STATE OF EMERGENCY!
The Plunder of Our Planet, The Environmental Catastrophe & The Real Revolutionary Solution

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The environment and human destiny itself is being taken to the brink of disaster.

All this because of the dictates of this system—because of its stranglehold on humanity. All this while technology and wealth exist on a scale and in forms never before imagined—technology and wealth produced by millions, billions, throughout the world who are nameless and faceless to the powers that be—technology and wealth that could and should be a resource belonging to humanity as a whole and used to meet the needs of people everywhere for a decent and ever-enriched material, intellectual and cultural life.

—From: *The Revolution We Need... The Leadership We Have—A Message, And A Call*, From *The Revolutionary Communist Party, USA*
This special issue of *Revolution* focuses on the environmental emergency that now faces humanity and earth’s ecosystems. This emergency has many dimensions:

- the destruction and fragmentation of forests and other natural habitats, making the survival of many species of plants and animals impossible;
- the acidification, degradation and spreading of dead zones (areas in which there is no life) in oceans;
- a great extinction (wiping out) of species on the lands, lakes and rivers, and in the seas;
- large-scale pollution and degradation of water, air and soils;
- and now, the real threat of unstoppable climate change.

These environmental problems affect each other, and are already causing certain ecosystems—the complex webs of interacting and interrelating life—to collapse.

It is as if life on earth is being ravaged by a cancer—something that is growing and totally out of control, something eating up life which the body is powerless to defeat.

If we don’t hurry up and protect and preserve fast-vanishing natural ecosystems around the world, we will very likely witness before too long an unprecedented series of domino effects—a qualitative unraveling and degeneration of the natural world on this planet.

This environmental crisis is already causing wide-scale misery for humanity. But we must confront the full reality—*humanity is already well on the way to making this planet literally uninhabitable*. Ardea Skybreak has written that “it is definitely conceivable that the physical and biological conditions necessary for human life to continue on this planet could be destroyed by how human beings interact with the environment (even without something like nuclear war). The necessary conditions for human life include not just such things as the appropriate quality of air and water, but also the right quantity and quality of sufficiently diverse habitats and sufficiently diverse species interpenetrating in an overall ‘mix’ within which humans can continue to live.” (*The Science of Evolution and The Myth of Creationism: Knowing What’s Real and Why It Matters*, Insight Press, 2006, p. 32)

*But we can do something.* People are acting on this now—they are sounding the alarm, they are demonstrating, they are resisting with real determination, they are doing important research, they are thinking through alternate ways of doing things, and they are carrying forward important projects.

These actions are crucial. But ultimately our actions must actually correspond to a true understanding of the causes of the problem, and to the real solution to it.

In this issue of *Revolution* we are going to show:

- the dimensions of the emergency...
- the source of its causes in the capitalist system, and the impossibility of that system solving this crisis...
- a way out and way forward for humanity—a revolutionary society in which we could actually live as custodians of nature, rather than as its plunderers.

Read this issue. Engage it. Use it as a powerful tool to awaken people and spread the word. Get it out far and wide—taking it into classrooms and into the streets and communities. Take it to those places where people are fighting the power against these crimes, and spread it as you unite with their struggle. Organize discussions of it. Get into forums and roundtables with scientists, activists, and others. Let us know what you think of it, and what others think of it. And as you do all this, check out and get with the movement for revolution that we are building. ≈≈
The Dimensions of the Environmental Emergency

Snapshots of a Planet in Peril

Humanity and earth’s ecosystems face an environmental emergency. But that phrase doesn’t capture the scope of what we face.

Let’s imagine we are circling our planet by satellite—and then can zoom down to the earth’s surface to see the situation on the ground.

First we come to the outskirts of Accra, the capital of Ghana in West Africa. There we see children as young as five years old playing. But when we look closer, we see that their “playground” consists of vast piles of abandoned computers—what is called “e-waste.” We see them breaking up the computers and burning off foam. And when we ask, they tell us that they aren’t playing at all—they are salvaging metals to sell, in order to survive.

The computers were shipped from the U.S., Europe and Japan—as “donations.” But these donations are actually useless. Still worse, they are filled with lead, cadmium, organic chemicals and other materials that cause cancer, and that damage brain and reproductive development. These “donations” poison these kids, and when the rains come, washing the toxins into the rivers and lagoons, they poison life there too.

We get back in the satellite and move to the Amazon rainforest in northern Ecuador in South America. From above we see views of beautiful forest. Once on the ground, the lovely vistas give way to oozing pits of poisonous waste water. The rivers and streams are black with oil. People come out of their huts to tell us about many of their loved ones who are dead, or dying, from cancer. They cry about their children with leukemia and birth defects. Here, in Oriente, an area the size of Rhode Island, Texaco Oil has created one of the worst environmental disasters in human history. Texaco spilled and dumped 17 million gallons of crude oil and billions of gallons of toxic waste water into the rivers and rainforest. The people you meet live in these rainforests. They are members of six indigenous tribes, 30,000 people, that depend on it for life.

Now Chevron Oil Co. has bought out Texaco. Chevron tries to brand itself as “eco-friendly.” But Chevron is fighting in court to avoid responsibility for the devastation of the environment, and the hundreds of deaths, they have caused.

Next, we fly to the North Pole. From the air, amazing ice sheets seem to stretch endlessly. But if we could compare them with 30 years ago, we would see that during the late summer they are smaller by about the size of California and Texas combined. They are melting away as the planet warms. The sea ice also melts earlier now, making it harder for polar bears that hunt from the ice to find food at critical times. Bears are powerful swimmers, but now some are drowning, because they have to swim greater distances between floating ice floes to hunt. And it’s not just the bears—the entire Arctic ecosystem is threatened by global warming. What’s more, the melt of the Arctic will cause dangerous feedbacks, warming the planet even more.

We go to the South Pole. There we find that huge ice sheets have already broken up in the Antarctic Peninsula. A scientist stationed in Antarctica talks to us about the extreme but richly abundant ecosystem there, and then takes us on a tour where we see penguins, seals, whales, fish and many birds. She explains that these animals face present and larger future threats from two big changes: first, because the sea ice is melting; and second, because the numbers of small shrimp-like animals called krill are declining. Many animals depend on the vast amounts of krill to eat for survival. Krill form the base of the Antarctic food chain, but now their numbers are dropping. Global warming is melting sea ice containing algae that krill eat, and krill are also targeted by industrial fishing for food for fish farms and other uses. The further decline of krill would not only affect Antarctica, but marine ecosystems far beyond.

We fly from the Antarctic northeast to the island nations of Indonesia and Malaysia. We encounter amazing tropical rainforests but we also see forests on fire. As we get closer to the ground we make out huge swaths of land where the forests have been wiped out—with only some stumps remaining. In others, there are vast miles of palm tree plantations; such plantations seriously reduce biological diversity in favor of the single plant being cultivated.

