

# SENATE BILL REPORT

## SB 5236

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As of January 24, 2025

**Title:** An act relating to emissions of greenhouse gases used for anesthetic purposes.

**Brief Description:** Concerning emissions of greenhouse gases used for anesthetic purposes.

**Sponsors:** Senators Slatter, Harris, Nobles and Shewmake.

**Brief History:**

**Committee Activity:** Environment, Energy & Technology: 1/24/25.

### Brief Summary of Bill

- Directs the Department of Ecology (Ecology) to commission a study, to be completed by July 1, 2026, relating to the use of certain gases used for anesthetic purposes—anesthetic gases.
- Requires Ecology, in consultation with the Washington State Department of Health (DOH), to report to the Legislature on statutory changes necessary to reduce greenhouse gas (GHG) emissions from using anesthetic gases by October 1, 2026.
- Requires Ecology, in consultation with DOH and other specified organizations, to develop and publish a guidance document intended to reduce GHG emissions from using anesthetic gases in certain medical settings by January 1, 2027.
- Provides that, beginning January 1, 2028, facilities and practitioners in certain medical settings may only use anesthetic gases consistent with the guidance document, with certain exceptions.

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### SENATE COMMITTEE ON ENVIRONMENT, ENERGY & TECHNOLOGY

**Staff:** Matt Shepard-Koningsor (786-7627)

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.*

**Background:** Greenhouse Gases. Gases that trap heat in the Earth's atmosphere are called greenhouse gases (GHGs). GHGs include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and several other gases identified by the Department of Ecology (Ecology). Global Warming Potential (GWP) is used as a method to compare one GHG's capacity to trap heat in the atmosphere with that of another. GWP is measured as a function of how much of the gas is concentrated in the atmosphere, how long the gas stays there, and how strongly the particular gas affects global atmospheric temperatures. Under state law, the GWP of GHGs are measured in terms of their equivalence to the emission of an identical volume of carbon dioxide over a 100-year timeframe. For example, the GWP of nitrous oxide is 298. Put simply, this means that nitrous oxide is 298 times more potent at trapping heat in the atmosphere over a 100-year timeframe relative to carbon dioxide.

In 2020, Washington updated its GHG emission limits. The next requirement applies in 2030, where the state must reduce human-caused GHG emissions to 50 million metric tons or 45 percent below 1990 levels. There are separate, specific GHG emission limits for state agencies. Ecology administers several programs aimed at reducing GHG emissions, such as the Cap-and-Invest Program, Clean Fuel Standard, and Refrigerant Management Program.

Anesthetic Gases. According to the American Society of Anesthesiologists, during clinical use, inhaled anesthetics are mostly vented through gas scavenging systems to protect against indoor occupational exposure, but are eventually released into the atmosphere. Some common anesthetic gases are isoflurane, sevoflurane, desflurane, and nitrous oxide, often referred to as laughing gas. Under state law, these gases have varying GWPs, ranging from 200-1000.

**Summary of Bill:** Anesthetic Gases Study and Report. Ecology must commission a study to be completed by July 1, 2026, that:

- determines the potential sources of gases with a high GWP used for anesthetic purposes in Washington;
- determines how these gases are used in Washington;
- estimates the quantity of emissions;
- recommends potential points of regulation for each of these gases; and
- recommends measures for reducing or eliminating emissions of these gases.

By October 1, 2026, Ecology, in consultation with the Washington State Department of Health (DOH), must submit recommendations to the Legislature regarding further statutory changes needed to appropriately and effectively reduce GHG emissions associated with the use of anesthetic gases, including any recommendations to prohibit the manufacture, distribution, sale, or use of specific anesthetic gases. The report must note recommendations DOH does not endorse and include any associated opinions in an appendix.

Anesthetic Gases Guidance Document. By January 1, 2027, Ecology must develop and

publish a guidance document intended to reduce GHG emissions associated with the use of anesthetic gases with a high GWP used in medical, dental, veterinary, or other similar facilities and settings. Gases subject to the guidance document must include, at a minimum, sevoflurane, desflurane, isoflurane, halothane, and nitrous oxide. The stated goal of the guidance document is to reduce GHG emissions associated with the use of anesthetic gases without limiting the judgment or needs of medical, dental, or veterinary professionals in providing safe and effective care.

In developing the guidance document, Ecology must:

- consult with DOH and solicit input from specified organizations representing the state, medical community, environment, and other subject matter experts; and
- consider efforts in other jurisdictions to restrict the use of high GWP GHGs used for anesthetic purposes or otherwise, guidance documents or best practices prepared by certain national and international anesthesiology professionals, existing practices currently followed by facilities and practitioners, input related to professional liability and medical procedure risks associated with alternative anesthetic options, and additional financial considerations.

By January 1, 2028, facilities using anesthetic gases, and medical, dental, or veterinary practitioners using such gases, may only use anesthesia in a manner consistent with the guidance document. Ecology may not issue penalties under this requirement to a facility owner or operator of a practitioner for a failure to follow the guidance document. Nothing in the guidance document may be construed to require a facility or practitioner to provide medical care in a manner that, in the individual's judgment, increases medical procedure or professional liability risks.

Intent Language and Severability Clause. Legislative intent language and a severability clause are included.

**Appropriation:** None.

**Fiscal Note:** Available.

**Creates Committee/Commission/Task Force that includes Legislative members:** No.

**Effective Date:** Ninety days after adjournment of session in which bill is passed.

**Staff Summary of Public Testimony:** PRO: GHG policies have focused on the most common sources of emissions, but there is an increased awareness of other sources out there, more obscure GHGs. I have seen how health is connected to the well-being of our planet. We have reached a tipping point in healthcare impacts of climate change, including increased respiratory illness, infectious disease, wildfires, drought, and food shortages. The medical community wants to be part of the solution. Research from University of California, Davis shows that one-hour of desflurane use produces emissions equivalent to

driving 400 miles. The bill calls for a clear comprehensive study, guidance, reducing emissions, and tools to adopt sustainable practices, while retaining clinical judgment and patient preference. The bill strictly preserves clinical judgment of the physician and their discretion to provide safe and effective care. Nitrous oxide is the only remaining ozone-depleting substance we have not reduced in our international treaties or national laws. Hospitals pipe it through the walls to access it at a patient's bedside. We appreciate the study will give us good guidance on how to proceed. I am concerned that the healthcare sector is responsible for 8.5 percent of all U.S. emissions. My own practice is contributing to climate change and we should learn how to assist. We use these gases daily and most of them are vented into the outside air and wasted. We voluntarily track our emissions, saving our hospital money, and helping the planet.

OTHER: The bill requires a highly technical review of emissions sources done in consultation with the Department of Health and a number of experts. Ecology does not currently regulate this classification of gases and is requesting to push the dates back. Because nurse anesthetists provide anesthesia in the practice of nursing and not medicine, we have been in contact with the prime sponsor to ensure that nursing is involved in the group of stakeholders as we tackle this problem.

**Persons Testifying:** PRO: Senator Vandana Slatter, Prime Sponsor; Mark Vossler, Washington Physicians for Social Responsibility; Elizabeth Hansen, Washington Physicians for Social Responsibility; Amy Brackenbury, Washington State Society of Anesthesiologists; Washington State Medical Association; Annemarie Dooley; Ivy Lin; Kate White Tudor, Natural Resources Defense Council.

OTHER: Kelli Camp, Washington Association of Nurse Anesthesiology; Joel Creswell, Washington State Department of Ecology.

**Persons Signed In To Testify But Not Testifying:** No one.