

2023–2028 IMPLEMENTATION PLAN

The **Plan for a Green Economy 2030 (PGE 2030)** sets out the roadmap for Québec's climate action up to 2030. The **PGE 2030 2023–2028 Implementation Plan** defines the concrete climate actions rolling out over the next five years to achieve the Québec government's targets and objectives.

The Implementation Plan is structured around five main axes:

- ▶ Mitigate climate change by reducing our greenhouse gas (GHG) emissions
- ▶ Build the economy of tomorrow, with a focus on electrification
- ▶ Adapt to climate change
- ▶ Create a predictable environment that is conducive to the climate transition
- ▶ Accelerate the development of knowledge



2023-2028 IMPLEMENTATION PLAN: UNPRECEDENTED EFFORT

With the 2023–2028 Implementation Plan, the Québec government is ramping up its investments to \$9 billion, an increase of \$1.4 billion over the previous implementation plan. According to estimates, the planned actions and budgets will lead to GHG reductions representing 60% of the work required to reach the 2030 target, as opposed to 51% of the work needed in terms of reductions when the 2022–2027 Implementation Plan was launched. For the first time ever, the plan also sets out measures currently in development to further boost progress in a range from 69% to 73%.

Here are a few examples of the Ministère's increased investments and new initiatives:

Accelerate transport electrification

- ▶ Raised the target to increase the number of light electric vehicles from 1.6 to 2 million by 2030.
- ▶ Announced the future launch of a \$500 million strategy for electric vehicle charging in Québec.
- ▶ Extended the Roulez Vert (Drive Green) program's electric vehicle rebate.

Accelerate the decarbonization of the industrial sector

- ▶ Invested an additional \$175 million in the Bioénergies (Bioenergy) program to develop a large emitter component of the program, which finances bioenergy conversion projects such as switching to renewable natural gas.
- ▶ Invested an additional \$254.9 million in the GHG Challenge program to support industries carrying out large-scale GHG emission reduction projects.
- ▶ Announced the optimization of the cap-and-trade system for greenhouse gas emission allowances (C&T system), more commonly known as the carbon market.

Increased support to sustainable mobility

- ▶ Allocated \$68 million more to the Programme d'aide financière au développement des transports actifs dans les périmètres urbains (Financial assistance program to develop active transportation within urban perimeters).
- ▶ Pursuit of the Programme d'aide aux nouvelles mobilités (New mobility assistance program), designed to support developing alternatives to solo vehicle usage.

Improve energy performance of buildings

- ▶ Invested \$214.5 million to launch a new program to support waste heat recovery projects.
- ▶ Earmarked an additional \$12 million for projects to improve electricity peak period management, mainly to finance the purchase of heat accumulators. These simple devices store heat so it can be released during peak periods.
- ▶ Announced the intent to implement a system for reporting and rating the energy performance of buildings.

Support off-grid communities in planning and implementing renewable energy projects

- ▶ Allocated \$280.3 million more to various partial conversion projects for off-grid systems and community renewable energy generation projects.

Accelerate Québec's adaptability to the impacts of climate change

- ▶ \$2.5 million to map and communicate about coastal erosion and flooding hazards.
- ▶ \$57.9 million to implement adaptation solutions for coastal erosion and flooding, such as beach nourishment and shoreline protection structures.
- ▶ Total sums allocated to adaptability in Québec (+\$213 million, +33%).
- ▶ Assignment of executive orders to various ministries and organizations to carry out risk assessments in order to ensure that Québec's strategic infrastructures and priority services are resilient and protected. These mandates also aim to encourage municipal organizations to assess climate risks and develop adaptation plans.

