

# ENVIRONMENTAL STRATEGY AND GREENHOUSE GAS TARGETS

# EPCOR ENVIRONMENTAL STRATEGY

At EPCOR, we take our role as environmental stewards to heart. Being an environmental leader is an integral part of who we are as a company and how we operate — the environment and climate affect EPCOR's operations daily and in the long term.

To protect the environment is to protect the communities where we live and work, and preserve the resources that we rely on to deliver essential services to our customers. At EPCOR, being an environmental leader is about doing the right thing in the day-to-day operations and pursuing opportunities where we can apply our expertise.

## EPCOR'S ENVIRONMENTAL STRATEGY HAS THREE GOALS

- 1 Reducing the company's environmental footprint.** EPCOR is eliminating PCBs (polychlorinated biphenyls) in electricity infrastructure by 2023; reducing utility impacts to air, land, water and ecosystems; enhancing watershed monitoring and protection; reducing greenhouse gas (GHG) emissions; reducing emissions and energy use from fleet vehicles; increasing potable water re-use; and increasing local renewable electricity generation.
- 2 Improving the resilience of utility infrastructure.** EPCOR is studying the potential impacts of extreme weather events on the ability to deliver reliable utility services, and is implementing action plans to improve system resiliency and reliability.
- 3 Helping communities and customers to reduce their footprint and increase their resilience.** EPCOR is implementing flood mitigation initiatives in Edmonton that protect homes, businesses and essential services; implementing education initiatives that promote efficiency and resource conservation; and preparing the local electricity grid to support customer choice as households adopt electric vehicles or self-generation of electricity.



# GREENHOUSE GAS INVENTORY

EPCOR first established and reported on its greenhouse gas (“GHG”) emissions more than twenty years ago, through the Voluntary Challenge and Registry program. The company continues to maintain an inventory of GHG emissions and an ongoing plan to reduce these emissions.

EPCOR seeks to achieve utility performance that supports the City of Edmonton reaching the citywide targets set in its Community Energy Transition Strategy, which includes a 35% reduction in GHG emissions by 2035 and 10% of Edmonton’s electricity being produced locally produced by 2035.

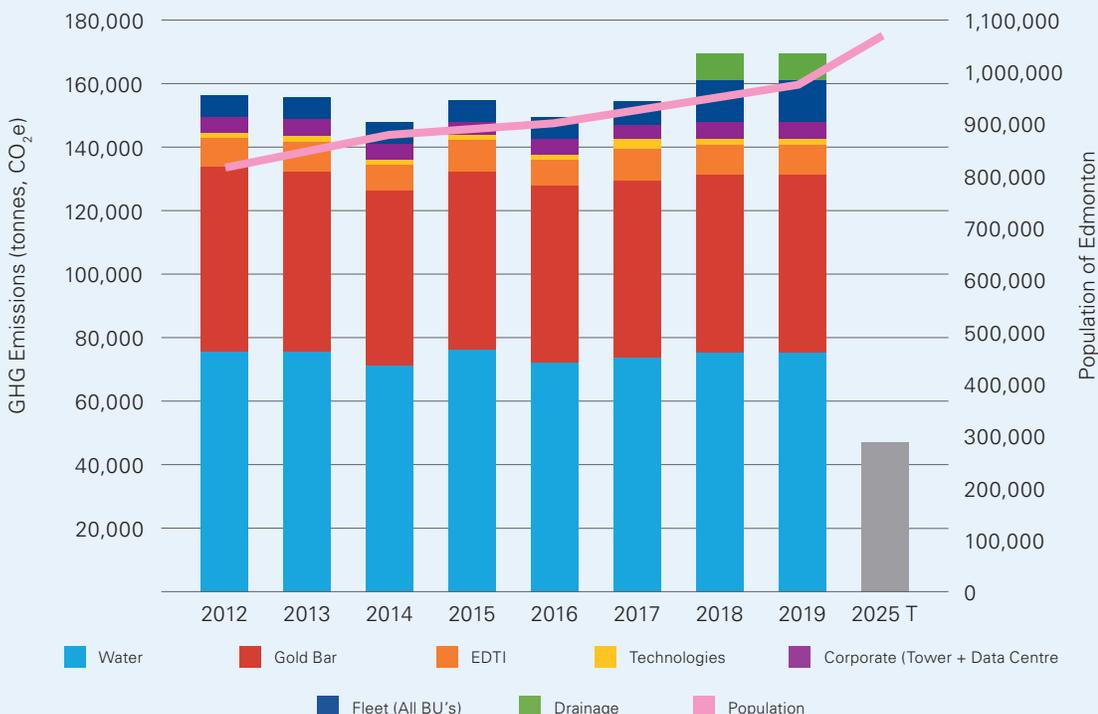
EPCOR has selected 2012 as the baseline year that reduction efforts will be measured against. In the baseline year, EPCOR’s Scope 1 and Scope 2 GHG emissions were 156,590 tonnes of carbon dioxide equivalent (“CO<sub>2</sub>e”). The trend of GHG emissions since 2012 has been relatively flat with a small increase in 2018 when Edmonton drainage operations were included in EPCOR’s total.