The eminent climate scientist James Hansen has warned, “Our home planet is now dangerously near a ‘tipping point’... an environment far outside the range that has been experienced by humanity. There will be no return within the lifetime of any generation that can be imagined, and the trip will exterminate a large fraction of species on the planet... We must move onto a new energy direction within a decade to have a good chance to avoid setting in motion unstoppable climate change with irreversible effects.”
Arriving in the forested region of Borneo, we come into a world alive with amazing plants and animals—beautiful orchids and other flowering plants, birds of many kinds. We meet an activist on the ground who has been part of blocking the destruction of the forests by developers. His eyes come alive as he describes the immense variety of creatures the forest still holds, including apes, tigers, amphibians, reptiles and even elephants. But he becomes visibly upset as he explains that all this rich life is rapidly being exterminated as the forests are being destroyed. Three-quarters of Indonesia’s once immense forests are already gone. If things are not stopped quickly, he says, this vast rich ecosystem will be no more—all these animals and plants gone—with consequences for all of us.

We keep flying over the planet, coming to the Khosi river that flows through Nepal and India. As we arrive, farmers show us their former farmland. Now the land is covered in six feet of sand after massive floods that killed 1,500 people and displaced three million. Now nothing grows. And there are worse droughts in some regions, more torrential monsoon rains in others, as the climate changes. The farmers say they don't know what they will do to survive.

And then, finally, we arrive at our last stop—New Orleans. We walk through the 9th ward, where most of the people who lived here are either poor, Black, or both. We can’t believe it, but so many houses have been simply razed or are still lying in ruins—five years after being destroyed by the massive hurricane Katrina. These neighborhoods have been abandoned by a government and an economic system that does not provide for people’s needs. The people in New Orleans show us pictures of their loved ones who died, abandoned in their homes, and tell us about how the police and soldiers came at them with guns, when they needed help. Katrina was a monster—fueled by warmer waters in the Gulf of Mexico. Katrina is a sign of things to come—the type of more powerful hurricanes and storms that are likely already occurring and will become more common as warming of the planet proceeds.

These snapshots demonstrate the emergency, but now let’s look at the entire picture.

Many of Earth’s ecosystems—its complex webs of life—are being undermined, compromised and even destroyed. By ecosystem we mean the way in which all the living organisms in any area—the plants, animals, and micro-organisms like bacteria—interact with one another, and with the topographical area (the features of the land—rivers, mountains, desert, etc.)—in a complex web of life. These organisms are interdependent and interact with each other. If you “pull one thread in the fabric”—that is, if one or more key species are destroyed—you may very well unravel the whole thing.

How bad is this ecosystem crisis? The UN’s Millennium Ecosystem Assessment Report of 2005 estimated that two-thirds of the “services provided by nature to humankind are found to be in decline worldwide.” This means that the things we depend on from nature for life—the production of food and water and many medicines, the air we breathe, the control of climate and disease, the supply of nutrients and pollination of crops, and cultural and recreational benefits—are being used up and degraded.

But how can this be so? When we go into nature or watch nature shows on television, in many ways things may seem the same as they always have been. And in fact there are still large swaths of the world with awe-inspiring natural wonder and rich diversity of life. But when we pull back the lens to see the whole view, and when we look under the surface at the changes that are actually happening to the environment, a staggering and extremely frightening picture emerges.

Consider these basic facts:

• About half of the world’s rainforests are gone, caused by clearing land for agriculture, timber and beef production. These forests are concentrated around the equator.

• Many areas where people used to farm have been turned into wasteland or desert by misuse and overuse. This is especially a problem on the 40% of Earth that is arid (very dry) and semi-arid. And these are lands in which a quarter of the people in Asia, Africa and Latin America live.

The Larger Picture: The Destruction of the Ecosystems

Water and air pollution is a global problem—for instance, 80% of China’s major rivers are no longer able to support aquatic life (fish, plants, etc.)! Air pollution especially hits hard at the elderly, the sick and young children—causing lung cancer and other lung diseases, bronchitis and heart disease. Three million people worldwide die each year from its effects.

Left: Pond filled with dead fish in Wuhan, central China. (Photo: Greenpeace) Right: Smog over Los Angeles. (Photo: EPA)
• Water and air pollution is a global problem—for instance, 80% of China’s major rivers no longer support aquatic life (fish, plants, etc.)! Air pollution especially hits hard at the elderly, the sick and young children—causing lung cancer and other lung diseases, bronchitis and heart disease. Three million people worldwide die each year from its effects.

• Then there is the warming of the planet. According to the World Health Organization, this already kills 150,000 people every year from worsening droughts, storms, flooding, heat waves and parasitic disease. From 2000-2008, when scientists were repeatedly sounding the alarm about global warming, greenhouse emissions (gases like carbon dioxide and methane that cause global warming) rose by 29% and the rate of their build-up has been increasing. Now the rising ocean levels caused by this global warming are threatening the very existence of many low-lying nations, from the islands of the South Pacific to nations like Bangladesh.

It’s important to note that in all the above examples, the environmental devastation is overwhelmingly concentrated in the areas of Asia, Africa and Latin America. This is not just an accident, or bad luck. These nations have been dominated by the U.S., Japan and the European powers for centuries. Today, this means that the imperialist powers consume a hugely disproportional share of the world’s resources—and that the oppressed nations bear a terribly disproportional share of the brunt and burden of the environmental crisis.

Governments have talked about this being a problem, as they did recently at the Copenhagen climate talks last December. But instead of taking action to solve this, they have actually increased the burning of fossil fuels, and increased the hunt for the coal and “dirty oil” that are the most dangerous polluters. These modern-day Neros are fiddling while the whole planet burns!

The eminent climate scientist James Hansen has warned, “Our home planet is now dangerously near a ‘tipping point’… an environment far outside the range that has been experienced by humanity. There will be no return within the lifetime of any generation that can be imagined, and the trip will exterminate a large fraction of species on the planet…. We must move onto a new energy direction within a decade to have a good chance to avoid setting in motion unstoppable climate change with irreversible effects.”

There are differences from region to region in how the environmental emergency is developing, with some regions affected more than others. But the crisis is real, global and advancing.

The Extinction Crisis and Ecosystem Collapse

Today, more than 3,000 species a year are going extinct and this could reach tens of thousands per year. In Africa the lion population has decreased from 200,000 to 20,000 just over the past 30 years. Chimpanzees and gorillas, humanity’s most closely related cousins, are facing threats of extinction—totally going out of existence. They are being hunted as “bush meat,” their forest habitats wiped out, and they are dying of disease. In the world’s oceans, about 90% of the populations of the world’s predatory fish (such as tuna and swordfish) are gone, depleted through overfishing.

As bad as this is, this picture doesn’t capture the deep threat to earth’s biodiversity from many factors, and the degree to which entire ecosystems are being radically altered and in some cases already vanishing from the earth. There is real danger of a cascade of negative effects being set in motion that can affect the global health of the whole planet. Add up enough ecosystem collapses in local or regional scales and you can have collapse of the global ecosystem. To repeat: add up enough ecosystem collapses in local or regional scales and you can have collapse of the global ecosystem.

