

Frequently Asked Questions on Cradle to Grave Report

1. Isn't this just another climate report? What makes it different?

Response: *Cradle to Grave* is the first comprehensive global overview of the health harms of fossil fuels across their entire lifecycle — from extraction to transport, combustion, and waste. It also traces impacts across the human lifespan — from fetal development to old age — showing how no stage of life is untouched.

What sets it apart is its scope: it documents health harms, as well as the societal costs of the fossil fuel economy— displacement, inequality, and the corruption of democratic processes- which have tangible health impacts. The report adopts the WHO's definition of health—as a state of complete physical, mental, and social well-being, not merely the absence of disease—and thus enables us to see fossil fuel impacts not just in terms of illness and mortality, but also in how they erode dignity, livelihoods, and community resilience.

It further exposes how fossil fuel infrastructure itself magnifies risks during climate disasters. As we mark the 20th anniversary of Hurricane Katrina, we cannot forget the Murphy Oil spill in St. Bernard Parish, where toxic contamination from flooded tanks compounded the disaster and continues to affect nearby residents today.

2. How robust is the evidence? Aren't many of these health impacts still understudied?

Response: This report is grounded in over 600 scientific citations, case studies from across the world, and firsthand accounts from affected communities and health professionals. It brings together peer-reviewed science with lived experience, showing that fossil fuel harms are not abstract—they are illnesses, deaths, and lost futures. This evidence base reveals health impacts from extraction to waste, across the entire human life course.

While some harms are understudied (especially cumulative harms, harms from newer types of fossil fuel techniques and technology, and harms during certain stages of human development), there is significant evidence, and the existing evidence is strong and consistent: links between benzene and leukemia, PM2.5 and heart disease, coal and mercury poisoning. Where gaps remain, given the breadth and depth of the harms revealed by the existing evidence, we would do well to heed the precautionary principle.



3. Can you explain your methodology?

The report is based on a review of existing peer-reviewed research, complemented by grey literature, legal documents, and reports from credible organizations. Over 600 sources were reviewed, covering epidemiological studies, toxicological evidence, and population-level health data.

To ensure global representation, we included documented case studies from every region of the world — from oil spills in Nigeria to coal pollution in India and gas extraction in the United States. These cases were chosen to highlight lived experience and help bring to life and put into human terms what the evidence shows, as well as some of the impacts that warrant further research.

We used the World Health Organization's definition of health — complete physical, mental, and social well-being — as our guiding framework, which led us to look at not only the impacts of fossil fuels on rates of disease and death, but also how they undermine dignity, livelihoods, and resilience.

Where gaps exist in research, the precautionary principle should be applied: in the face of credible evidence of harm, lack of absolute certainty should not delay action. This principle is especially vital when communities' health and lives are at stake.

4. Do you have country specific data?

We don't present country-by-country datasets in this report. Instead, we draw on a wide body of peer-reviewed studies and documented case examples from many regions—from Norway to Egypt, from Nigeria to India, from the United States to Chile. For every health harm we describe—whether it's cancers, respiratory illness, cardiovascular disease, or reproductive impacts—there is robust evidence linking exposure to pollutants from the fossil fuel industry. Together, these studies present a global picture of how fossil fuels harm health across their entire lifecycle.

5. What is the new data in this, in addition to the original?

Response: The *Cradle to Grave* report does not generate new primary data—it draws on secondary sources. But what makes it unique is that, for the first time, we have brought together the full spectrum of fossil fuel harms in one place. This includes health impacts across the industrial lifecycle of fossil fuels, from extraction to waste; across the human lifecycle, from fetal development to old age; as well as the disproportionate burdens on marginalized communities and workers, the social harms such as displacement and rights violations, and even the climate-related risks to fossil fuel infrastructure itself.

Much of this evidence has existed in pockets—scattered across disciplines and geographies. This compendium provides the scale and scope of harm in one comprehensive overview. Our aim is to equip the medical and public health community, policymakers, and others with a clear, evidence-based understanding of these pathways of harm, so they can make informed decisions as we move forward.



6. Why does this report focus on health rather than just climate impacts?

Response: Climate change is often framed in terms of emissions and temperature, but the human toll is immediate and ongoing. Fossil fuels affect health from before birth to old age — causing low birth weight, asthma, cancer, cardiovascular disease, and premature deaths. The Lancet Countdown has been one of the most robust sources documenting the health impacts of climate change, and *Cradle to Grave* builds on this foundation by exposing the direct and indirect harms of fossil fuels across their entire lifecycle, including, especially, beyond the effects on health of fossil fuel-driven climate change. The evidence makes clear that the reliance on fossil fuels is not an abstract environmental issue but a public health emergency.

7. Fossil fuels have lifted millions out of poverty. Isn't the health cost just the price of development?

Response: Communities in "sacrifice zones" rarely reap the benefits but bear the greatest harms: toxic air, poisoned water, cancers, asthma, and lost livelihoods. Health systems shoulder billions in hidden costs, while the direct and indirect subsidies to fossil fuels reached \$7 trillion in 2022. A just transition can provide cleaner energy, healthier jobs, and prevent millions of premature deaths. In an era in which costs are dropping for clean, renewable energy such as wind and solar, and the technologies to provide them are improving by leaps and bounds, there is no reason any country's or community's development should depend on outdated, dirty, toxic fossil fuels.