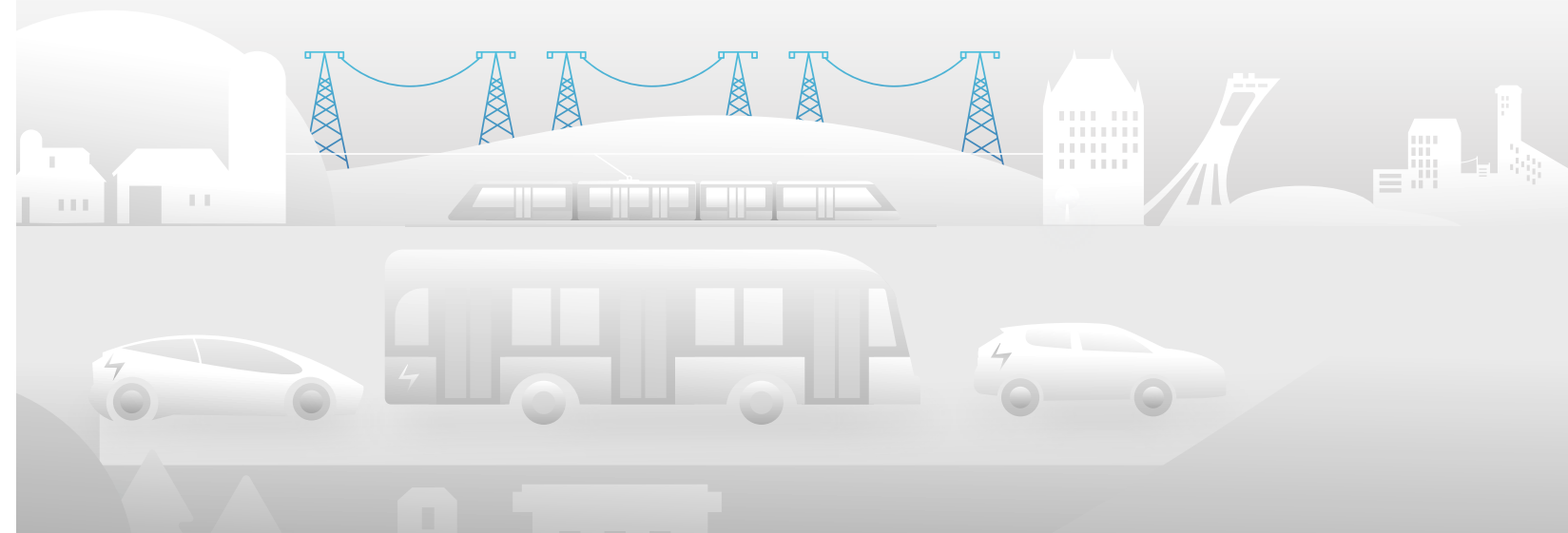
ACHIEVEMENTS IN 2022-2023

Many initiatives to support the fight against climate change have taken place during the second implementing year of the Plan for a Green Economy 2030, namely the ones below.

- ▶ Launched several programs, including the following:
 - ▶ GHG Challenge Program – Industry;
 - ▶ Programme de soutien au secteur privé pour le déploiement de bornes de recharge rapide publiques (Fast-charging station deployment support program for the private sector);
 - ▶ Mesure d'aide pour la décarbonation du secteur industriel québécois (Québec industrial sector decarbonization assistance measure);
 - ▶ Programme d'appui à la lutte contre les changements climatiques dans le secteur bioalimentaire (Support program for climate action in the bio-food sector).
- ▶ Announced the Stratégie de mobilisation pour l'action climatique 2022–2027 (Mobilization strategy for climate action) at COP 27 to ensure all parties (businesses, communities, citizens) do their part to fight climate change.

Financial support has also been awarded in 2022–2023. Here are a few examples:

- ▶ Under the Programme d'électrification du transport scolaire (School transportation electrification program), nearly \$150 million has been granted to fund electric school bus purchases and support public transit electrification.
- ▶ Under the Écocardionnage (Ecotrucking) program, 882 applications were submitted to acquire technology or vehicles. Over \$17 million in financial support has already been confirmed.
- ▶ The "Grands émetteurs" (Large emitters) component of the ÉcoPerformance program supports energy efficiency and energy conversion projects, and several promising projects have received financial support. Here is an example:
 - ▶ CertainTeed carbon-neutral plant project in Sainte-Catherine, Montérégie (\$40 million).
- ▶ A sum of \$1.3 million was awarded to the town of Saint-Félicien for a heating network to recover waste heat from a forest biomass cogeneration plant.
- ▶ As part of the Technoclimat program, aiming to support emergent GHG emission reduction technologies across the innovation chain, we awarded:
 - ▶ \$3 million to Geomega Resources Inc. for a demonstration plant to recycle rare earths from permanent magnets;
 - ▶ \$3 million to Entosystème Inc. to produce insect proteins and fertilizers from insect farm waste.
- ▶ With funding of over \$12.7 billion over five years, 45% of which comes from the Electrification and Climate Change Fund, the Plan directeur en transition, innovation et efficacité énergétiques (Energy transition, innovation and efficiency blueprint) was updated in 2022.
 - ▶ During this update, the Société de financement et d'accompagnement en performance énergétique (SOFIAC) was announced. SOFIAC aims to finance projects that improve energy efficiency and reduce total corporate GHG emissions by over 50%.



