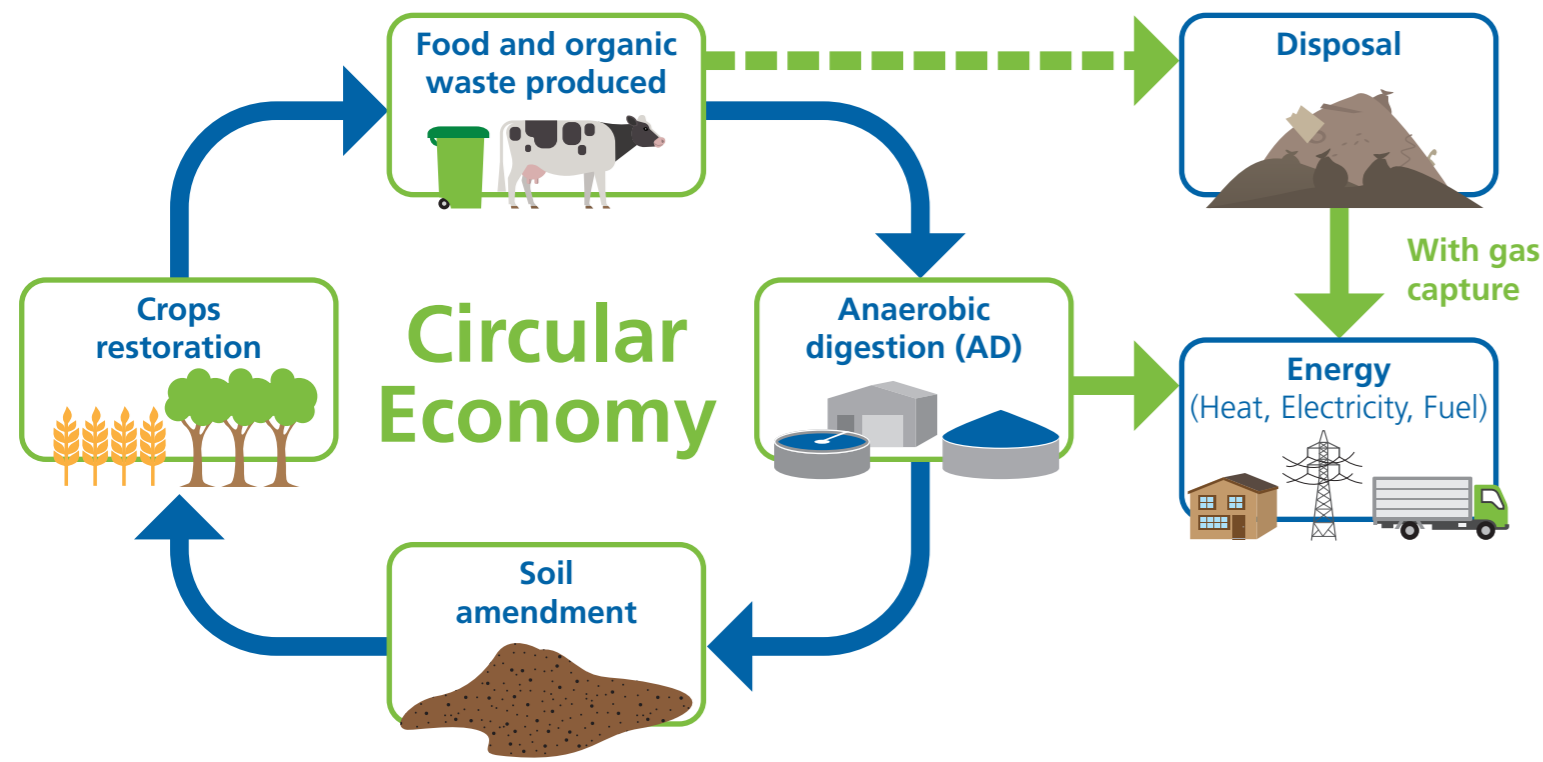


# Facts About the Biogas Industry in Canada

The biogas industry is helping to close the loop in Canada by breaking down organic wastes in the absence of oxygen and converting them to low-carbon energy and soil amendment to fuel our economy.