Today in the oceans, nearly all of the big fish, mammals and turtles, as well as many birds and other species—are being pushed toward extinction. Why? On the one hand, because capitalist companies trawl the bottoms of the oceans with huge nets. This trawling takes too many fish, and destroys their habitat (the environment in which they can live); but this is the most profitable way to do this for the capitalists, so that is how it’s done. On the other hand, these species are threatened by the overall pollution and climate change—which, as we’ll show in this issue, is brought on by the heedlessness of capitalist production more generally.

These changes in the oceans are widespread and a big problem. In some cases human activity has wiped out predators at the top of the food chain. With the predators gone, some species that they fed on expand out of all proportion and decimate other species they eat lower down the food chain. In other cases, such as in estuaries, pollution and overfishing have decreased oysters and other filter feeders. The problem is that in a healthy estuary, filter feeders keep algae and bacteria in check and without them, these organisms grow without limit, polluting waters and beaches with slime and toxins.

Entire ecosystems in the oceans are threatened and in some regions, already collapsing. Coral reefs are of particular importance. According to a recent article by Brian Skoloff, “Death of Coral Reefs Could Devastate Nations,” the National Oceanic and Atmospheric Association (NOAA) says that 27 percent of the world’s reefs are already gone and if things continue as they are, another two-thirds will disappear by 2032. Coral reefs are being degraded because of pollution and development of coastlines, overfishing and bad fishing practices. These factors are increasingly interacting with warmer ocean waters from global warming to kill off the algae that live inside coral and feed them, causing the corals themselves to turn white and die.

Skoloff says, “Coral reefs are part of the foundation of the ocean food chain. Nearly half the fish the world eats make their homes around them. Hundreds of millions of people worldwide—by some estimates, 1 billion across Asia alone—depend on them for their food and their livelihoods.” Carl Gustaf Lundin of the International Union for the Conservation of Nature says the death of coral reefs would mean “Whole nations will be threatened in terms of their existence.”

Kent Carpenter, a professor at Old Dominion who directed a worldwide census of marine species, said that if global warming
continues unchecked, all corals could be extinct within 100 years. Carpenter said, “You could argue that a complete collapse of the marine ecosystem would be one of the consequences of losing corals…. You’re going to have a tremendous cascade effect for all life in the oceans.”

Similar things are happening on land. The rainforests of Asia, Africa and South America contain multitudes of species. Many of these species are not yet even known to the scientific community. But forests are being cut down and burned, threatening great extinctions of species and collapse of these rich ecosystems.

The Catastrophic Danger of Global Warming

Rainforests not only contain the greatest diversity of species, they also take large amounts of carbon dioxide, which is causing global warming, out of the air. In turn rainforests give off vast amounts of oxygen that organisms need to breathe. Rainforests have been called “the lungs of the planet.” Cutting and burning rainforests releases tremendous amounts of more carbon into the atmosphere, further increasing the planet’s warming.

Rainforests affect climate. They take up water from the ground and use it to grow, then give off vast quantities of water vapor. The Amazon rainforest, the largest remaining expanse of tropical forest on the planet, has a tremendous impact on weather. The Amazon rainforest interacts with trade winds, forming weather systems that affect large regions and regulating ocean temperatures. But about one-fifth of the Amazon has been completely destroyed and more than 20% more has been damaged by logging. In some recent years with the planet warming, drought has hit the Amazon and there is real fear that more years of drought with increased climate change can cause a tipping point where the Amazon begins to die off, even being turned eventually into grassland or desert.

This deforestation and the burning of oil, coal and gas (known as fossil fuels) is causing the earth to warm. The burning of these fuels, and the cutting and burning of forests, releases carbon dioxide, which is the main “greenhouse gas.” The build-up of carbon dioxide and other greenhouse gases in our atmosphere is warming the planet which is causing the climate to change. Polar ice and glaciers are melting at an accelerating rate. Whole island nations and coastlines where hundreds of millions of people live could be threatened in coming decades by rising oceans from melting of glaciers and ice sheets. The average temperatures on the planet as a whole are rising with some regions—especially concentrated in the oppressed regions of Asia, Africa and Latin America—affecting more than others. Eleven of the past 14 years are the warmest ever recorded. There is evidence that climate extremes—more devastating floods in some regions, severe droughts in others, heat waves and more powerful hurricanes in certain regions—are already occurring and global climate models predict these things will become much worse as the planet continues to warm.

Climate is a key factor affecting ecosystems, including whether a particular plant or animal can live in a particular place. As the planet warms, many species are moving toward the poles and to higher elevations where they can survive. In the polar regions, species have nowhere colder to go. In “normal” periods, climate usually changes over thousands and even millions of years—and species can adapt. But now, Anthony Barnosky, UC Berkeley professor of integrative biology says, human-caused climate change “is racing faster than it ever has during the evolution of living species and ecosystems—many species simply aren’t
biologically capable of adjusting their geographic range at the speed they would need to in order to survive.”

And on top of this, when many species respond by changing their range, they run smack into cities and development where they can’t survive and can’t travel through. The natural ranges of species have been fragmented and even eradicated by urban development, sprawl, and other destruction of natural habitat. Often, there is no more habitat to even migrate to. Climate change combined with habitat destruction means a double whammy threatening not just species but whole ecosystems. Barnosky says, “As a result, whole communities and ecosystems may fail to operate as they have evolved to do over thousands, even millions, or years.”

Ecosystem Collapse, and the Consequences for Our Future

Ecosystems are made up of complex webs of interacting and interrelating life. Extinction of key species, such as krill in Antarctica, wolves or other top predators, or groups of species, can cause whole ecosystems to be fundamentally transformed, or even to “unravel” in highly destructive ways. Species in ecosystems have been compared to rivets in an airplane wing. Take out one and it’s not necessarily much of a problem (unless it’s some type of central or controlling bolt), but remove a few more and the wing weakens and goes out of whack. A few more, and the entire structure collapses.

Some very important ecosystems—including rainforests and coral reefs that contain the richest life on earth, but also others—are being outright devastated and in some cases, already collapsing or being eliminated altogether. Others, such as the Arctic, are being severely affected. Ecosystems blend into, interact with and can tremendously impact each other, affecting the entire global ecosystem. Humans depend on functioning living ecosystems for our own survival.

We have to confront this reality. Taking out individual species and groups of species can unravel ecosystems, and ecosystem collapses can cascade like dominoes. Now many factors, with climate change being the leading edge, are coming together to confront us with the threat of not only massive extinction of species, but collapse of some ecosystems and the threat of a cascading impact on the earth’s global ecosystem and the transformation to a different kind of planet that potentially could even threaten human existence. We can’t predict all of the pathways and outcomes, but this is the trajectory we are already on and it must be stopped.

