

The State of Our Planet 2023

by Speak Out Now (December 2023)

The health of the Earth's environment shapes the possibilities for our lives. The functioning of the world capitalist system has resulted in an extreme climate crisis, degradation of our planet's ecosystems, the impact of toxic pollution on workers and communities, and countless more compounding and interconnected environmental catastrophes. This paper will not be able to explore all the impacts and all the complexities of climate disruption, nor all the other destructive impacts of this system on the environment. It does provide analysis of what is often going on in the background, except when we are confronted by major weather events, which include the massive wildfires that have ravaged large parts of the Earth, or chemical spills that poison rivers and downstream communities. Nearly every year is a record-breaking year for the various indicators of a planet in deep distress.

Global Warming or Heating

Greenhouse gasses - particularly carbon dioxide (CO₂), but also including methane (CH₄) and nitrous oxide (N₂O) - trap the sun's energy in the Earth's atmosphere, energy that would otherwise be largely reflected back into space. This "greenhouse effect" is the cause of global warming. Since the beginning of human civilization, our atmosphere contained about 275 parts per million (ppm) of carbon dioxide (CO₂). Climatologist Dr. James Hansen wrote that these are the conditions "on which civilization developed and to which life on earth is adapted." To exceed this level of CO₂ concentration is disrupting our global climate system's 1,000,000+ years of relative stability. This disruption has been caused by the industrial revolution. The carbon in the atmosphere began to rise as humans began to burn coal, gas, and oil, at first slowly and now more quickly. Carbon dioxide levels are now 50% higher than the pre-industrial era, trapping heat in the atmosphere. The long lifetime of CO₂ means that temperatures will continue to rise for many years to come.

More than a decade ago, scientific assessments arrived at two key numbers, beyond which significant damage to the Earth's ecosystem would take place. One was the average temperature of the Earth: if this temperature were to exceed 1.5°C above the pre-industrial baseline of 13.5°C, or 56.3°F, the effects of climate change would worsen dramatically, and perhaps irreversibly. This past year, a number of parts of the world recorded yearly temperature increases of 1.5°C. According to the World Meteorological Organization, the global mean near-surface temperature increase in 2023 (to October) was around 1.4°C. As the 1.5°C baseline was close to becoming a reality, there was an agreement among some in the scientific community to shift the

target to 2°C. Regardless of the target established, each fraction of a degree increase that we are experiencing will result in an even larger portion of life on the planet being threatened with extinction.

The other measure is of the amount of carbon dioxide in the atmosphere. Scientists estimated that the highest amount that the environment could handle without severe damage, was 350 ppm (hence the name of the environmental organization 350.org). On Dec 7, 2023 the measurement at the Mauna Loa atmospheric research facility in Hawaii was 420.74 ppm.

There is no scientific doubt about the role of greenhouse gasses, including CO₂ and methane, in disrupting the climate of the Earth. Yet despite all the scientific research and evidence and international climate conferences, it is clear that the world's powers are not going to stop dumping greenhouse gases into the atmosphere.

Heat Waves

The ten hottest years in recorded history have all occurred in the last decade. 2023 was the hottest year on record, and an estimated 500,000 people died due to extreme heat waves around the world. Scientists are in agreement that these extreme temperatures wouldn't be happening now without human-caused climate change. Parts of Brazil, Paraguay, Bolivia and Argentina had an unusually hot winter and early spring, with temperatures in August and September soaring above 104°F (40°C). Phoenix, Arizona recorded 31 consecutive 110-degree days from June 30 to July 30. The previous mark was 18 days in 1974. Temperatures in Death Valley reached 128°F (53.3°C), and China posted an all-time national high temperature at 126°F (52.2°C). In Europe, local records were broken in Spain and Italy. Currently, around 30% of the world's population is exposed to deadly heat conditions for at least 20 days per year.

Water: Oceans, Rivers, and Rain

Water is essential to life. The warming of the planet means that water stored as ice for tens of thousands or hundreds of thousands of years is being released in larger quantities. We are seeing this with the accelerated melting and disappearance of glaciers, which are year-round mountain ice fields and the sources of water for many streams, rivers and lakes. Nearly two billion people rely directly on water trapped in mountain glaciers. Sea ice in both the Arctic and Antarctic is also melting. Icebergs the size of large cities are breaking off the Antarctic ice sheet and drifting away, often dragging along the ocean floor, disrupting the undersea environment as they slowly melt. In 2023, the extent of sea ice around the South Pole reached unprecedented lows in both the summer minimum and winter maximum periods, breaking the

already strikingly low records set just one year prior. The melting of Greenland's ice is also occurring faster than earlier predictions indicated. This means that salt water now has a large influx of fresh water and this impacts the salinity, acidity, and density of water and ocean currents, adversely affecting the ocean's biosphere.

