The Ministers of the Environment and Health need to work together to add all anesthetic gases to the Greenhouse Gas Inventory and then apply a carbon price to them.
Send a letter to your MP

We have a narrow window of opportunity to avert climate catastrophe.

We must leave no greenhouse gas behind.
Anaesthetic Gases

1. Primary source of GHG pollution in the operating room in North America.
2. Hydrofluorocarbons that are magnitudes worse than C02 for the climate.
3. Global Warming Potential (GWP)
   - DESFLURANE = 2540 GWP
   - SEVOFLURANE = 130 GWP

CO2e of common anaesthetic gases expressed in kilometers driven

A route from Parliament Hill to Saint Joseph’s Oratory in Montreal. The total distance is 192 km. The CO2 equivalent of travelling a distance is calculated by assuming that a car emits 200 g of CO2 per kilometer.

Sevoflurane (Sevo) = yellow = 6.5 km
Isoflurane (Iso) = pink = 14 km
Nitrous oxide (N2O) = green = 95 km
Desflurane = purply blue = 320 km

MAC-hour = dose necessary to keep a patient asleep for 1 hour

Efforts to Restrict Desflurane

- Best practice guidelines and position statements from the World Federation Societies of Anaesthesiologists, American Society of Anaesthesiologists, and Ontario Anaesthesiologists support restricting anaesthetic gases with high global warming potentials.

- Several health systems including NHS in the United Kingdom are severely restricting desflurane for environmental and financial reasons.

- Lobbying efforts by anaesthesia professionals and citizens to include anesthetic gases into GHG inventory.
Health Sciences North Sudbury

Health Sciences North removed Desflurane in 2019.

This resulted in the reduction of the annual carbon footprint in their operating rooms by over 720 tonnes and cost savings $45,000. There was no change in patient morbidity or mortality.
In 2022, the price of GHG pollution in Canada is $50/tonne. If the GHG pollution from anaesthetic gases had been priced:

- $2.47 per bottle of Sevoflurane
- $44.70 per bottle of Desflurane
The Ministers of the Environment and Health need to work together to add all anesthetic gases to the Greenhouse Gas Inventory, and then apply a carbon price to them.