



Nitrogen Dioxide

Frequently Asked Questions

What is Nitrogen Dioxide?

Nitrogen dioxide (NO₂) is one of a group of highly reactive gases known as oxides of nitrogen or nitrogen oxides (NO_x). Other nitrogen oxides include nitrous acid and nitric acid. Nitrogen dioxide is used as the indicator for the larger group of nitrogen oxides. These gases can irritate the respiratory system and contribute to the formation of acid rain and visibility-reducing haze.

How is nitrogen dioxide created?

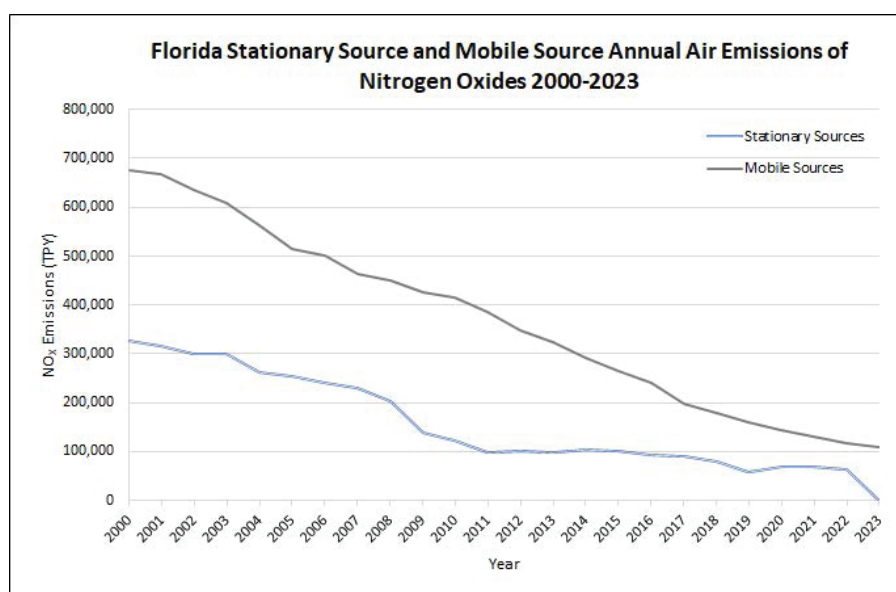
NO₂ is formed primarily from the burning of fuels or plant matter. High temperatures from combustion cause nitrogen and oxygen in the air to react and combine to form nitrogen dioxide.

How much nitrogen dioxide is in the air in Florida?

The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards for the highest daily one-hour average concentration and the annual average NO₂ concentrations. Ambient air monitors throughout the state gather real-time data each day. Florida continues to have concentrations well below both EPA's health-based standards. Information on NO₂ levels is available online at <https://FloridaDEP.gov/air/air-monitoring/content/floridas-air-quality>.

What are the sources of nitrogen dioxide?

As NO₂ is formed chiefly from the burning of fuels, the primary source is vehicle exhaust — cars, trucks, ships, trains, construction equipment, etc. Power plants, industrial facilities, and fires are also large sources of NO₂. For the last three decades, NO_x emissions from mobile and stationary sources have been declining, which is reflected in these observed statewide annual averages.



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