This is disruptive to the climate. Bright white ice and snow reflect the rays of the sun back into the atmosphere - the Albedo Effect. Melted ice leaves dark water and land exposed, which instead absorbs the sun's energy, creating a feedback loop that only adds to the increase in the Earth's temperature.

The release of water which was stored as ice, along with thermal expansion (the expansion of water as it warms) are the main contributors to sea level rise. That means coastal areas are more susceptible to flooding, and salt water mingles with fresh ground water in low lying areas, which means less drinking water and less water to irrigate crops and death to many plants. Heavy rainfall or rapid snowmelt, both likely effects of the warming climate, can cause rivers to overflow and leave devastation in their wake.

Ocean temperatures are reaching new highs. From late March through October, the world's average sea surface temperature consistently broke daily records. By July, these temperatures were nearly 1.8°F (about 1°C) above average, as marine heat waves spread across nearly half of the global oceans, compared to about 10% in previous years. The heat energy stored in warming oceans fuels more powerful hurricanes, cyclones, and other coastal storms, which devastate coastal areas and penetrate further inland.

Some ocean currents appear to be slowing and some currents could face collapse. A study published this year in the journal *Nature* found that the Atlantic Meridional Overturning Current (AMOC) could slow and collapse around the middle of the century. Ocean currents play a major role in climate systems, regulating global weather patterns. In the Atlantic Ocean, as warm water is carried north, it cools and sinks into the ocean depths and is carried south. This complex system of ocean currents plays an important role in regulating the temperatures of much of Europe, the eastern U.S., and South America. They also have an important impact on the ocean's ecosystems. The collapse of the AMOC would bring much more severe winters in the north and monsoons and other storms in the south. This is one of many climate change scenarios that could become a reality in the near future.

Drought and Desertification

The Earth's climate is extraordinarily complex. While warming temperatures may cause more rainstorms and flooding in some locations, other massive areas of land are seeing increasing droughts and extreme drying or desertification. Currently, about 500 million people live within areas that have experienced desertification since the 1980s.

The loss of normal flows of fresh water, the lack of seasonal rains, and the evaporation of standing bodies of inland water are leading to the drying of rivers and lakes. The Negro River, which flows into the Amazon, was so shallow that normal shipping traffic has ceased because of months of intense drought. Similar problems exist across the planet. China's desert land has rapidly increased since the 1980s and now stands at 30% of its total area.

Alongside the serious effects on ecosystems, this increase in droughts and desertification will continue to wreak havoc on agriculture across the world. The number of people experiencing water scarcity, currently at half the world's population, is also expected to increase dramatically.

Wildfires

As the Earth dries and heats, wildfires become more frequent and larger - burning tens of millions of trees, adding tons of pollutants into the air, and increasingly threatening areas with significant human populations. The extent, persistence, and intensity of wildfires in 2023 resulted in a total estimated carbon emissions of almost 410 megatons.

In 2023:

- In Chile, fires burned more than 1,719 square miles and more than 18,750 square miles were burned in Brazil's Amazon Basin.
- The Arctic experienced record heat and fires with an estimated 27,000 wildfires engulfing Siberia, threatening cities and towns, and creating air pollution that was 15 to 20 times worse than the pollution of Delhi, one of the most polluted cities in the world. More than 7,335 square miles were burned in 2021, and more than 5000 square miles this year.
- And in Canada, forests covering 69,000 square miles – an area larger than the size of Washington state – burned in a record breaking year. Greenhouse gas emissions from the fires nearly doubled or tripled Canada's usual industrial emissions. Air pollution from the fires spread throughout the eastern U.S., parts of Europe, and China.

The Disruption of Ecosystems

The impacts of these dramatic climatic effects are transforming the world's ecosystems. For instance, a sustained and significant decrease or increase of rainfall in a certain region will have a dramatic impact on all the lifeforms in that area. It isn't just animals such as insects, birds, reptiles, amphibians, mammals, wild plants, and other organisms that will adapt or die. Cultivation of rice, manioc, maize, wheat or other plants basic to human diets may no longer be possible when the climate in which they thrive changes. Massive numbers of people will be forced to move. Though there also may be a possibility of the cultivation of new crops in those regions, along with the spread of invasive plants. Rising temperatures will also result in the spread of infectious diseases to new regions.