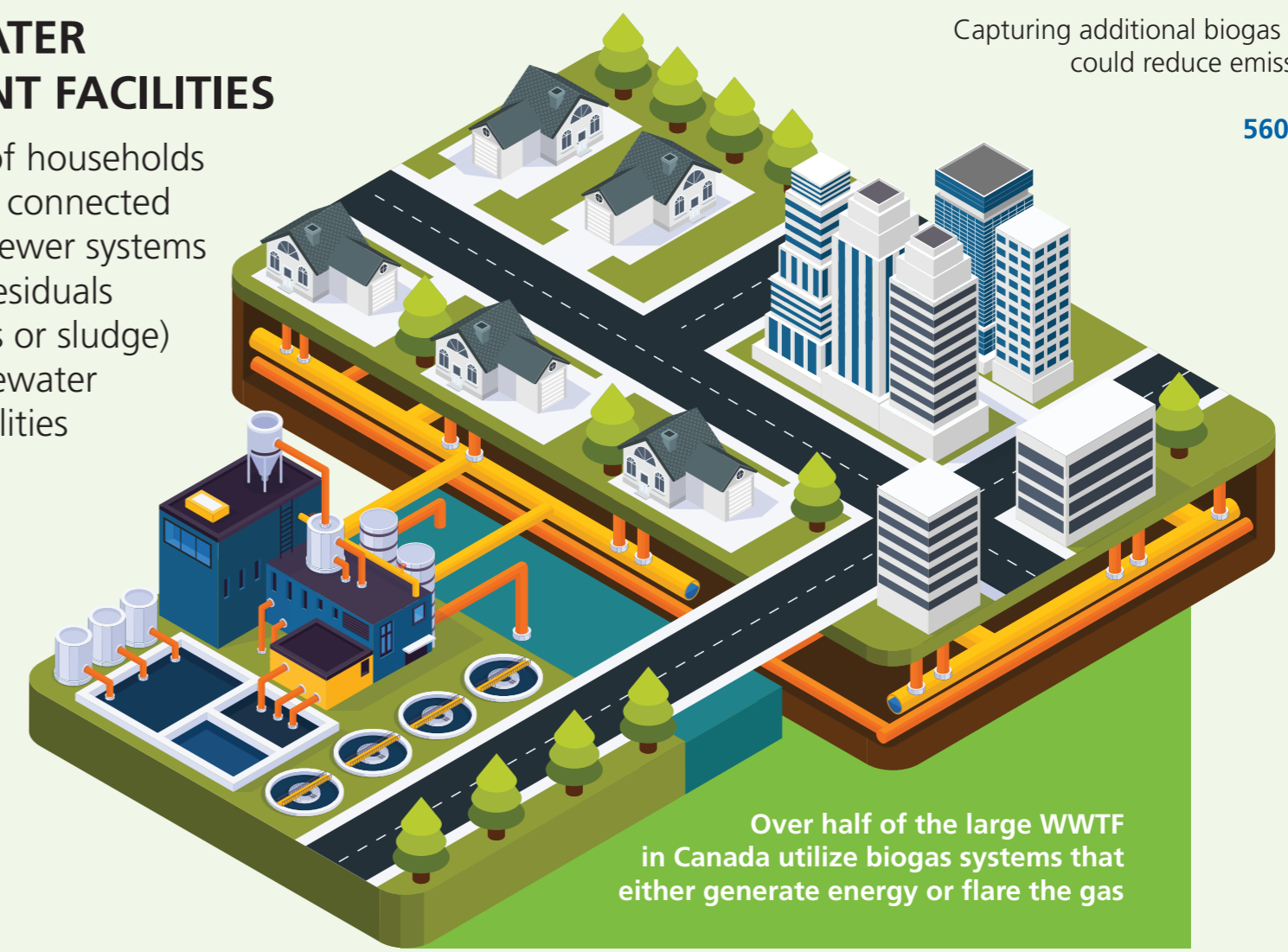


**DID YOU KNOW...**

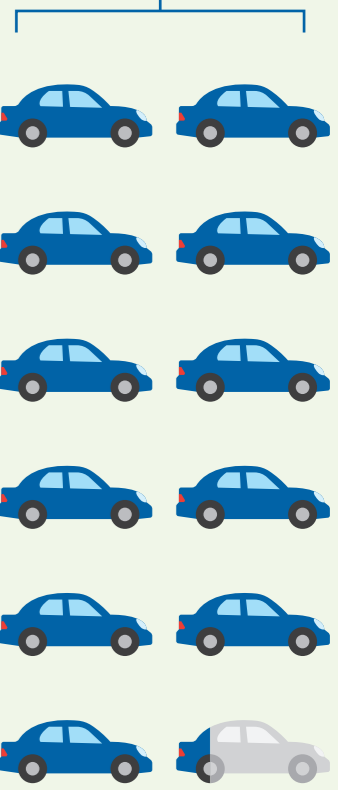
Canada generates **18.4 million tonnes** of organic waste annually, with only **32% being diverted** through compost and anaerobic digestion facilities. Landfilled organic materials emit methane – **25x more harmful than CO<sub>2</sub>**

## WASTEWATER TREATMENT FACILITIES

The majority of households in Canada are connected to municipal sewer systems that process residuals (e.g., biosolids or sludge) through wastewater treatment facilities (WWTF).