Scientists and organizations devoted to the preservation of nature have been studying all this and coming up with many possible solutions, many things to do to preserve species, to preserve cores of wilderness and corridors for species to migrate and move through, new technologies that could be sustainable and even ways to “sequester” carbon dioxide—to take it out of the atmosphere and help reverse climate change. Many others are actively fighting development and environmental destruction. Some important initiatives have already been taken that are having positive effects showing the potential to save nature. But many efforts and avenues are being frustrated by the workings of the system. Much, much more needs to be done, can be done, cries out to be done. ≈≈
Biodiversity, Wilderness and Nature

Why does it matter that species are destroyed on the scale mentioned in this issue of Revolution? Why does preserving biodiversity and wilderness matter?

First, species that exist are the product of millions of years of evolution. There is a certain amazing beauty to each one—to how it lives and relates to other species, and to the ways in which each evolved. But once destroyed, species are gone forever. It isn’t the case that humans, even if power is seized out of the hands of the capitalists, would be able to recreate biodiversity that is already gone. Certainly, species do go out of existence in the course of the evolution of life. But the destruction of species being caused by capitalism’s anarchic plunder is far greater than normal rates. It’s difficult to exactly measure these rates, but best scientific estimates are that extinction rates today are from 100 to 1,000 times the normal “background” rate. And this is a crime that must be stopped.

Second, nature and wilderness have great importance in relation to real human needs—to experience and explore the relatively unknown, to experience adventure and solitude. Nature and wilderness open us up to a certain kind of beauty, and a certain kind of awe and wonder. There is great joy in experiencing nature and the wild as it is, unchanged by human development. To lose this is to diminish what it can mean to be human.

Third, humanity is part of nature—and we rely on nature for our very life.

Humans are the product of natural evolution. We are part of and linked to all other living things in a real sense. All species originate as evolutionary modifications of pre-existing ancestor species, so all living species are related to each other, through a succession of shared ancestors. And our own human species is related, by different degrees of kinship, to all other species on the planet—whether the blades of grass and fruit trees, the polar bear, the smallest insect, or your family’s cat.

The natural world is made up of ecosystems—webs of life interacting with each other and their physical environment as a unit. Destruction of species, particularly key species, or groups of species, affect other species and can even cause unraveling of an entire ecosystem’s life. We don’t always know what threads when pulled might cause that unraveling.

One good example of this interconnectedness in ecosystems that biologists have discovered is the part played by predator species—such as the wolf in the Yellowstone National Park region. Wolves in this area were wiped out but now have been re-introduced. Studies have shown that wolves in effect regulate the entire ecosystem. The reintroduction of the wolf is keeping down the deer and elk populations that were overgrazing certain trees. Elk are now also staying away from grazing trees along streams because they are vulnerable to wolves in these areas. The elk not grazing as much by streams has caused the western aspen tree, which was almost eliminated, to come back. The aspen’s regrowth is providing more shade, making healthier river systems and better conditions for fish to thrive. Other species in turn eat fish to live. The importance of predator species at the top of the food chain in keeping a healthy and relatively balanced ecosystem has been found in many other ecosystems—including in the oceans where big negative changes have resulted from the elimination of predators by overfishing and hunting. Killing off top predators can in effect throw an entire ecosystem out of whack and make it vulnerable to degradation and even collapse.

One important area of scientific study and conservation work by biologists and others today is efforts to “rewild” the world. This involves efforts to overcome the destruction and fragmentation of natural wild habitat through development and other means, by linking up and preserving cores of natural wilderness and corridors for wildlife to move through so they can survive and flourish. These are very important efforts to protect our natural world.

We humans on this planet must realize that we depend on and rely on nature for our survival. The physical environment and its interaction with living organisms is the basis for human life—generating plants and animals for food, rain and thus fresh water to drink, materials for shelter, medicines for many diseases and illnesses, trees and plants that take carbon dioxide from the air and produce oxygen for us to breathe, etc. Without vibrant, functioning natural ecosystems—humanity will not be long for this world. Make no mistake, destruction and collapse of whole ecosystems can transform our planet to one that could become unlivable for humans, even with all our potential to adapt.

And this is what’s at stake in the environmental emergency facing us today.

The environmental emergency is driven by capitalism’s logic that nature is just an instrument that fuels growth—a logic that commodifies nature (turns nature into an object to buy and sell). This outlook is horrifically destructive and also leaves humanity impoverished in a moral sense. In contrast, a communist approach to nature sees humanity as becoming the guardians of the natural world and preserving the wild. It’s based on a scientific approach to understanding all of reality. It fosters an appreciation for the natural world, a joy in the wonder of it, a love for the beauty of it, a marveling at the complexity of it, and an eagerness to learn from all it can teach us.

But this approach is not simply better in a moral sense. This is the approach humanity needs to transform our relationship to nature—to be able to survive and live together with nature on this planet as part of a future communist world.
What Is the Cause of the Emergency?

Why is the natural environment being destroyed? Is it simple greed of corporations? Ignorance? “Human nature”? Science itself?

In December of 2009, the governments of the earth assembled in Copenhagen, Denmark. They promised to create an agreement that would at least begin to slow down climate change. But instead of a serious scientific convocation followed by meaningful steps to address the emergency, the world got something quite different. The great powers, with the U.S. dominating the rest, were contending with each other over climate issues. These biggest polluters in the world, and the U.S. alone is responsible for more than a quarter of all carbon emissions in the atmosphere, used the climate negotiations to gain strategic advantage over each other and to strong-arm the poor countries, which are also the most vulnerable to the effects of global climate change. Protesters—some of whom have dedicated their lives to saving the planet—were locked out, often arrested, and sometimes beaten by police. The end result: a promise that did nothing to stop climate change and was worse than meaningless.

What happened? Are these powers just too ignorant, arrogant and corrupt to accomplish what was needed?

Or is there something deeper at work?

Cancerous Growth, Crippling Integration

To answer this, we need to come to grips with the economic and political system that we live under: capitalism. We have to examine the economic relations at the foundation of this society, and the institutions and ideas which have grown up on and reinforce that foundation.

To capital, nature is either something to be seized and plundered, or a gift to be taken for granted, exploited and poured into profit-based commodity production.

Capitalism has led to the fastest growth in productivity of human labor in human history. But this growth has been based on the more intense exploitation of world humanity and the more savage plunder of the planet. Unparalleled growth has carried with it unparalleled destruction. Capitalism arose on a foundation of the “African holocaust”—the enslavement and murder of over 11 million African people—and the genocide of the Native American peoples, through conquest, disease and working them to death in the silver mines. Capitalism thrived on the exploitation of children and immigrants, and brought with it devastating depressions and two world wars. Today, in its phase of capitalism-imperialism, it carries out and/or sponsors terrible genocidal invasions and wars against people in Africa, Asia and Latin America. And now capitalism is causing environmental destruction that endangers human existence itself.

