

Introduction To Section One (Pre-publication Overview)

The Existential Apparatus of the Fossil Fuel Industry has been Building on a Planetary Scale

The Carbon Clock is Ticking provides a dynamic reality check on the existential apparatus the fossil fuel industry has been building on a planetary scale since the 1980s. ExxonMobil, Chevron, BP, Shell, and API have known the consequences of burning fossil fuels for more than forty years, but these Big Oil companies continue to burn the future that children and young people will be forced to live.

There is extensive documentation that ExxonMobil, Chevron, BP, Shell, with the American Petroleum Institute and the fossil fuel industry, have worked for decades to distort the truth, promulgate lies, embed false narratives and persuasive arguments that deceive policy makers and the public into thinking we can keep using fossil fuels and still fix the climate crisis. Once again, we cannot.

Section One of *The Carbon Clock is Ticking*, which will be available as an Interim Report in digital and paper forms, tells the truth about Big Oil's dark spheres of power, uncovers the lies, exposes the false narratives, and shreds the arguments used to gaslight us.

More formally, Section One presents to the public the scientific evidence from multiple fields and disciplines that confirms unequivocally that we cannot continue to burn fossil fuels without jeopardizing young people's future right to exist.

At a time when Big Oil is ramping up production, data is presented and arguments are made that challenge ExxonMobil, Chevron, BP, Shell, and API's insistence that we can continue burning fossil fuels without harming the future of children and young people. By 2040 and 2050 entire regions of the world and potentially entire U.S. States will be devastated by the climate crisis and global warming, causing great harm and even the death of people who are children now.

Big Oil's awareness of the destructive force of CO2 emissions and the fossil fuel industry's failure to act is a crime against humanity. ExxonMobil, Chevron, BP,

Shell, and API know that the CO₂ from burning oil and gas and chemical production impacts the biosphere and the complex relationships between social-ecological systems, triggering threshold effects and large-scale bio-physical changes that are uncondusive to human life on the planet.

The lives of children and youth born this century are especially vulnerable to the profit-before-people actions taken by ExxonMobil, Chevron, BP, Shell, and API today. Not only will they have to endure the devastating impact that continued burning of fossils fuels will have on their future lives, but they will also have to cope with the government's willingness to hand over to Big Oil trillions of dollars in tax breaks and subsidies.

The cost of Big Oil's massive Q45 tax credit subsidies demanded for CO₂ removal will be bequeathed in years to come to the young people of today who are already being crushed by student debt. Children and young people will be burdened by trillions of dollars of Q45 payouts that Big Oil is hanging around their necks. The weight of education loans and massive Big Oil debt will negatively impact any actions they want to take in response to the extreme impact of climate crisis they will experience in the 2040s and 2050s.

Thus, *The Carbon Clock is Ticking* presents the evidence that Chevron, BP, Shell, ExxonMobil, and API are a clear and present danger to the future of children and young people worldwide. The documentation and analysis presented underscores that these Big Oil fossil fuel companies are actively engaged in pressuring the Biden Administration and the U.S. Congress to support Carbon Capture Utilization and Storage (CCUS/CCS), and to provide trillions of dollars in financial incentives to the fossil fuel industry to both build and operate the plants and infrastructure needed for the large-scale deployment of carbon capture.

Knowing the deadly consequences to young people of the fossil fuel industry's moral bankruptcy, the public must have an opportunity to inform the decision-making process of the U.S. President and Congress to make it mandatory that all subsidies are removed from Big Oil. For the children and youth of today to live well in the 2040s, 2050s, and beyond, the U.S. Congress must support wind, solar and hydro electrification projects with the trillions of dollars in subsidies they are planning to allocate to failing Big Oil. We must alter course and we must do it quickly.

In a last-ditch attempt to retain their power, privilege and industry, Chevron, BP, Shell, ExxonMobil, and API are willing to risk the planet to keep making money and hold on to power. But we can use science to call out their lies and show how they are defying the data and transgressing the indisputable findings of

science. Chevron, BP, Shell, ExxonMobil, and API are lying about the fossil fuel industry being able to capture CO₂ emissions in time to save the future for young people. *The Carbon Clock is Ticking* provides the evidence and actionable strategies to stop Big Oil stealing children's and young people's right to exist in the future.

Section One (published on-line as "The Interim Report") provides readers with a broad overview of the realities of the existential threats caused by ExxonMobil, Chevron, BP, Shell, and API that children and young people will have to overcome in their lifetime. In subsequent sections the wide-angle lens of the first section is replaced by a more high-powered zoom lens that brings questionable aspects of the fossil fuel industry and technology into sharp focus.