The climate crisis' effects along with other human-caused impacts on the environment, particularly habitat destruction, have led to a degradation of our planet's ecosystems to the point where we may be in the midst of a sixth mass extinction. The last mass extinction, the Cretaceous extinction, occurred approximately 66 million years when a massive asteroid hit the earth, casting a cloud of debris into the atmosphere that blocked most of the rays of the sun, creating a year round "global winter" that killed most of the plant life and animals, including the dinosaurs, that were part of these ecosystems.

What we are seeing now isn't as dramatic as the last mass extinction. This one is due to human activity, or more accurately the activity of humans locked into the capitalist mode of production in its modern form - imperialism.

For most of us, the process of species extinction is not noticeable. But the rapid loss of species today is estimated to be between 1,000 and 10,000 times higher than the normal extinction rate. These are guesses, as we can only estimate the number of living species on the planet. But based on ecosystem destruction, scientists are alarmed.

Deforestation

In this system of capitalism, the value of every tree on the planet is measured by its value on the market. As a consequence, we have seen a massive deforestation across the Earth of tropical, semi-tropical, temperate and boreal forests, as these rich, complex ecosystems are clearcut and the trees sold as lumber. Those trees viewed as being "worthless" are cleared for more "worthwhile" (profitable) enterprises. In the Amazonian Basin, vast tropical forests have been cleared to create grasslands to raise millions of cattle. In southeast Asia, Africa, and South America vast tropical forests are

cleared and replaced with palm oil trees. That palm oil is used as biofuel, as well as to make your soap foam, fix the color in your lipstick, crisp up your donut, soften your bread, and make your chocolate smooth and shiny. Oil palm plantations currently cover more than 27 million hectares of the Earth's surface, an area the size of New Zealand.

The consequence is a drastic destruction of regional environments and habitat destruction, leading to species extinction or the threat of extinction of many plants and animals. This tearing up of vast areas of forests breaks down the barriers between wilderness areas and regions with dense human occupation. This increases the possibility of the spread of zoonotic organisms, like the corona virus, ebola, or other highly infectious diseases that can spread from other animals to humans.

Once a forest is razed, the cooling effect of vegetation cover no longer exists, and the warming of the impacted areas allows for the spread of organisms that kill remaining trees and vegetation because they are defenseless in the face of these invasive species. This leaves vast areas susceptible to wildfires of the sort that we have witnessed recently in many parts of the world. Additionally, the ongoing destruction of huge areas of coastal mangrove forests in Asia is leaving population centers exposed directly to the open ocean and much more vulnerable to flooding from storms and sea level rise.

Industrialized Farming

The intensive, profit-driven production of plants and animals as food, controlled by huge corporations is a major contributor to both climate change and the destruction of ecosystems. The clearing of trees and other vegetation to make room for vast tracts of land for mechanized farming, and the use of chemical fertilizers, pesticides, and herbicides kill the living organisms that make up the fertile soil. Many specialized hybridized plants have been developed for maximum production, under specific conditions (e.g., application of fertilizers, pesticides, and herbicides). It is questionable how they will survive under the pressures of climate change, and whether other varieties can be developed to replace them.

Without ground cover and with the plowing and compaction of the soil with massive mechanized equipment, industrially-farmed lands are subject to soil erosion through wind storms and flooding. The dust from eroded soil contributes to air pollution. And the runoff from industrially-farmed land carries those chemicals into underground aquifers and ponds, rivers and streams. These vast areas of open and compacted land no longer serve as carbon sinks, which trapped atmospheric carbon when in

their former, wildland state. Natural habitats for many animals are destroyed when land is cleared for industrial, mechanized farming.

Raising poultry, cattle, pigs and sheep in factory farms creates horrific lives for the animals. In addition, it is a disaster for the environment. North Carolina's pig factory farms alone produce nearly ten billion gallons of feces and urine. That's enough to fill 15,000 Olympic-size swimming pools. Cattle produce about 5% of greenhouse gas emissions as part of their digestive process in the form of methane in their burps, farts, and manure. Methane traps about 30 times more heat than carbon dioxide.

Through both generational knowledge of traditional farming practices and modern-day research in agroecology, many farmers and scientists have knowledge of how we could produce enough food without this environmental destruction. These practices aren't implemented because the goal of agriculture corporations is not food production, but the production of profits, and these techniques don't produce the profit that is required.