In 2018, EPCOR’s Scope 1 and Scope 2 GHG emissions were 169,779 tonnes of CO<sub>2</sub>e. Electricity consumption accounted for just over 70% of EPCOR’s 2018 GHG emissions, with most of those emissions coming from electricity use at the E.L. Smith and Rossdale Water Treatment Plants, and from the drinking water pumping and distribution system.

EPCOR has a long standing energy efficiency program that includes life cycle optimization of pumps and other assets as well as building envelope improvements. However, there are limited opportunities for further reducing electricity consumption volumes through energy efficiency alone. In order to achieve the deep emission reductions that are required to mitigate the effects of climate change, EPCOR must utilize cleaner electricity for its operations.

**BY 2025, EPCOR PLANS TO UTILIZE 100% GREEN ENERGY ELECTRICITY FOR ALL EDMONTON BASED OPERATIONS**

## EPCOR GHG EMISSIONS (2012-2018) AND EDMONTON'S POPULATION



Credits from developing a new wind farm will be used to offset electricity-related emissions



Solar farm electricity used directly at the EL Smith Water Treatment Facility will reduce electricity use from the grid.

## 2025 REDUCTION TARGET

**By 2025, EPCOR will reduce its GHG footprint inside the City of Edmonton by 70% relative to the 2012 baseline.**

This goal will be achieved by utilizing 100% green electricity for all of EPCOR's Edmonton based operations.

Reducing the carbon intensity of electricity generation is the single largest opportunity for EPCOR to achieve GHG emission reductions, and essential for attaining meaningful results.