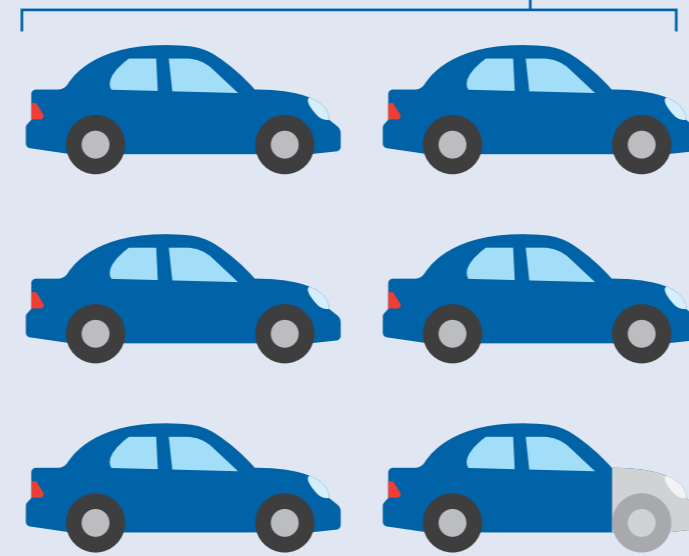
Capturing additional biogas in WWTF across Canada could reduce emissions by **2.8 Mt of eCO<sub>2</sub>** (equivalent to taking **560,000 cars off the road**)



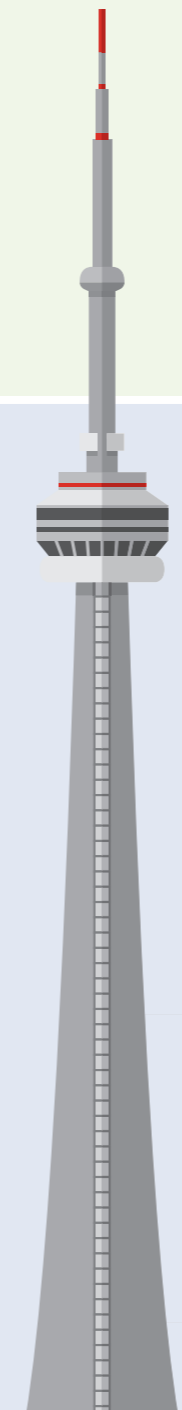
## SOURCE SEPARATED ORGANICS



If Canada diverted 50% of that food waste to AD facilities, it could reduce GHG emissions by **1.44 MT of eCO<sub>2</sub>** (equivalent to taking **288,000 cars off the road**)

