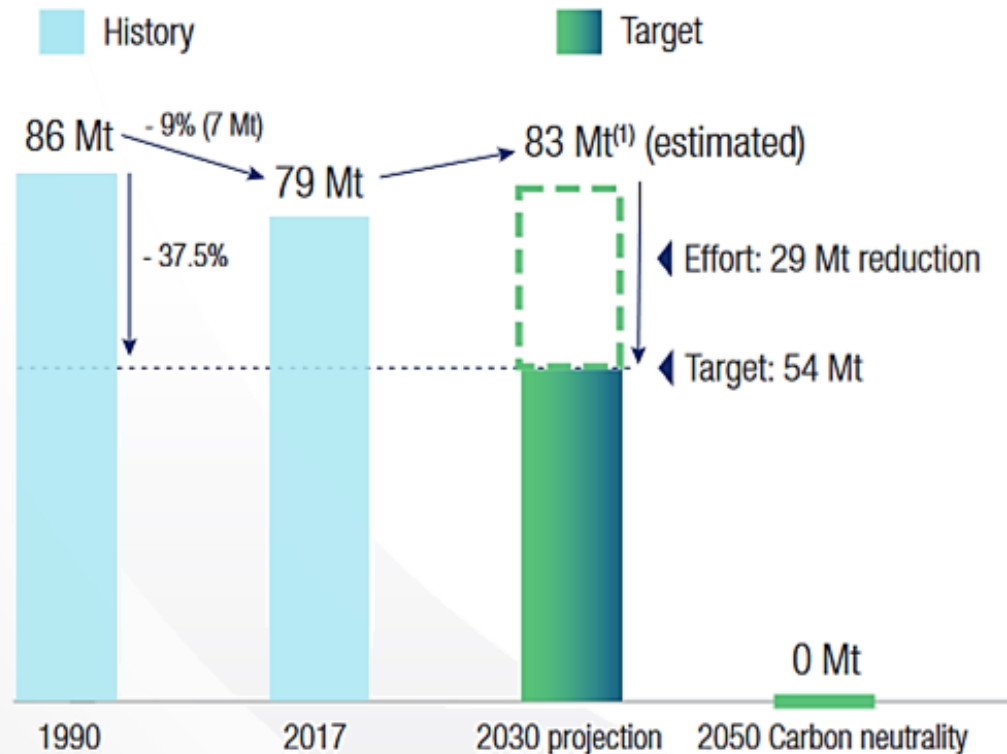
RESULTS TO DATE

GHG emissions in Quebec by sector of activity from 1990 to 2017



Economy
wide :
8,7 %
below
1990 in
2017

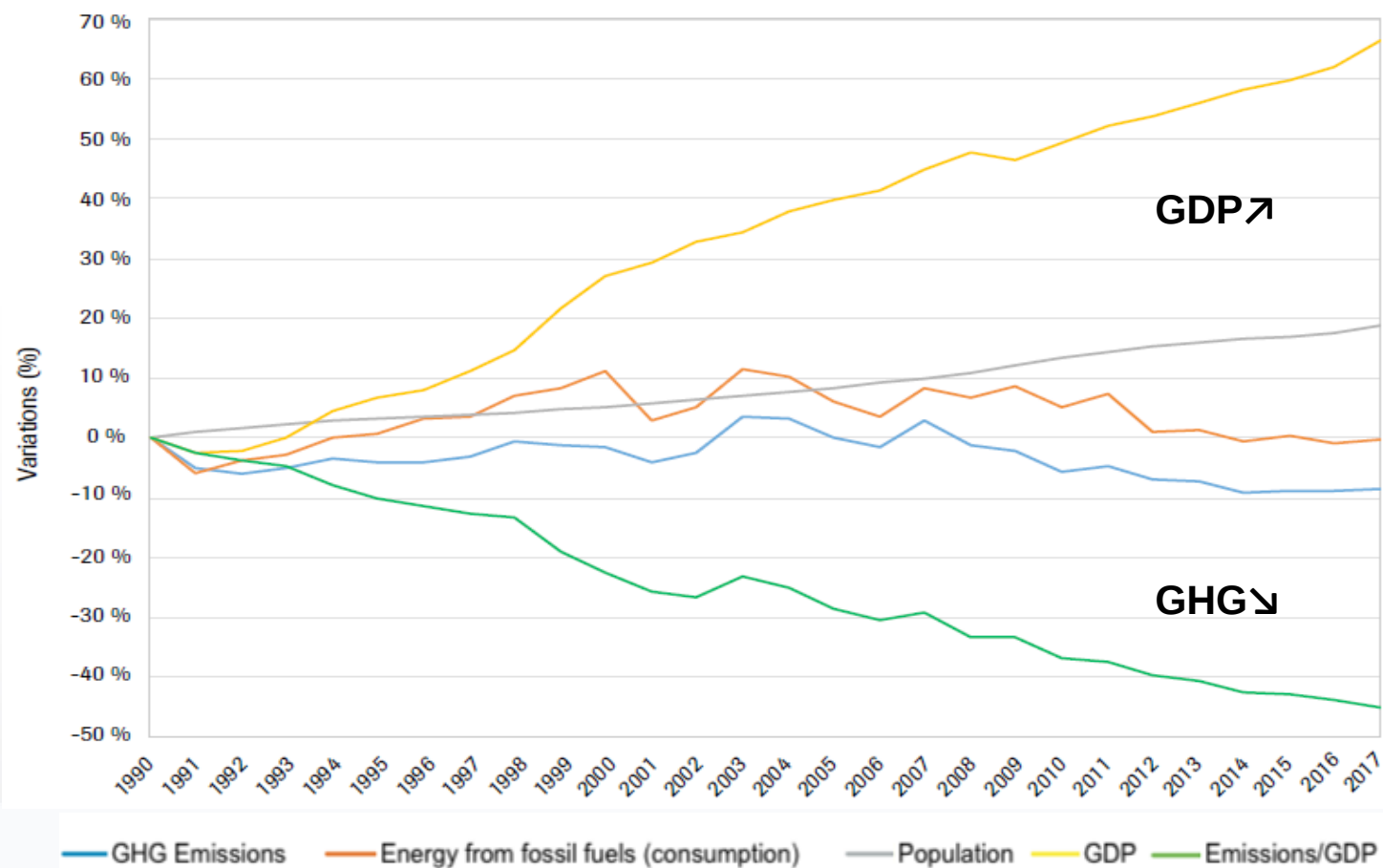
Expected results of the 2021-2026 implementation plan



Notes: Estimates are based on information available as of February 2020.

- ▶ Achieving the 37.5% reduction target thus represents a reduction effort of 29 million tonnes of CO₂ equivalent by 2030.
- ▶ By including the carbon market's impact, the 2021-2026 Implementation Plan could result in reductions of approximately 12 million tonnes of CO₂ equivalent in Québec within this timeframe, i.e., about 42% of the effort required.
- ▶ These reductions do not take into account the initiatives of other stakeholders such as the federal government and municipal sector.
- ▶ Reductions will increase over the years thanks to, among other things, the addition of new actions or the improvement of those already planned, technological developments and changing lifestyles.

DECOUPLING GHG EMISSIONS AND ECONOMIC GROWTH



Variation, in percentages, of Québec GHG emissions, fossil fuel consumption, population, GDP, and GDP/GHG ratio since 1990

MERCI

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**For more information on Québec's approach
to fight climate change, visit
[www.environnement.gouv.qc.ca/changements
climatiques/index-en.htm](http://www.environnement.gouv.qc.ca/changements
climatiques/index-en.htm)**

**OR contact me at
anais.jalbert@environnement.gouv.qc.ca**

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