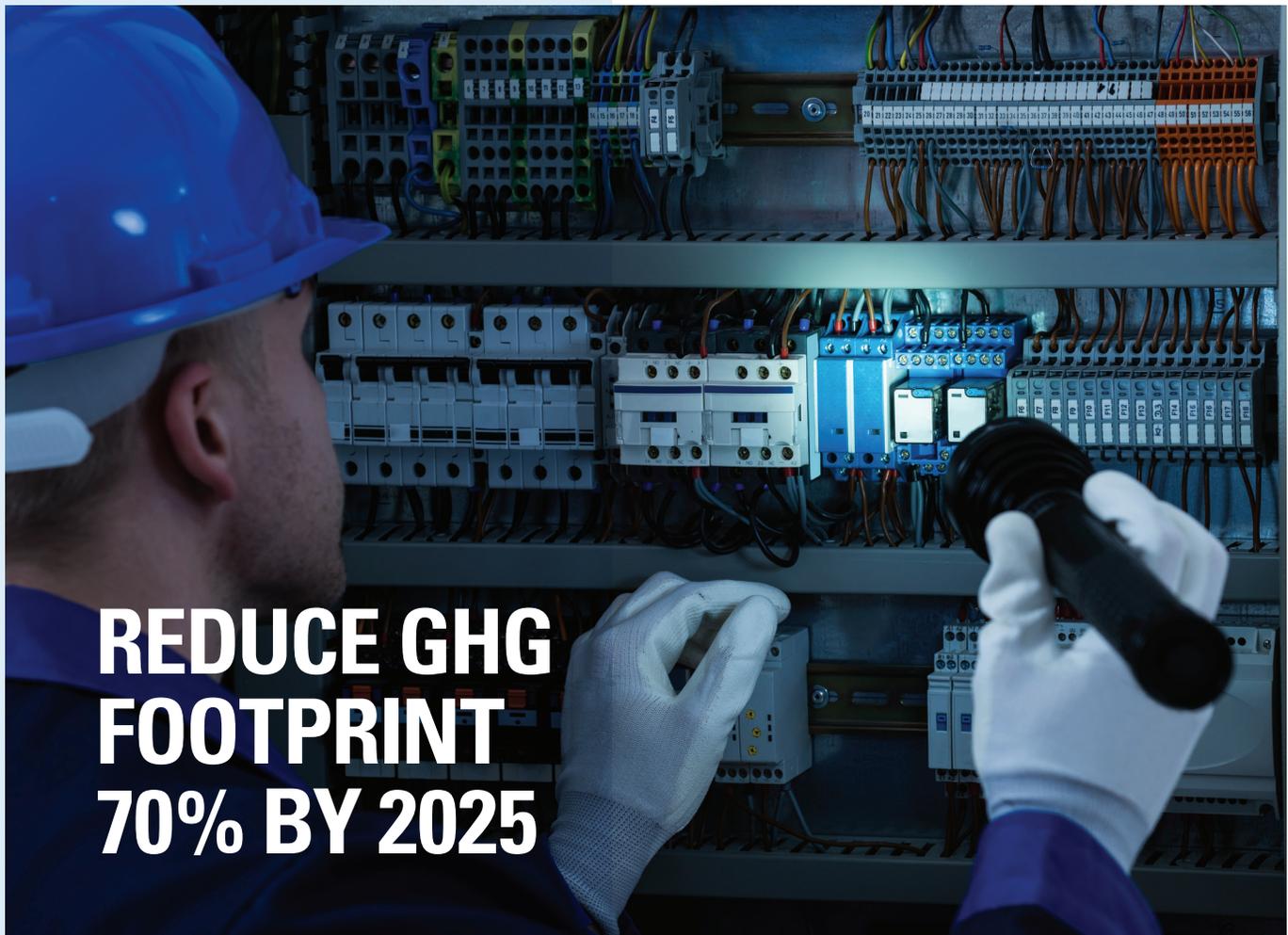
Two projects have been identified to deliver on this target – the E.L. Smith Water Treatment Plant Solar Farm located in Edmonton, and an offtake agreement for Renewable Electricity Certificates ("RECs") from a newly constructed wind farm

in Southern Alberta. These projects will provide EPCOR and its customers with a portfolio of green electricity generation that balances local development and affordability while significantly reducing EPCOR GHG footprint within Edmonton.

