

Greening the anaesthetic room

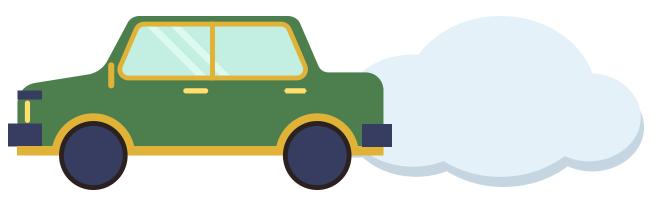


Reduce the global warming potential of your anaesthetic

DID YOU KNOW?

Volatile anaesthetics are greenhouse gases, some with many times the global warming potential (GWP) of CO2. Sevoflurane has 130 times the GWP of CO2, whilst Desflurane has 2540 times the impact of CO2! (1) Some simple strategies could greatly reduce the environmental impact of each anaesthetic.

Car miles equivalent



One hour of anaesthesia is like driving a car how many miles?

Dose	Sevoflurane 2.2%	Isoflurane 1.2%	Desflurane 6.7%
0.5 L/min	XXX	4	93
1 L/min	4	7	189
2.0 L/min	8	15	378
5.0 L/min	19	38	939
10.0 L/min	38	74	1,876

The WHO has labelled climate change the greatest threat to global health in the 21st Century. It is everyone's responsibility

Tips for Greener Anaesthesia

- Avoid Desflurane use.
- Avoid Nitrous Oxide Use.
 Its a greenhouse gas and depletes the ozone layer!
 (2)
- Use low flow or ultra low gas flows to reduce wastage.
- Consider TIVA or regional anaesthesia. (3)
- Don't forget gas in the anaesthetic room! Turn gas flow down when disconnected from the patient.

Sulbaek Andersen MP, Nielsen OJ, Wallington TJ, Karpichev B, Sander SP. Assessing the impact on global climate from general anesthetic gases. Anesth Analg. 2012;14(5):1081–5.

2. Nitrous Oxide (N2O): The dominant ozone-depléting substance emitted in the 21st century.

Science 326(5949):123-5 September 2008

3. Sherman J et al. Life cycle greenhouse gas emissions of anaesthetic drugs. Anesthetic Anαlg 2012;**114:**1086-1090.