8. What about "clean fossil fuels" like gas or technological interventions like carbon capture?

Response: The concept of "clean" fossil fuels is a fossil fuel company marketing strategy, without a basis in reality. Gas still emits methane, a potent greenhouse gas, alongside NO₂ and VOCs harmful to lungs and hearts. Carbon capture doesn't prevent health damage from extraction, spills, or pollution. These are dangerous distractions that prolong harm instead of protecting people.

9. Isn't renewable energy also harmful? Mining critical minerals also has health impacts.

Response: Extracting critical minerals does carry risks. That's why the report urges learning from fossil fuel mistakes: prioritize transparency, human rights, and environmental safeguards as we undertake these new and needed extraction and production processes. The difference is that renewables don't emit ongoing toxic pollution at every stage of their lifecycle, and nor do they drive climate change, and the very real risk of catastrophic warming. With appropriate safeguards, critical minerals that are currently essential to clean renewable energy could be produced in ways that protect worker and community health, safety, and well-being.



10. Isn't focusing on health too narrow compared to climate economics or security?

Response: Health is the most tangible and relatable measure of the fossil fuel crisis. Nothing is more fundamental than the right to breathe clean air, drink safe water, and live free from preventable disease, and our economies cannot thrive, nor can our security be protected, when workers, our families, and our communities are getting sick and dying. Health links the science, economics, and justice arguments together.

11. How does this report address energy poverty?

Response: Energy poverty is real — billions still lack access to reliable, safe, and affordable energy. What this report makes clear is that fossil fuels are not the solution. Communities living near coal plants, oil refineries, or gas fields often face both energy poverty and health crises: toxic air, unsafe water, and unaffordable fuel. The report calls for vastly expanding access to renewable energy that delivers clean power without poisoning communities. In fact, some forms of renewable energy, such as solar, can be produced at the neighborhood, facility, or even household level, freeing households from dependence on major power grids. Investing in clean, renewable energy gives communities a development pathway that doesn't require them to pay with their health and their lives for access to energy.

12. Isn't gas the answer to clean cooking for poor households?

Response: Gas is often promoted as a "clean" alternative to biomass or coal, but the science shows otherwise. Cooking with LPG or other fossil gases still releases nitrogen dioxide and particulate matter, harming lungs, increasing asthma risk, and raising the chance of cardiovascular disease. It is not a health-based solution — instead, electric induction cooking and decentralized renewables offer cleaner, safer, and more sustainable alternatives. Paired with investment in health systems, subsidies redirected from fossil fuels, and community-led solutions, these approaches can reduce household air pollution — one of the world's biggest killers — without locking families into new fossil fuel dependence

13. What's the core message you want the public to take away?

Response: Fossil fuels are not just driving climate change—they are undermining human health and social wellbeing from cradle to grave. Every stage of their lifecycle inflicts harm, often irreversible. A rapid, just, and health-centered transition is the only way to protect people, communities, and future generations.

14. Fossil fuel is still attractive - wars are being fought, defence budgets are being increased; and on the other hand, fossil fuel cars are still considered sexy. In this kind of landscape what is the realistic outcome you want C2G to achieve?

Response: That question goes right to the heart of why we produced *Cradle to Grave*. Fossil fuels are still portrayed as indispensable, even glamorous, but this comes at the cost of ignoring the full scale of harm



they cause. For the first time, *Cradle to Grave* brings together the evidence of health impacts across the industrial lifecycle, across the human life course, and across society, exposing not just emissions, but the breadth and impact of toxic exposures, the displacement and human rights abuses, and even the risks to fossil fuel infrastructure itself.

By making visible the breadth and depth of health harms, we make clear that fossil fuels are not sexy-cancer is not sexy, asthma and strokes are not sexy, developmental issues in children are not sexy. The tobacco industry also glamorized its product, but the realities of lung cancer and cancers of the throat and mouth are not nearly as glamorous. This report equips health professionals, advocates, and policymakers with the evidence they need to press for policies that truly protect people's health—policies that uphold the right to health, a safe environment.

15. How should political leaders respond to this report?

Response: Political leaders must treat this report as a public health mandate, not just an environmental warning. The evidence shows fossil fuels cause harm from pregnancy through old age, driving asthma, cancers, heart disease, and premature deaths. Leaders should respond by:

- Acknowledging the health crisis: Recognize fossil fuel dependence as a systemic driver of disease and inequity, not just a source of climate emissions.
- Committing to a rapid, just transition: Halt new fossil fuel expansion and exploration, set binding timelines for phase-out, and align policies with the health imperative of keeping warming below 1.5°C, while providing holistic transition support to affected communities.
- **Ending subsidies and redirecting funds:** Shift the trillions currently propping up fossil fuels into public health systems, clean energy, and community resilience.
- **Protecting frontline communities:** Ensure remediation, healthcare access, and justice for communities bearing the heaviest burdens.
- **Curbing industry influence:** Regulate and restrict fossil fuel lobbying, advertising, and disinformation, just as has been done with tobacco.