

Greenpeace USA and Sierra Club submit new research to the Department of Energy showing that the deadly extent of LNG terminal air pollution should bar new LNG export authorizations from approval

In January, the Biden-Harris administration and the Department of Energy (DOE) announced a pause on consideration of LNG export applications while the DOE [updates the economic and environmental studies](#) that are used to inform the public interest determination. Authorizations of these applications are a practical requirement for LNG terminals to operate,¹ and the DOE has universally approved them on the basis of [flawed reasoning](#). But the DOE now has the opportunity and imperative to pursue a new direction.

A new analysis, [“Permit to Kill”](#), from Sierra Club and Greenpeace USA shows that permitted emissions from operating and planned LNG terminals are associated with major public health costs. Among the key findings:

- Direct air pollution from currently operating LNG export terminals is estimated to cause 60 premature deaths and \$957 million in total health costs per year.²
- If all the planned terminals and expansion projects are built, these numbers would increase to 149 premature deaths and \$2.33 billion in health costs per year.
- By 2050, the same permitted air pollutants from currently operating LNG export terminals alone are slated to yield cumulative impacts of 2,020 premature deaths and \$28.7 billion in total health costs, with these figures rising to 4,470 and \$62.2 billion respectively in a scenario where all planned projects are built.
- There is a strong overlap between areas that are already environmentally overburdened and the counties and parishes slated to suffer the worst air pollution impacts. Moreover, at the national level, Black and Hispanic Americans would respectively experience air pollution from LNG terminals at 151–170% and 110–129% the rate of white Americans, if all projects slated for 2030 are built.³
- If the DOE ceases to approve new LNG export applications, it would save an estimated 707 to 1,110 lives and avoid \$9.88 to \$15.1 billion in health costs through 2050, by comparison to a scenario where all projects are built. A policy to phase out all LNG exports, consistent with limiting warming to 1.5°C, would save even more lives and health costs.
- This analysis does not consider the likely public health harms associated with air pollution from infrastructure upstream or downstream of LNG terminals, hazardous air pollutants such as benzene, the impacts from explosions or other emergencies, or the climate impacts of LNG’s life cycle emissions.

[This research](#) strengthens the body of evidence showing that LNG exports are not in the public interest and must be rejected. This is especially pertinent considering that the Biden-Harris Administration’s announcement on LNG highlighted the need to “guard against risks to the health of our communities, especially frontline communities in the United States who disproportionately shoulder the burden of pollution from new export facilities.”

The briefing additionally lays out specific steps the DOE should take to halt, and ultimately deny, the approval of new LNG projects, incorporate environmental justice practices, and develop more robust controls on the cumulative impacts of air pollution for the most overburdened communities.

On July 31, Sierra Club and Greenpeace USA submitted this briefing to the DOE in response to the DOE’s [Request for Information on its Environmental Justice Strategic Plan](#).

¹ LNG terminals can export to Free Trade Association (FTA) countries without export authorization by the DOE but export authorization to non-FTA countries is widely considered a practical requirement for LNG projects to reach operation due to global LNG market conditions. No long-term, large-scale LNG projects that are currently operating have reached operation without non-FTA export authorization.

² Estimates of premature deaths and total health costs presented here use the Environmental Protection Agency’s CO-Benefits Risk Assessment (COBRA) Health Impacts Screening and Mapping Tool “high estimate.” COBRA natively outputs high and low estimates that reflect uncertainty in the relationship between PM_{2.5} exposure and adult premature deaths based on the results of two different cohort studies. Both the high and low estimates are presented in the full *Permit to Kill* report.

³ The range of percentages reflects different values for ozone (lower number) and PM_{2.5} (higher number).