MAIN QUANTIFIED PLAN OBJECTIVES

Reduce GHG emissions by **37.5%** below 1990 levels by 2030.

Reach **carbon neutrality** by 2050.

Have **2 million** electric vehicles on the roads in Québec by 2030.

Ban the sales of new gas or diesel vehicles starting in 2035.

Transition **55%** of city buses and **65%** of school buses to electric models by 2030.

Transition **100%** of government cars, SUVs, vans and minivans and **25%** of government pickup trucks to electric models by 2030.

Ensure **15%** of low-carbon content in gasoline and **10%** in diesel fuel by 2030.

Achieve a **50%** reduction in building heating emissions by 2030.

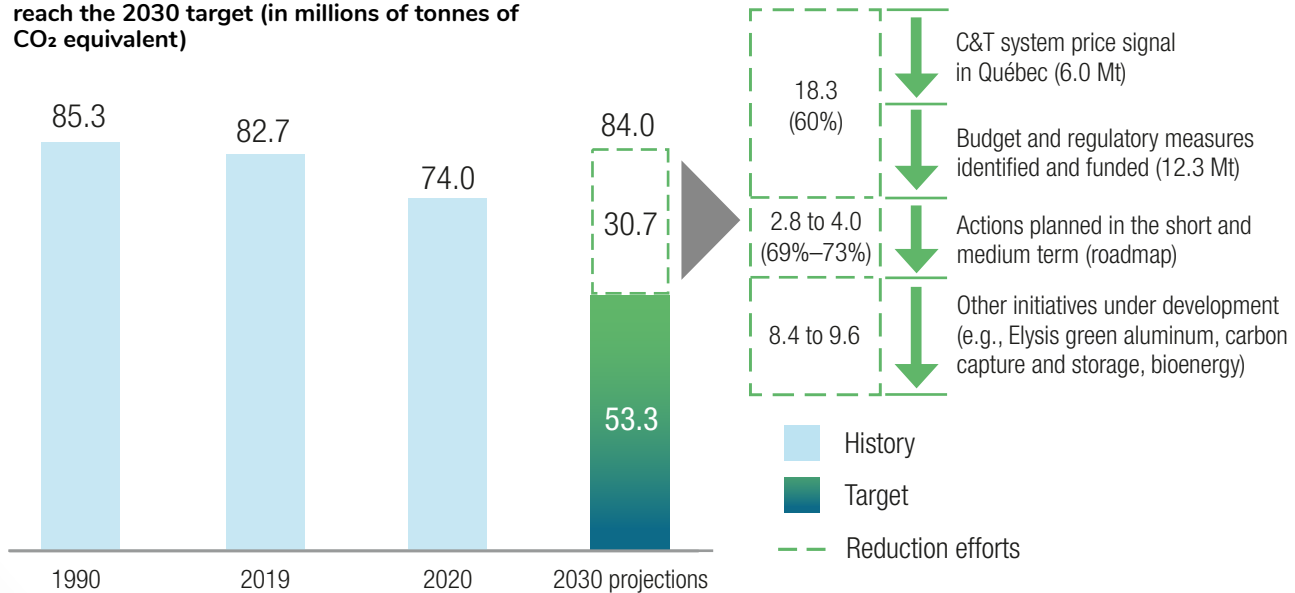
Achieve a **60%** reduction in emissions from the government building stock by 2030.

Reach **10%** of renewable natural gas in the network by 2030.

Achieve a **50%** increase in bioenergy production by 2030.

Increase the renewable energy supply to **80%** in autonomous electrical systems by 2030.

GHG emissions trends and reductions needed to reach the 2030 target (in millions of tonnes of CO₂ equivalent)



Note: These estimates are based on the most up-to-date information available as of March 10, 2023, and the economic forecasts in the 2023–2024 budget.

Sources: Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs et ministère des Finances du Québec.

- ▶ A reduction effort of 30.7 million tonnes of CO₂ equivalent (CO₂ eq) is required to achieve the 37.5% reduction target.
- ▶ We estimate that the 2023–2028 Implementation Plan could allow for reductions of 18.3 Mt CO₂ equivalent, or about 60% of the required effort to reach the 53.3 Mt CO₂ equivalent target in 2030.
- ▶ Additional actions to drive the climate transition have been identified to achieve even greater reductions, i.e., between 69% and 73% of the required effort to reach the 2030 target.