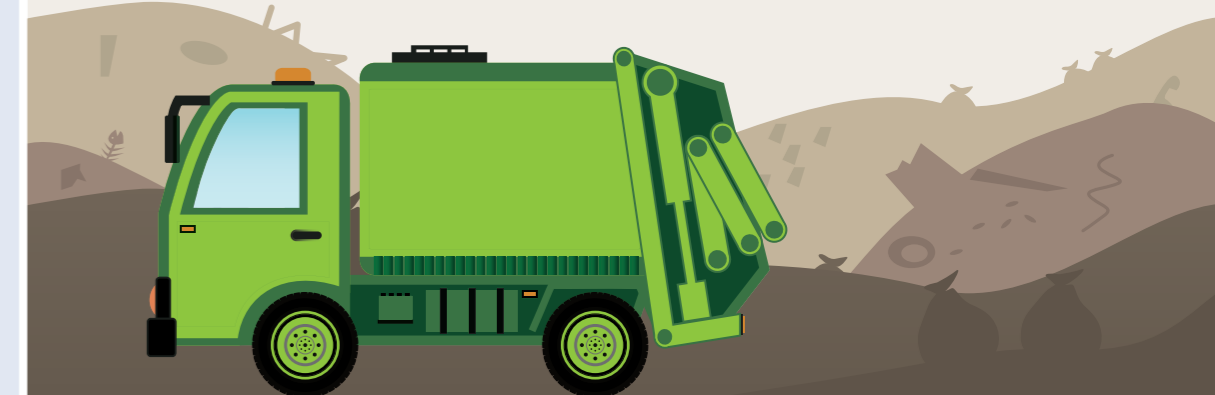


Canada generates **6 million tonnes of food waste annually**, equivalent to the weight of nearly 50 CN towers.

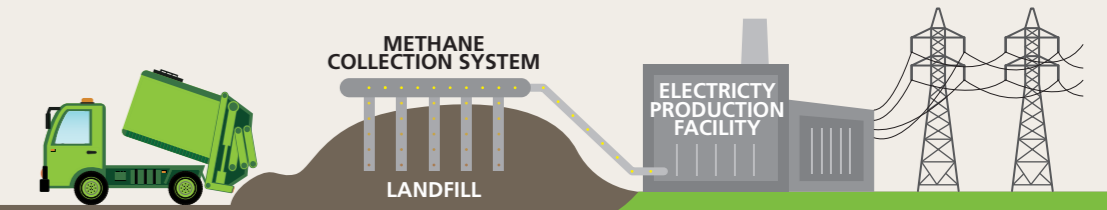


## LANDFILL GAS CAPTURE

The over 1,500 active landfill sites across Canada, generate approximately 30 MT of eCO<sub>2</sub>.