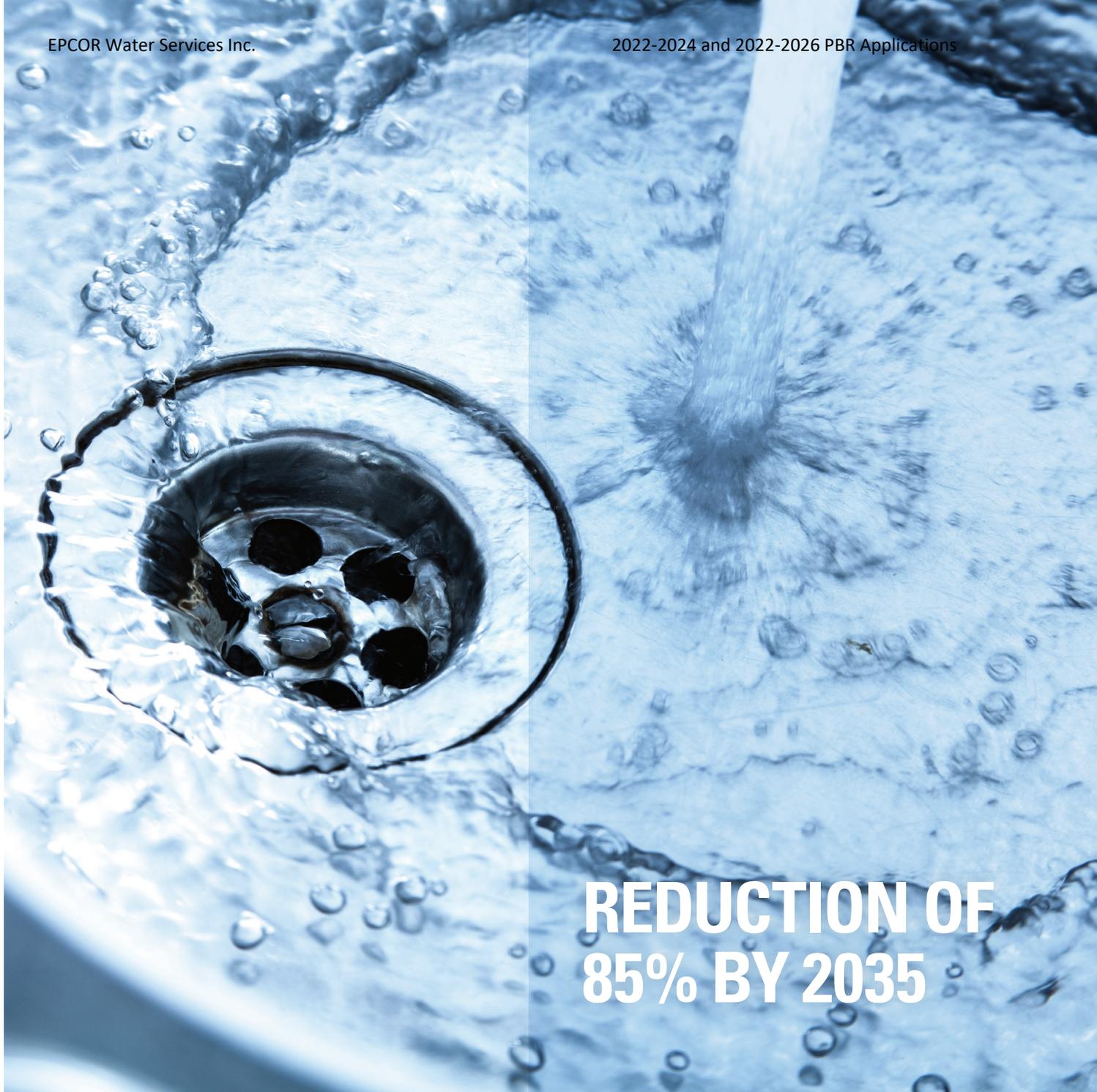
The electricity generated by the E.L. Smith Water Treatment Plant Solar Farm will be utilized directly at E.L. Smith. Electric energy generated by the wind farm will provide a new source of green electricity to the Alberta grid that would otherwise not be developed and EPCOR has secured the rights to claim the Renewable Electricity Credits for the 20-year life of the project.

These projects will provide enough green electricity to reduce EPCOR's Scope 1 and Scope 2 emissions from electricity consumption inside the City of Edmonton to zero.

EPCOR believes that it can achieve and sustain this substantial reduction in GHG emissions by 2025, with a **stretch target of full implementation in 2023.**



**REDUCE GHG  
FOOTPRINT  
70% BY 2025**



# REDUCTION OF 85% BY 2035

## 2035 REDUCTION TARGET

By 2035, EPCOR will further reduce in its GHG footprint inside the City of Edmonton such that a reduction of 85% will be achieved relative to the 2012 baseline.

EPCOR believes that emerging and improving technologies will lead to cost effective opportunities to act. Some of the tactics that EPCOR will consider include electrifying fleet vehicles, utilizing biomethane, synthetic natural gas, and hydrogen for heating and transportation, and evaluating alternative process technologies for water and wastewater treatment.

EPCOR will refine the 2035 reduction target as additional tactics are identified, evaluated, and approved for implementation.