Petrochemicals and toxic pollution

The demand for petrochemicals for the production of plastics is so great that a 2018 report by the International Energy Agency found that petrochemicals were becoming the leading driver of global oil demand, ahead of transportation. It predicted that petrochemicals would account for more than a third of the growth in oil demand by 2030. The world is increasingly aware of the impact of plastics on our world, but as with the pouring of carbon into atmosphere, the world's powers refuse to place meaningful limits on its production and disposal. About 400 million tons of plastic waste is generated each year, about 42 million tons from the U.S. alone. In 2016, the average American disposed of 286 pounds of plastic waste, the highest rate per capita of any country on Earth.

Plastics are used in a huge proportion of the things we use every day, including clothes, materials, cars, electronics, appliances, packaging, and building materials. More than eight million tons of plastic enter the ocean every year. Many of us have seen photos of sea animals tangled in or being strangled by plastics; or dead sea birds with their stomachs filled with bits of plastic; or giant landfills with children scrambling on them to get bits of plastic that can be recycled. Plastic is just about everywhere, including the Great Pacific Gyre or Garbage Patch, which is made up of plastic and floating trash, covering an area of approximately 620,000 square miles. We are now aware of the micro-plastics that pervade virtually every part of the Earth, including our bodies. Exposure to toxins in plastics increases long-term health risks,

including cancer and respiratory problems. Plastic can take centuries to break down, so plastic produced today threatens the health of many future generations.

In the United States, plastic production is currently responsible for 232 million metric tons of greenhouse gas emissions every year, and is on track to exceed the emissions from coal-fired power plants in the US within the next few years. In addition, in the U.S., the production of plastics is increasingly dependent on fracked gasses. These processes, including transporting the gasses, inundate many small towns in the South and Midwest with toxic pollution and contribute millions of tons of greenhouse gas emissions, particularly methane.

Manufactured Chemicals

Of the 350,000 chemicals in use, only a small number have been fully assessed for safety. The scale of chemical release is estimated to be as high as 220 billion tons per year – of which greenhouse emissions constitute only 20% the total. Pollution-related deaths are now around nine to ten million a year. Compare this to the two million deaths from COVID-19 in the first year of the pandemic (WHO 2021).

The impact of these chemicals has barely been studied. And when scientists do prove harmful or even lethal impact, their work is legally challenged by massive corporations. Monsanto's "weed killer," Roundup, has been shown to cause cancer but it is still on the shelves in stores.

Trillions of tons of chemically active materials are discharged into the environment by mining, mineral processing, farming, construction, and energy production. There are more than 700 known "dead zones" in oceans and lakes, and pollution by fertilizers, agrochemicals, and sediments are the factors most strongly associated with these habitat collapses. Industrial chemicals, including known carcinogens and their residues, have been detected in the blood and tissues of all populations, including fetuses and infants, and in breast milk. They are found in plants and wild animals, as well as foodstuffs.

As mentioned earlier, intensive production of crops and livestock on industrialized farms now relies on the annual application of some five million tons of pesticides, and 200 million tons of concentrated nitrogen, phosphorus, and potassium (NPK) fertilizers.

We Are All Impacted

The climate crisis and global pollution is impacting some more than others. And it isn't just geographical. It is also political, based on who has the resources to moderate impact. Many parts of the world have been and remain sites of major extractive processes, while others have been the centers of processing, consumption, and capital accumulation. The wealthy countries have more mechanisms to deal with the impacts of climate disruptions, at least for the short term.

The continent of Africa - especially sub-Saharan Africa - has been one of the most exploited sites on the planet. A significant fraction of the African population was severely impacted by enslavement. For centuries, the resources of the continent, both mineral and agricultural have been extracted through the exploitation of the labor of African peoples.

Ethiopia, which was never colonized but is dominated like the rest of the world by imperialist relations, faces the same problems as countries whose development was held back by colonialism and imperialism. Agriculture comprises almost 40% of its total GDP. More than 80% of its population is employed in agricultural production. Like other countries that experience climate extremes - droughts, floods, increased temperatures, and other impacts - its economy is deeply affected by climate change.

As a consequence, many parts of sub-Saharan Africa are facing deep food insecurity. In Uganda alone, there are close to one million people who are facing serious food insecurity because of drought and crop failures.