Capitalism has integrated the whole world. But this integration is horrifically unequal. This is a world divided up by a handful of wealthier countries which dominate the rest of the world. The relative prosperity in the imperialist powers—prosperity which cannot hide the exploitation and poverty of millions in the “developed world”—exists in relation to the bitterest immiseration in Asia, Africa and Latin America. Imperialist powers like the U.S., Japan and the European nations parasitically feed off the peoples of the rest of the planet. The imperialists achieve control over the resources of the whole world through investments, trade agreements, control of technology and dominance of markets. They gorge themselves on these resources—and then they shift back the pollution that they cause into the very nations which they oppress and plunder. Different countries and different peoples face this crisis in radically unequal ways, and those who live in the imperialist countries often don’t even know how bad the crisis really is.
Let’s look at a few examples of how this comes down:

• When a company like Texaco extracted oil in the Ecuadorian rainforest and, as it did so, sprayed and spilled toxic waste water and oil, it destroyed pristine rainforests and actually killed people. When Shell Oil did similar things in Nigeria, and the Ogoni people who lived on the land on which Shell drilled resisted, the Nigerian government arrested and executed nine of the resisters, including the playwright Ken Saro-Wiwa. The only unique things about these cases are that they are relatively well-known. Similar outrages routinely occur in the countries of Asia, Africa and Latin America where major corporations operate in conjunction with local governments and with the ultimate backing of the militaries of the imperialist powers.

• When agribusinesses take advantage of globalization to spread all over the world, they create huge industrialized systems of growing food that depend on massive amounts of petroleum and create enormous amounts of waste. But this has carried it the wiping out of natural habitats. For example, rainforests in the Amazon have been cut down to make way for cattle production and to grow soybeans. And this process has also destroyed traditional agriculture and the livelihoods of hundreds of millions of farmers and peasants. Tens of millions have been driven into the mega-slums of the cities; others have only been able to resume farming by moving into and clearing forest.

• Driven forward by the process described above, as well as other dynamics of capitalism, massive slums and shantytowns have grown up throughout Africa, Asia and Latin America. These cities, bursting at the seams, now contain one billion people. From Lagos, Nigeria to Mexico City to Mumbai, India and dozens of other places besides, people live their lives breathing toxic air and drinking poisoned water, with their children playing in rivers of human and chemical waste.

• Regions of Africa and China have been turned into dumping grounds for toxic e-waste (i.e., cast-off computer equipment that contains poisonous minerals and chemicals) from the advanced capitalist countries, poisoning people, land and waterways.

And this terrible plunder of the earth’s environment and its people, and the unequal and oppressive way this comes down, is defended and reinforced by brutal military power—especially that of the U.S. military (which, as it turns out, just happens to be the single biggest institutional consumer of oil in the world. (See “A Dirty Little Secret of Capitalism: The U.S. Military Is One of the World’s Largest Polluters.”)

Capitalism Is a System: What That Means

But still—is there something intrinsic to capitalism, something built into the way it works, that has generated this?

Any society is a system. That means that it operates according to certain rules, like a game. If the rules are violated, the system doesn’t work. Think about the rules of basketball, or soccer. When the players go on the court, they can’t just do whatever they want. If a basketball player should decide to kick the ball, as you do in soccer, because it seems the best way to get it downcourt, she’d be penalized. If she kept doing it, she’d be thrown out of the game. So you need to understand the rules. And you need to understand whether you can make the game work by modifying the rules, or whether you need to be playing a different game altogether.

The same is true with the system of capitalism. Yes, there are individual capitalists and corporations who have created the crisis. But we need to understand if there is something about the rules of that game that have led to this crisis. We need to understand whether we can deal with this crisis by working within the rules of capitalism, including perhaps modifying those rules—or whether capitalism itself must go. The future of life itself depends on our getting this right.

The fundamental point is this: capitalism as a system cannot deal with the environment in a sustainable and rational way—even if an individual capitalist, or group of capitalists, sincerely wanted to. Capitalism cannot cope with the many-sided effects of its own production. Capitalism cannot plan for future generations.

Why? Because capitalists, or blocs of capital, confront one another as competitors; sometimes they cooperate but at bottom each must be ready to seize on any advantage, to undercut their competition, lest their competition undercut them and drive them under. This basic underlying dynamic is what drives the actions of individual capitalists; and it is what lay behind the failure of the major powers to agree on any meaningful action at the recent Copenhagen conference on climate change.

Capitalist Rule Number One: Everything Is a Commodity and Everything Must Be Done for Profit

Capitalism approaches everything as a commodity. A commodity is anything that is produced in order to be exchanged, to be sold. Now to be exchanged—for someone to buy it—the commodity must be useful. In previous societies, people would produce for their own direct use and then supplement this by exchanging some of what they produced for goods that they needed. In today’s capitalist society virtually everything is produced in order to be sold to others—to be exchanged—and this almost universal dominance of commodity production and exchange marks off capitalism from previous forms of society. But there is something else, as well, at the heart of capitalism: the measure and motivation of all production is profit.

With capitalism, the mentality of viewing everything as a commodity and a potential source of profit penetrates into everything—into how people look at other people, how they look at themselves and, yes, how they see nature too. To capital, nature is either something to be seized and plundered, or a gift to be taken for granted, exploited and poured into profit-based commodity production. Even environmental disasters are seen first and foremost as “opportunities for profit”—as we see today with the melting of the polar ice caps due to relentless burning of fossil fuels. This is a terrible loss and tragedy, and puts all kinds of life—including human life—in acute danger. But for the capitalists of the U.S., Canada, Norway and Russia it is a call to maneuver to exploit the potentially rich reserves of new fossil fuels being opened up in the increasingly ice-free Barents and Arctic Seas. Global warming simply opens up new ground perversely, for capitalism to take “advantage” of—and take that warming to an even more horrible level.
**Capitalist Rule Number Two:**
Production Is Privately Owned and Driven Forward by the Commandment “Expand or Die”

Capitalist production is by its nature private. The economy is fragmented into separate and competing units of capitalist control and ownership. Each unit of capital must fight others for market share, and to cheapen costs, in order to stay alive. To the extent that agreements are concluded, these either take the form of alliances in a larger battle, or temporary truces. Thus, each capitalist or bloc of capital must follow one basic commandment: expand, or die.

Each unit is fundamentally concerned with itself, with its own operations—with “realizing its investment” in the form of profit and expansion. An individual capitalist who opens a steel mill will subject the cost and efficiency of that steel mill to strict accounting. But what happens outside of that—for instance, what that steel mill’s pollution does to the air—is not “on its ledger.” When capitalist interests cut down rainforests in Indonesia for timber and then grow trees producing palm oil for biofuels, neither the massive amount of carbon released into the atmosphere nor the destruction of the habitat of the orangutan and Sumatran tiger even enter into the calculations.

To mainstream economics, tigers and apes (or air and water) are simply “externalities.” What this means is that environmental damages and the exhaustibility of resources don’t get counted. The extinction of entire species, the birth defects and diseases that ruin the lives of small children—these are “external” to capitalism’s account books. In the Niger Delta in West Africa, Shell Oil has caused tremendous pollution to the soil and water in extracting oil. And the burning of that oil adds to greenhouse gases left for future generations to deal with. But none of these effects are part of Shell’s economic bookkeeping. Each unit of capital looks at what lies outside itself as a “free ride.”