In Section Two an analysis of COP26 and the U.S. Congressional Hearings on Big Oil's Disinformation Campaign to Prevent Climate Action is presented, followed by an in-depth research-based account of the ecological vandalism caused by the fossil fuel industry in the Gulf of Mexico, Louisiana, Alberta, Canada, the Amazon Basin, Ecuador, and the Niger Delta, Nigeria. The focus then shifts to the medical evidence amassed globally of human illness and mortality caused by the oil production of ExxonMobil, Chevron, BP, Shell, API, and other Big Oil companies.

In a subsequent section a thermodynamic assessment and risk analysis of a high-pressure supercritical CO₂ pipeline rupture is presented that was conducted for *The Carbon Clock is Ticking*. The explosive pipeline discharge had life-threatening consequences for families and children living as far as one mile away from the high pressure super critical CO₂ pipe-rupture, and calls into question the public safety risks posed by the 5,150 miles of pipeline currently in operation.

The CO₂ pipe rupture also raises serious concerns about the public health and economic consequences of the planned nationwide high pressure CO₂ pipeline infrastructure proposed for the carbon capture initiatives scientists have shown are deeply flawed and will exacerbate the climate crisis and global warming.

The Carbon Clock is Ticking presents the scientific evidence that the nationwide deployment of CCUS/CCS raises concerns about Big Oil pressuring Congress for tax subsidies. Meanwhile, even though there is a climate emergency, ExxonMobil, Chevron, BP, Shell are aggressively ramping-up fossil fuel production and use. The transgression of planetary boundaries for human life on the planet makes it too late for Big Oil's CCUS/CCS initiatives that Chevron, BP, Shell, ExxonMobil, and API estimate will be implemented by 2050. By then Big Oil will have destroyed all human societies as we know them, so the heat is on

for ExxonMobil, Chevron, BP, Shell, and API to alter course and instead of destructively ramping up production, use their immense power and vast resources to support net zero clean energy alternatives to oil and gas.

Research from the social, medical, and physical sciences girds the text, including peer reviewed studies in the fields of biophysical-economics, engineering, environmental science, geology, thermodynamics, physics, and sustainability, as well as research from the oil and gas sectors. Also included are documents and videos produced by the U.N., policymakers in governments, and environmental organizations, and by scientists and engineers in oil and gas sectors. The data is rounded out by ethnographic accounts of conversations with many prominent officials, including leaders from government, diplomacy, and academia.

The U.S. Government has no science based actionable plan to respond to the climate crisis. This failure of governance has already caused social unrest and economic uncertainty in the short term and will cost many lives in the decades to come. *The Carbon Clock is Ticking* is a response to this uncertainty and is intended to encourage the public to become knowledgeable communicators of the climate crisis and the impact of global warming on people and the planet. It is also intended to raise public awareness of how the propaganda and lies of Big Oil are not only damaging lives now but also jeopardizing the future of children and young people.

In keeping with the United Nations Guiding Principles *Towards Cost-Effective and Equitable Deep Decarbonization to Limit Temperature Increases to 1.5 ° C*, the U.S. has the capacity to phase-out fossil fuel use, reject the trillions of dollars in subsidies demanded by Big Oil for CCUS/CCS and blue hydrogen, and rapidly advance electrification of the energy supply. We need to move away from all fossil fuels as quickly as possible, and truly green hydrogen produced by electrolysis driven by renewable electricity can play a major role. Blue hydrogen, though, provides no benefit. Similarly, we can reduce the CO₂ and methane discharged into the atmosphere in the production and use of natural gas, and undertake the great transformations that the scientific data makes clear we must make. The challenge is to achieve these transformations within the next seven years. It can be done.

In the final section of *The Carbon Clock is Ticking* a Net Zero Plan is presented to mobilize for action to protect the future of children and young people and their right to exist in the future. The Net Zero plan is grounded in the research findings of the world's most renowned scientists who are focused on pushing down the risks of global warming and the climate crisis. The plan also includes the public. Young people and their families, professionals in the caring

professions, civil society groups, environmental organization, can all have a positive impact on the world. We can form partnerships and unite to encourage the U.S. President, Administration and Congress to reject the fossil fuel industry's misleading claims that we can burn fossil fuels and decarbonize. We must insist that Big Oil companies, including Chevron, BP, Shell, ExxonMobil, together with API fulfill their ethical obligation to meet the climate challenge and end the use of fossil fuels.

It is time these planet polluters acknowledged that science has won and commit to achieving Net Zero within the next seven years. The Carbon Clock *is* ticking, and children will live the future that burning fossil fuels is setting on fire. Big Oil must change course and have a positive impact on the lives of today's children and young people not only in the 2040s and 2050s, but in the centuries to come. If Chevron, BP, Shell, ExxonMobil, renege on their responsibility to rapidly phase out fossil fuels it would be a crime against the future of humanity. Children and young people want to live.