Consequences like these lead to forced human migration of people who can no longer sustain themselves in the places they call "home." People are forced from their homes by wars and by economic crises that are often linked to climate disruption. Farmers are no longer able to raise enough crops for their consumption and to take to market to sell. Farm workers no longer have enough work because the large farms are no longer producing enough. People who fish can no longer subsist on their catches from the seas or lakes, while the local animals and plants are no longer plentiful enough to provide for them or supplement their diets. According to the UN refugee agency, climate-related disasters were responsible for more than half the human displacements in 2022 (more than 100 million people - one in every 78 people). And nearly 60% of refugees and internally displaced people now live in countries that are among the most vulnerable to climate change.

We Cannot Leave the Fate of our Earth and Lives in the Hands of Those Who Are in Power

The capitalist class is unable to respond to the crisis their system has created. Instead, they continue with their climate discussions and false promises. The United Nations COP28 conference in Dubai in 2023 pulled the curtain open on this sham. It was held in a region dependent on oil and gas production - in the United Arab Emirates, a "petrostate" and close ally of the U.S. The president of the conference was the chair of Abu Dhabi National Oil Company (Adnoc), which has announced its plans to expand production capacity by more than 10% to five million barrels a day by 2027. As hopeful environmentalists, along with some of the delegates and politicians, put forward their versions of what should happen, oil executives, along with politicians, were negotiating their plans for the expansion of the exploitation of oil and gas in different parts of the world.

The message sent to the world by COP28 was "To hell with Pacific Islanders who are being forced from their homes by sea level rise. To hell with those who are living on the coastal cities and villages that are being ripped apart by increasingly ferocious storms, those whose homes are in the paths of monstrous wildfires, whose farmlands are being turned into parched earth with increasing droughts."

Estimates are, that to prevent warming beyond 1.5°C, we need to reduce emissions by at least 7.6% every year, from 2023 to 2030. Would the capitalist class and their managers sacrifice their investments in their carbon-based system of production to save life on our planet? Would they go against the basic functioning of their system? They have already given us their answer. In 2022 global carbon emissions rose 1%. Oil, gas and coal production increased, and new areas of exploitation expanded, despite all the warnings of the world's scientific community. They used the last international environmental conference, COP28 to negotiate plans for future exploitation.

The fundamental feature and necessity of capitalism is constant expansion. Production is organized to generate capital, which is invested to generate capital and on and on. We live in a finite world and capitalism demands an infinite expansion. It is not sustainable.

This system can identify and analyze, but not respond, in any meaningful way, to the existential threat that it has created. This system can only respond to that which affects the generation of capital. The solution to the climate crisis cannot be found within the framework of the system that produced it. Could we believe that those in power and immersed in the global competition of generation of capital could all agree to a drastic reduction in their rate of profit and shift major capital investments to new forms of energy production, carbon sequestration, and other necessary

actions that would not generate capital for them and their investors? And like all other decisions they make when their system is facing a crisis, they will attempt to impose the sacrifices on the majority of the population. We see this during economic crises when millions are cast aside, into unemployment and desperate poverty. Or when the battle for economic dominance results in wars with the massive destruction and the slaughter of working people sent into battle to defend the system of their exploitation.

Those in power will not truly respond to this crisis. They cannot. As individuals, they may be aware and concerned. But, as a class, they are unable to act. Unlike us, unlike the workers, farmers, and peasants of the world, the 99+%, they are not in a position to overthrow and replace the system they are a part of, with a system that is based on needs and values their system cannot recognize as anything other than a threat.

We Must Be Part of the Movement

A decade ago, there was a very active climate movement. With the pandemic the movement has declined, not only in the U.S. but worldwide. It doesn't mean that people have forgotten or are unaware of the devastation that surrounds us.

Tens of thousands of people turned out this September to the call for a demonstration in New York City, in response to the UN climate summit there. Demonstrations took place across the country and around the world on the same day, and the following week. (Nine years before - in 2014, at least 400,000 people demonstrated in defense of the Earth in New York.)