Due to its privately owned and controlled character, and flowing from the life-and-death competition between different capitals, there can be no conscious, society-wide coordination of production. There can be no long-term planning to take into account ecological impacts, or relations. The impact of its growth on the ecology of rainforests or oceans is not considered. Or whenever reforms are passed that seek to restrain them, capital is driven to seek to defeat or get around them. The horizons of capitalism tend to be short term because it must seek returns on its investment quickly. Consequences in 10, 20, 30 years don’t matter.

When the capitalists at Texaco, as we discussed above, poisoned the waters of the people in Ecuador, it wasn’t just greed (though the greed was monstrous); they feared that if they didn’t take all the profit that they could they would be driven under by some other capitalist, somewhere else, who would cut costs to the bone.

**Capitalist Rule Number Three:**
Capitalism Today Proceeds through Imperialist Domination of Oppressed Nations and Strategic Rivalry between Imperialist Powers

By the mid-1800s capitalism began to burst its bounds. Capital stretched deeper into Asia, Africa and Latin America, investing in these countries and increasingly dominating their political and social structures—whether through outright colonialism or the more indirect domination of neocolonialism carried out through “native elites.” The imperialist powers carried out wars and invasions with a staggering and awful toll—hundreds of thousands murdered in the U.S. invasion of the Philippines, in the French subjugation of Algeria, or in the British repressions of resistance in India; in the Belgian Congo alone, an estimated 10 million people (half the population) was destroyed through murder, starvation, exhaustion, exposure, disease and a plummeting birth rate during Belgium’s horrific rule.

Like gangsters carving up turf and then violently clashing with each other, these capitalist powers would go to war with each other over the division of the planet. This caused World War 1 and was also the principal cause of World War 2. This drove the U.S. to threaten the use of nuclear weapons—which themselves could easily end human life on this planet—against what used to be the Soviet Union. Ultimately, U.S. military superiority both spurred on the collapse of their Soviet rivals and led to the era of U.S.-dominated globalization. But this rivalry itself continually recurs and takes new forms—and this rivalry played out at Copenhagen and prevented any significant agreement.

As we have shown in our article on the dimensions of the crisis, this terrible global inequality finds concentrated expression in the environmental emergency humanity now faces. The people in these oppressed nations find their waters and air utterly befouled, their agriculture devastated, their lands robbed of fertility; they find that their children face birth defects and a blighted future on a scale people in the imperialist countries can barely imagine; they find themselves driven by starvation and want into making the situation they face even worse—driven to clearing rainforests, or poaching in jungles. They awake each morning on a planet where the continued burning of fossil fuels puts the very existence of the island nations of the Pacific, as well as heavily populated low-lying countries like Bangladesh, in grave doubt; indeed, it is just a matter of time, on the current course, before these lands are inundated.

The fundamental point is this: capitalism as a system cannot deal with the environment in a sustainable and rational way—even if an individual capitalist, or group of capitalists, sincerely wanted to.
Six Reasons Why Laws Passed by the Government Will Not Even Begin to Solve this Problem

“Okay,” some will say, “the capitalists will do bad things if left on their own. But there is a whole history of laws that restrain their actions, and these laws often work. Why can’t we work for more and better reforms?”

As evidence for this, people point to certain “environmental successes” under the current system—for example, the international agreement cutting chlorofluorocarbons (CFC’s) that were damaging the ozone layer; some cuts in production of acid rain in the United States; the cleaning up of various bodies of water such as Lake Erie; the Clean Air Act; and others.

Well, what about this? It’s true there have been rules and regulations passed that have resulted in some curbing of environmental destruction and better standards in certain situations. Yet a closer examination reveals just how badly such efforts fall short of solving the problem.

First off, the degree to which problems are addressed has to do with how central they are to profit-making and the entire functioning of the capitalist country. It is quite different for certain companies to switch from CFC’s to other substances (the switch that has resulted in leveling off of the destruction of the ozone layer) than it is for whole countries to switch off of fossil fuel energy use. The first affects a relatively small sector of companies; the second is foundational to the economies of capitalist countries and in particular to the domination of the U.S. over the entire world.

Certain “gains” in cleaning up of water and air within the U.S. remain within an overall picture of continuing environmental destruction. While air quality in the U.S. has improved to a degree in certain areas, after 38 years of the Clean Air Act, one out of three people in the U.S. still live in counties with air pollution levels that exceed EPA standards. One in five live in areas with unhealthy year-round levels of particulate pollution, like soot. And note well: these dangers are more concentrated for oppressed nationality (i.e., Black, Latino, Native American and other “people of color”) and poor people.

Or let’s look at efforts to clean the water. After 30 years of EPA standards, the EPA said in 2002 that more than a third of rivers and half of lakes surveyed didn’t meet pollution standards. Many fish, mammals, reptiles, flowering plants and amphibians are either imperiled or vulnerable to extinction in the U.S. And if anything, larger amounts of toxic chemicals—pesticides, insecticides, etc.—are being released into the environment.

This also holds true for schemes like “cap and trade,” which envisions a trade between capitalist enterprises in licenses to pollute. The most ardent defenders of this point to the Clean Air Act and similar reforms discussed above as positive examples. Some of them even concede that such an act would be more complex, more open to financial speculation and the various forms of corruption and fraud that go with that, and at the same time very unlikely to even pass into law at this point in the U.S. (see, for example, “Building A Green Economy,” Paul Krugman, New York Times Magazine, April 11, 2010, for a defense of cap and trade). Given all that, there is no reason to invest any more hope in this scheme than in the others, and every reason to expose it for the dangerous fraud that it is. In fact, detailed and blistering exposures of cap and trade in particular have been done by Mark Schapiro in the February 2010 Harper’s, “Conning the Climate: Inside the carbon-trading shell game,” and James Hansen, “Cap and Fade,” New York Times, December 7, 2009. Schapiro in particular, after going deeply into both the theory and the actual practice of this scheme as it has been done in Europe, concludes that cap and trade is “an elaborate shell game, a disappearing act that nicely serves the immediate interests of the world’s governments but fails to meet the challenges of our looming environmental crisis.”

Whatever “greening” of the imperialist countries takes place occurs on the basis of the continuing ravaging and destruction by international capital of the oppressed countries. Rainforest destruction, toxic spills, etc., continue unabated in the countries where capital has no need for any “standards,” and this is a tremendous advantage to profitability. Thus, so long as we are inside the framework of imperialism, “greening” within the U.S. or Europe will be “paid for” by the exploitation of the oppressed countries and the lack of outlay for environmental protections there. 77% of the world’s resources are consumed by 20% of the world’s people. While in America people shower, wash and mainly freely drink (relatively) clean water (using 176 gallons per day on average), an average African lives on 5-6 gallons per day. This is about the same amount as 2-4 toilet flushes in the U.S.