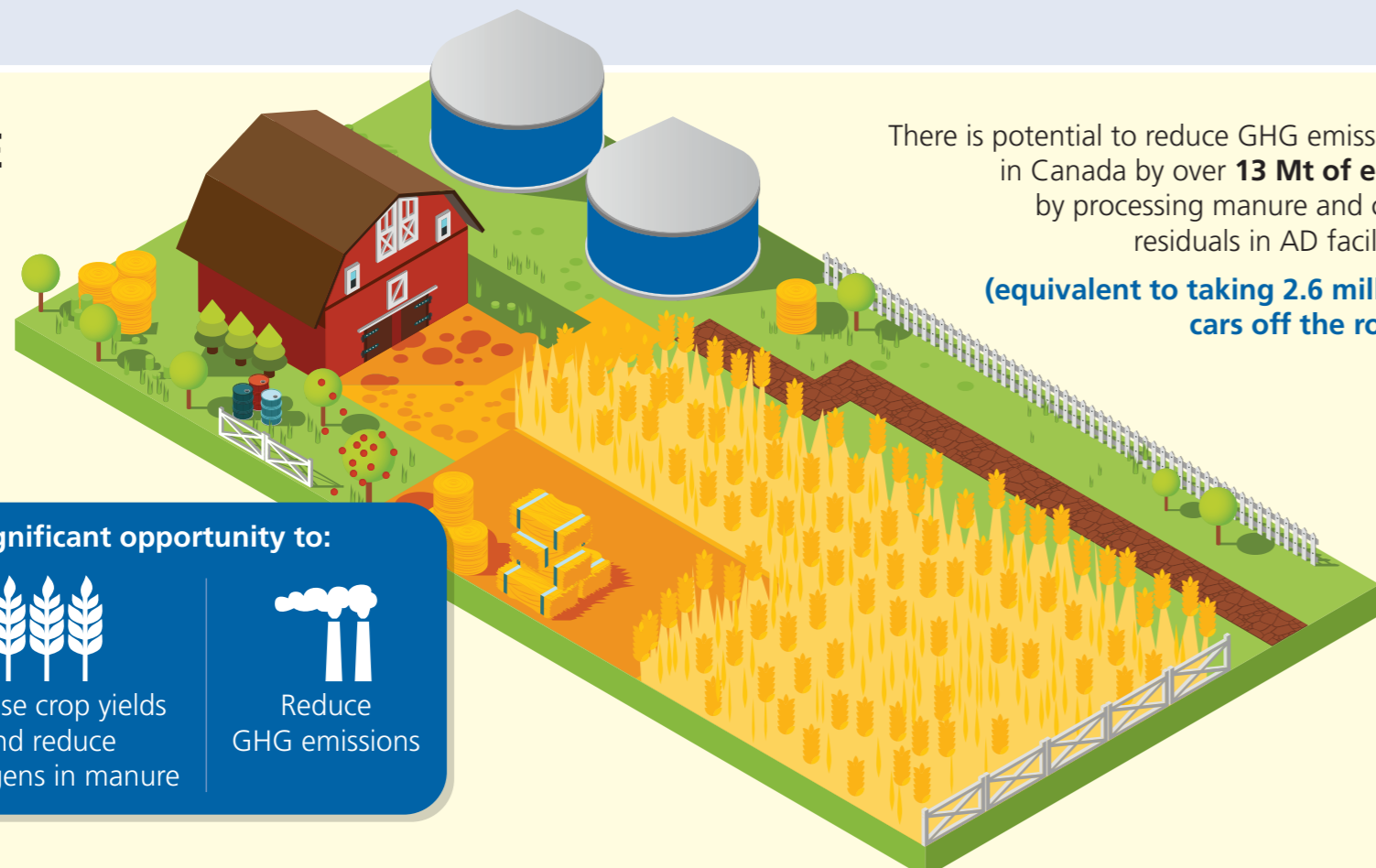
In Canada, there are over 100 landfill sites have gas capture systems in place, 50 of which produce energy.



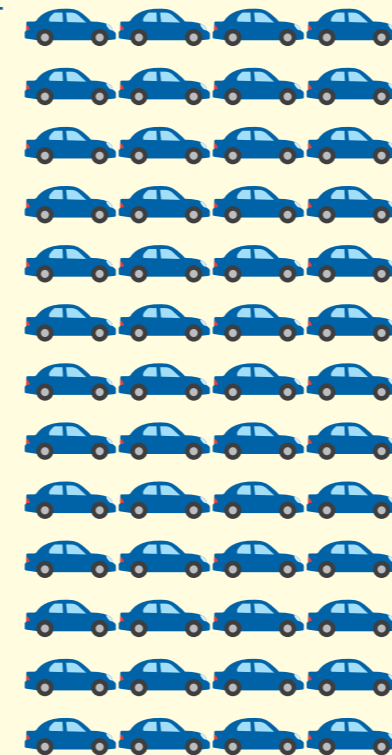
There is a significant opportunity to mitigate emissions by diverting organic waste and increasing the amount of large landfills with gas capture systems that are converting the gas to energy.

## AGRICULTURE

Currently there are over 50 on-farm AD facilities across Canada.



There is potential to reduce GHG emissions in Canada by over **13 Mt of eCO<sub>2</sub>** by processing manure and crop residuals in AD facilities (equivalent to taking **2.6 million cars off the road**)



One tonne of artificial fertiliser replaced with digestate saves:

**1 tonne of oil**

**108 tonnes of water**

**7 tonnes of CO<sub>2</sub> emissions**

This represents a significant opportunity to:

- Diversify farm revenue
- Increase crop yields and reduce pathogens in manure
- Reduce GHG emissions



[www.biogasassociation.ca](http://www.biogasassociation.ca)

Data in this report is adapted from various national and provincial published reports