Environmental efforts continue around the world. There are local organizations that are confronting the immediate impacts of the variety of attacks on the environment. Some are dealing with the extraction of fossil fuels, others with the transport to refineries, and others the pollution of the refineries themselves. Others are planting trees, organizing against logging of old growth and endangered forests, the pollution of waterways, the spread of GMOs - the list is endless. Some organizations like Fridays for Future, Extinction Rebellion, 350.org and Greenpeace still carry out actions and demonstrations but with reduced numbers. But most environmental organizations in the U.S. are focused on passing legislation in the hopes that the Democratic Party will reverse the impact of the Trump administration. Some legislation has been overturned or replaced, but the Biden Administration and Democrats across the country continue to show their disregard for the environmental catastrophe we are confronting, by approving new pipelines and oil leases for the oil companies to expand their devastating impact on our Earth. We should expect

nothing from these politicians other than a defense of the status quo in one form or another. And it is the same in other countries around the world.

The environmental movement has subsided for a number of reasons, one of which is that many people believed that "speaking truth to power" would change things. Greta Thunberg embodied this perspective - shaming and challenging policy makers year after year at their international COP summit meetings. Seeing the futility of appealing to a sense of logic and their humanity, she decided to skip the last two UN climate summits, and with demonstrations prohibited at the conference sites, the impact - and even media coverage of environmentalists - would have been negligible. Thunberg has concluded that these conferences are "not really meant to change the whole system."

The current lack of action is not due to a lack of awareness or concern. In part it stems from the lack of a sense of direction and activity that can make a real impact. There is an awareness and deep concern among tens of millions of people around the world who are facing this crisis in different ways. But the sense of dread that can arise in the face of this existential threat has given rise to what psychologists have called "climate anxiety." This anxiety is "heightened in those that are aware of and *feel* the existential threat of climate change, by the fact that most of us, most of the time, act as if it does not exist." And, faced with the enormity of the problem, grassroots activity that can have any real impact can seem hopeless. And who hasn't felt that sense of hopelessness, or questioned whether we are too late in our efforts to transform the society?

There are a multitude of ways to address the impact of this system on our planet. Whether humanity is successful in this effort depends on the mobilization of tens of millions of people and that means the international working class.

Unfortunately, the international revolutionary left has, for the most part, given little attention to the question of the environmental crisis. As a consequence, it has been largely absent from the environmental movements. This failure to confront the reality of the environmental crisis as awareness was growing, has left the movement in the hands of reformists. For most revolutionary groups, in the U.S., but also in a number of countries in Europe, and other parts of the world, the emerging environmental crisis, arising out of global warming, was largely ignored or at least not seen as a major realm of activity. Some framed the environmental movement, especially where Green parties arose, as primarily a petty bourgeois movement, which it was. As a consequence, the response to the environmental crisis has largely been a reformist one. The primary distinctions being tactical ones - either focused on the electoral or

legal realms or direct actions aimed at drawing attention to the crisis. Either way, even with seemingly significant victories, they rely on the functioning of the system that is responsible for the problem. And, as we have seen, the needs of the system of profit can overturn those gains once the movements or popular pressure subsides.

The reasons for this lack of response by the left may be numerous. The reformist perspective of the unions ties the well-being of the workers to the profitability of the corporations they are working for – a program of class collaboration. For those primarily focused on union activity there is no place to confront these questions within most unions, other than by passing an occasional resolution.

There is no reformist solution to the climate crisis

The integration of the working class into every aspect of production of the economy places it in a contradictory position. It has the power to stop production and ultimately reorganize production to meet the needs of humanity, rather than capital. But, because of its position of responsibility, there is a certain conservatism that prevails when there is a lack of consciousness of its power as a class, as a potential independent force in society. And until that consciousness is realized, the working class generally functions as a junior partner in production. And the apparatus of most unions tie it to this role, attempting, at best, to get a “fair share” of the profits returned to workers in the form of wages and benefits.

In tying workers to a system of production that is in a death spiral and limiting workers to a struggle for living wages, the union officials have effectively signed a death warrant for the class they claim to represent. Perhaps this prevailing economism in the unions has impacted revolutionary organizations that have an activity in the working class, and contributed to preventing them from tackling this question. This doesn't mean that unions cannot be a vehicle for change, but not without a clear revolutionary, socialist perspective.

It is not an easy subject to discuss in many workplaces. Most industrial jobs are tied to the fossil fuel industry in one way or another – from extraction to production to transportation. Attacking a dependence on fossil fuels is easily seen as an attack on the working class itself.

The Fight for the Environment Is a Working Class Fight

But that doesn't mean the question can't be addressed through educational propaganda, which takes the framing of the discussion out of the hands of the capitalists and presents it from the perspective of the working class.