Any environmental standards or regulations are always short term, subject to reversal if necessities of capital change. It is not just that individual blocs of finance capital and corporations are all tied into the government—though they are. Even more fundamentally, the “rules” of capitalism are relentless and much more powerful than any short-term environmental protections. James Speth, an environmentalist who actually spent years working in the highest reaches of the UN and the U.S. government on environmental issues, notes that whatever partial gains there have been such as on ozone or acid rain, “the threatening global trends highlighted a quarter century ago continue to this day and have become more serious and intractable.” “As a result, the climate convention is not protecting climate, the biodiversity convention is not protecting biodiversity, the desertification convention is not preventing desertification, and even the older and stronger Convention on the Law of the Sea is not protecting fisheries. The same can be said for the extensive international discussions on world forests, which never have reached the point of convention.”

Major political figures who operate within the framework of capitalism must ultimately enforce the interests of capital. Many people acknowledge that the Bush regime opened up massive destruction of the environment and undermining of standards. But Obama—who campaigned as an “environmentalist”—has announced plans to pursue offshore drilling, nuclear power, and so-called “clean coal.”

Even more basically, especially when confronted with the immense environmental dangers the world is facing, what is needed is nothing less than putting the needs of humanity and the environment first, and unleashing the creativity and initiative of
masses of people is actually what is needed—and no, that can’t happen under this system! Look at any natural disaster—be it Hurricane Katrina or the earthquake in Haiti—and the first thing these capitalist-imperialists do is to send in troops to clamp down on the people and put a stop to/sabotage the self-organized efforts of the masses to deal with the emergency. Capitalism can’t confront this problem and mobilize humanity to deal with it because any such mobilization could undercut its necessity to defend the “sanctity of private property” and to maintain masses of people in a suppressed and subordinate position. The interests of the capitalist class and the interests of humanity as a whole are in antagonism.

To sum up: any environmental laws passed by governments under capitalism will always be limited, partial, under constant assault, and overwhelmingly confined to the rich countries while pollution and destruction continue unabated in the poor countries. And as people spend their efforts and energies in fruitlessly and harmlessly “working through the system,” that very same system will generate even more devastating environmental problems.

Making Important Efforts—But Running into Obstacles

This is not to say that people are not taking important steps right now to combat environmental destruction. They are, and these efforts should be supported. For example, biologists and others have developed very important initiatives to preserve natural systems and prevent ecosystem collapse in diverse ecosystems in many regions around the globe. Some of these efforts involve very imaginative thinking to “rewild the world” by linking together natural ecosystems into larger cores of wilderness and to develop natural corridors in particular—around and over roads or other development—so that in particular top “apex” predator species that regulate whole ecosystems can travel to expand their range, migrate, etc. Some initiatives have met with some success—for instance, efforts to reintroduce wolves to the Yellowstone National Park area and to build corridors across busy highways have already had a positive impact. In other regions, however, these efforts run into tremendous difficulty—frustrated by big capitalist and other narrow interests, and also in many cases, by countries. For instance, efforts to develop corridors for top predators in the Mexico/U.S. border region have been prevented by U.S. Homeland Security building of border walls and fences.

In order for initiatives like this to really succeed in preserving critical ecosystems on the truly large scale needed, there is a need for bold initiatives that would often cross national boundaries and bring together unprecedented international cooperation among scientists and the people living in this region. Such efforts would need to overcome the ways the current system drives masses of people into cutting forests and poaching endangered species just to survive. These conservation efforts are extremely important but they are frustrated by the current capitalist relations. The new socialist system will be able to unleash such crucial initiatives.

Four Reasons Why “Green Technology” Is NOT the Answer

Some argue that the development of new “green technologies” under the current system can be the solution for the climate crisis. The thinking goes that more current “clean” technologies—like use of water power, wind and solar for energy, and development of new technologies—would be the magic bullet to solve the climate problem, for instance. The trick, they say, is to make these technologies profitable enough to attract the capitalists into investing in them—or else, get the governments to subsidize them.

Let’s look closer at this solution.

1 First of all, because of all the “rules” we have spoken to, capitalists are driven to do what they calculate will be most profitable. And the current energy system of extracting oil, coal and gas is tremendously profitable. This is why it is the overwhelmingly dominant form of energy use in the world, despite the fact that it is both unsustainable and tremendously destructive, and is now fueling potentially catastrophic climate change. Companies and countries must try to dig and drill for every last bit of fossil fuels because if they don’t, some other competitor will grab it up and drive them under. Even if the U.S. were to launch a major project to develop green technologies and subsidize them, these subsidies would still have to come, in the form of tax moneys, from the overall profits generated by capital. Other countries—including some that rely on their own advantage in resources in fossil fuel production—would see an opening and use the cheaper energy as a wedge to undercut U.S. economic dominance and the political and military power that is tied to it.

2 Second, tremendous resources, infrastructure and knowledge are invested in fossil fuel production already. Again according to capitalism’s “rules,” all this investment has to be recouped. But if fossil fuel energy is no longer to be used, how will that happen? Going along with that, switching into “green tech” would itself require a huge outlay of capital. So it’s not so easy under capitalism to just break out of this fossil fuel dependence, to switch to green technologies that may not hold as much promise of profit-making. This is reflected in the actual investments into fossil fuel technologies from major energy companies—which, contrary to the gauzy ads on public broadcasting TV, continue to dwarf by many times the investment in “green tech.” Indeed, as oil companies speak of “green technology” they are drilling deeper offshore in West Africa—and along with that, the U.S. government is propping up and reinforcing corrupt ruling cliques in that region and have even instituted a special U.S. military “African command” (AFRICOM) there.

3 Third, let’s suppose that it turns out that “green tech” could not, in the foreseeable future, produce energy more cheaply than burning fossil fuels. In a socialist or communist society a shift from burning fossil fuels to green tech could be made even despite that possibility because the needs of humanity and sustainability of natural systems would be the prime basis for decision making.

Actually saving the earth cannot be done within the framework of capitalism. It cannot be done by entrusting the fate of life on this planet to those whose only qualification is their history as the chief despisers of that life. This may be a hard truth to face—but face it one must. A whole new way must be found.
and interventions—for, just like oil, whoever could control this there would be a battle between capitalist powers leading to wars for low wages under very oppressive working conditions. And to produce this energy would be obtained by finding the places the most profit. The various machines and raw materials needed the battle would seek to charge as much as they could to make who would own it, who would profit from it. Those who won of this new energy—would battle over who would patent it, system capable of organizing the mass production and distribution monopolies and blocs of capital—the only groupings under this What would happen under this system? Immediately various breakthroughs and found ways to produce vast amounts of energy in cheap new ways that do not produce greenhouse gases. of “green tech” do come true—that scientists made great new relations. To follow this through, let’s assume the wildest dreams of “green tech” do come true—that scientists made great new breakthorughs and found ways to produce vast amounts of energy in cheap new ways that do not produce greenhouse gases.