Any discussion of the realities of the environmental situation today, and the incompatibility of the current mode of production with the continuation of life on Earth as we know it, would lead to a discussion of the need for revolution. And it would involve a discussion of the possibilities and necessity for the transition to a system of largely carbon-free energy production. This does not mean a "Green New Deal" under the direction of the capitalist class, but a total transformation of the system: "System Change - Not Climate Change."

The refusal or inability of the revolutionary left to confront this has put the working class on the margins of this movement, or totally absent from it. In large part, the movement has focused on environmental concerns and the need to end fossil fuel emissions with little or no regard for the human consequences - that is peoples' livelihoods. As a consequence, it has tended to solidify the class bias of the movement and a certain hostility has taken hold in the working class, especially in the private sectors, which are often engaged in activities that negatively impact the environment.

Calls for banning the extraction of fossil fuels, attacking auto and truck production, and many other industries without a path for workers to survive, pushes workers into the arms of the bosses, who are defending those industries, and thus seem to be defending the livelihoods of the workers. Focusing on individual actions, like driving and patterns of consumption, while they do contribute to the environmental crisis, ignores the systemic problem. How do people get to work, shop, take vacations, get their kids to school etc., if there isn't a network of reliable public transportation?

It's not productive to dwell on the failures of the revolutionary left. What is needed is to explore ways to address this question within the working class, especially as the situation continues to worsen. At some point the consequences of the massive disruption of the environment will have to be addressed. The future held out to us promises food shortages, massive increases of forced dislocation of populations, lack of potable water, and wars over all these questions. The crises we will face in the future cannot be left in the hands of those who are responsible. The restrictions enforced under the COVID pandemic will be mild by comparison with what they would impose to defend their system.

It is unthinkable today that revolutionary organizations can not engage in meeting this crisis. The left can and must play a role in this, not just on Earth Day, or when the bourgeoisie calls another conference, but constantly. It doesn't mean sending a message of doom and gloom. In fact, a revolutionary socialist message is just the opposite. It's a message of resistance and refusal to accept this horrific destruction, a

call for a systematic effort to expand people's understanding of the real nature of the problem we are confronting and our role in solving it.

A revolutionary perspective is desperately needed in the climate movement. It's the only way to overcome climate anxiety with climate anger over the destruction of our planet. If there is a political arena where the hopes of reformism are wearing thin and being proven futile, it is among environmental activists. There is no ignoring the reality and the urgency of our situation. And revolutionary voices and actions must be present.

We Need a Real Alternative

In a socialist society, just about everything that is produced would have to be evaluated on a totally different basis - the impact on the Earth and its lifeforms, not profitability.

It would require an enormous redirection of production to satisfy human needs. That would first require access to potable water for all, adequate food for all, as well as shelter and an active role in redirecting all aspects of living.

Agriculture would need to be organized democratically without the massive waste that is part of the process today. That would require the organization of all labor to restore the health of the planet, as well as our own health. Science would be unleashed from its profit bound operations and used to engineer solutions to problems we confront.

The future can be ours.

Additional materials of interest

James Hansen, former head of NASA's Goddard Institute, who left in 2003, because he refused to be limited by his job in a government agency where he was constantly advised or ordered to limit the conclusions drawn by the scientific evidence of global warming. One of his concerns, he said at the time, was for the future of his grandchildren and he authored the book "Storms of My Grandchildren." He and his co-workers are authors of a paper, cited below, directed at the COP28 Conference

*The COP28 Chairman and the United Nations Secretary General say that the goal to keep global warming below 1.5°C is alive, albeit barely, implying that the looser goal of the 2015 Paris Agreement (to keep warming well below 2°C) is still viable. We find that even the 2°C goal is dead if policy is limited to emission reductions and plausible CO2 removal. IPCC (the Intergovernmental Panel on Climate Change, which advises the UN) has understated global warming in the pipeline and understated fossil fuel emissions in the pipeline via lack of realism in the Integrated Assessment Models that IPCC uses for climate projections. Wishful thinking as a policy approach must be replaced by transparent climate analysis, knowledge of the forcings that drive climate change, and realistic assessment of policy options. The next several years provide a narrow window of time to define actions that could still achieve a bright future for today's young people. We owe young people the knowledge and the tools to continually assess the situation and devise and adjust the course of action. **From: "A Miracle Will Occur" Is Not Sensible Climate Policy by James Hansen, Pushker Kharecha, Makiko Sato (December 2023)***

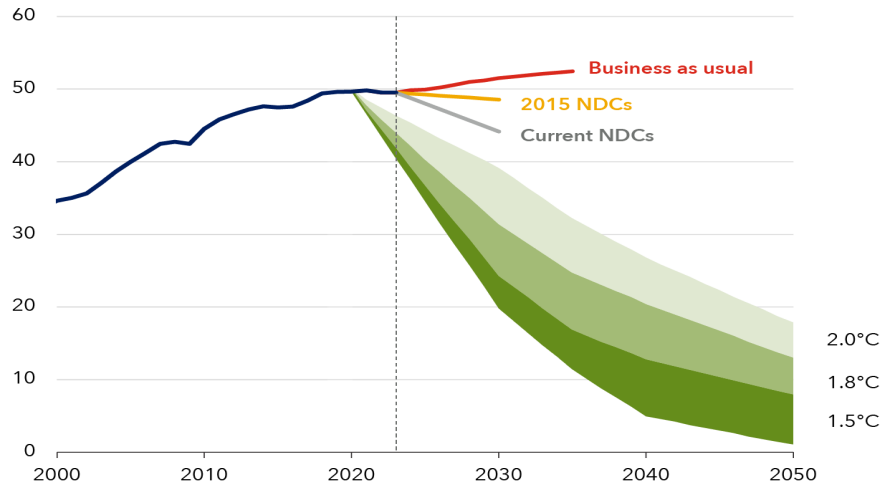
*...It is asking a lot to expect young people to grasp the situation that they have been handed—but a lot is at stake. As they realize that they are being handed a planet in decline, the first reaction may be to stamp their feet and demand that governments do better, but that has little effect. Nor is it sufficient to parrot big environmental organizations, which are now part of the problem, as they are partly supported by the fossil fuel industry and wealthy donors who are comfortable with the status quo. Instead, young people have the opportunity to provide the drive for a revolutionary third party that restores democratic ideals while developing the technical knowledge that is needed to navigate the stormy sea that their world is setting out upon. **From: Global warming in the pipeline by James Hansen and others (August 2023)***

Some interesting data from the International Monetary Fund

Falling short

Current climate commitments will still only reduce global greenhouse gas emissions by 11% by 2030.

(global GHG emissions, GtCO₂e per year)



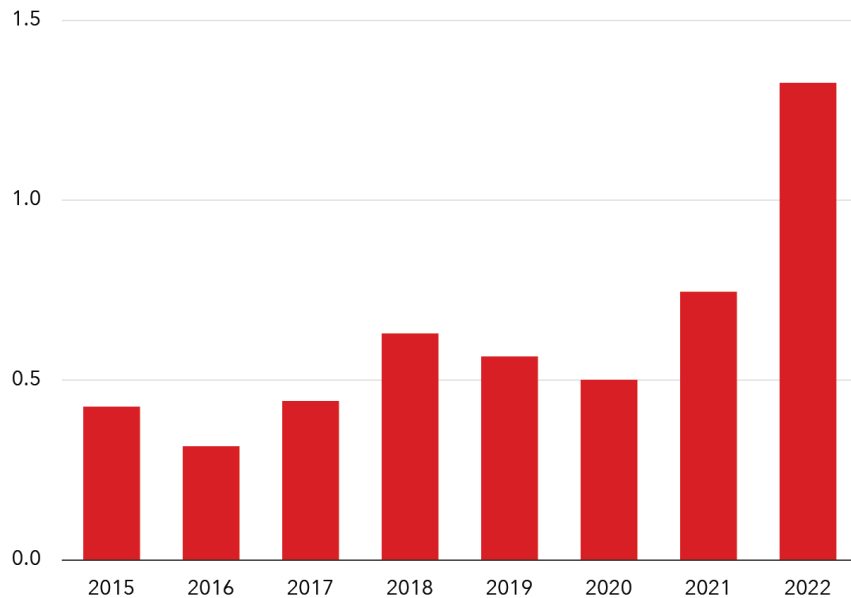
Sources: Intergovernmental Panel on Climate Change 2022; and IMF staff using CPAT.
Note: Excludes land use and land use change emissions. NDCs = Nationally determined contributions; GHG = greenhouse gas; GtCO₂e = Gigatonnes of carbon dioxide equivalent.

IMF

Wrong direction

Global fossil fuel subsidies have surged, with explicit subsidies alone topping \$1.3 trillion annually last year.

(explicit fossil fuel subsidies, trillions of USD)



Source: IMF staff calculations.
Note: Figures from 2019 onwards use projections for fuel use.

IMF