Fourth, and even more fundamentally, technology exists and can only be used by one economic system or another—and if that system is capitalism, any new technology will and can only be used within the framework of capitalism’s “rules” and its power relations. To follow this through, let’s assume the wildest dreams of “green tech” do come true—that scientists made great new breakthroughs and found ways to produce vast amounts of energy in cheap new ways that do not produce greenhouse gases.

What would happen under this system? Immediately various monopolies and blocs of capital—the only groupings under this system capable of organizing the mass production and distribution of this new energy—would battle over who would patent it, who would own it, who would profit from it. Those who won the battle would seek to charge as much as they could to make the most profit. The various machines and raw materials needed to produce this energy would be obtained by finding the places where all this could be produced most cheaply, by people working for low wages under very oppressive working conditions. And there would be a battle between capitalist powers leading to wars and interventions—for, just like oil, whoever could control this technology could control and dominate the world. Moreover, what is to prevent the capitalists from using green technology to make things like weapons of mass destruction? (Is it surprising to learn that the Pentagon is very interested in green technology?)

So even if somehow, in the wildest dreams of “green tech,” this led to more seriously addressing the climate crisis—and all our previous arguments show why this is, to put it mildly, highly unlikely—all this would still take place within a capitalist system, that in myriad other ways would be polluting and degrading nature and also oppressing the world’s people.

Yes, we desperately need green technologies that can sustainably produce energy without destroying the environment by warming the planet. But these can only be of help in a totally different social system, geared to deploying technology for the good of the people—and NOT utilizing it with no other consideration than increasing profit. Actually saving the earth cannot be done within the framework of capitalism. It cannot be done by entrusting the fate of life on this planet to those whose only qualification is their history as the chief despooiers of that life. This may be a hard truth to face—but face it one must. A whole new way must be found.≈≈

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**Green Tech and the Story of Biofuels**

The development of biofuels today is a living example of what happens when new “cleaner” energy sources are developed under capitalist relations. With the promise of profit from producing more “environmentally friendly” fuels to replace oil and gas, capital was sunk into agricultural production of crops that could be turned into ethanol, biodiesel fuel, etc. When this turned out to be very profitable, capital flowed into production of such crops and away from food production. This flow of capital into crop production for biofuels was a major factor triggering food shortages and skyrocketing corn and grain prices. This hit poor countries with devastating force, since they depend so much on the world market for grains and other food needs. So “green” fuel crop development caused people in poor countries worldwide to starve. This is a tremendous indictment revealing the bankruptcy of this system.

And more, biofuel crops, such as oil palm trees, are being grown in countries like Indonesia by destroying the rainforests to clear land. This is releasing massive amounts of carbon dioxide. (see “Plunder of the rainforests in Indonesia”). So, growing biofuel crops to “cut greenhouse gases” ends up causing even more build-up of greenhouse gases. Why? Because all this takes place under the rules of capitalist commodity production.≈≈

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"From the standpoint of higher economic forms [socialism and communism], private ownership of the globe by single individuals will appear quite as absurd as private ownership of one human by another. Even a whole society, a nation, or even all simultaneously existing societies taken together, are not the owners of the earth. They are simply its possessors, its beneficiaries, and must hand it down to future generations in an improved state.” —Karl Marx
The U.S. military is not only the main enforcer of the system that is plundering the earth’s environment and its people—it is also the single largest institutional consumer of oil in the world. And the U.S. military and its global operations are a major source of carbon dioxide emissions contributing to global climate change.

Estimates are that as of 2004, the U.S. military consumed 144 million barrels of oil a year—or 395,000 barrels per day. Fifty percent of the Pentagon’s energy consumption is accounted for by jet fuel—one of the single most carbon polluting fuels in existence. Many of its vehicles consume so much fuel their consumption is measured in gallons burned per minute instead of miles per hour. The B1-B Lancer bomber, for example, burns 59 gallons a minute. The Abrams tank meanwhile goes 1/2 mile on a gallon of fuel. The U.S. soldier is the most gas guzzling, carbon polluting, environment destroying combatant in the history of warfare. A report from Oil Change International found that the carbon emissions produced by the military from the war in Iraq alone “equals the emissions from putting 25 million more cars on the road in the U.S. this year & If the war was ranked as a country in terms of emissions, it would emit more carbon dioxide each year than 139 of the world’s nations do annually.”

But now the military has been announcing how they are “going green.” And the reality is that the defense department is developing and using some renewable power. The twist is what this renewable power is used for. The U.S. Navy base torture center in Guantanamo is powered by a wind/diesel plant. So while prisoners are locked away indefinitely without charge and tortured, the military carrying out the torture is using “green technology.”

The military motivation for “going green” is to cut dependency on “foreign oil” and to prepare for the danger of dwindling oil reserves in the future. At the same time, because biofuels haven’t proved practical for powering its war fighting machines, the military is moving to rely more on synfuels—that is, synthetic fuels made from coal, oil shale and biomass. These are dirty fuels, producing more carbon than regular oil and gas. Claiming to “go green” (to defend U.S. interests), the U.S. military is a major source of climate change while warring on the planet—in part fueled by the drive to dominate and exploit the world’s fossil fuel energy reserves.

In addition to carbon emissions, the U.S. military is also one of the world’s major sources of other kinds of pollution and toxic waste. U.S. military bases, in the U.S. and especially worldwide, have spilled, dumped and left a toxic mess of petroleum products, solvents, chemical defoliants and heavy metals contaminating the soil, groundwater and waterways. In the U.S. as of 2004, 10% of “superfund” sites (the most polluted sites needing clean-up) were created by the military.

U.S. wars, invasions, and weapons testing sites have wreaked much worse havoc. They have caused untold devastation to people and the environment over decades. This includes the results from America dropping two atomic bombing on Japan—bombs which poisoned the people and countryside with radiation, in addition to killing over 100,000 people. During its war against Vietnam, they sprayed “agent orange” on the trees in the countryside to remove “the cover” of the guerrilla soldiers—this resulted in 400,000 deaths and disabilities, and 500,000 children born with birth defects. More recently, U.S. use of the Puerto Rican island of Vieques for target practice contaminated the soils and seas, and its illegal use of depleted uranium weapons in both wars against Iraq caused cancer rates and birth defects to skyrocket there. ≈≈

The U.S. military is one of the biggest polluters in the world. U.S. military bases, in the U.S. and especially worldwide, have spilled, dumped and left a toxic mess of petroleum products, poisonous chemicals, and other pollutants. Above photo shows artillery shells on the island of Vieques, Puerto Rico, where decades of U.S. military target practice has contaminated the soils and the seas. Photo: AP
“Borneo rainforests are one of the wonders of the natural world. They support at least 15,000 plant species, including more than 2,500 kinds of orchids.... There are flowers as big as deck chairs, one of the world’s largest butterflies, pygmy elephants, flying snakes, huge crocodiles, rhinoceros hornbills, a true rhinoceros so rare that there are just a few dozen left in the wild, and the orangutans.”
— “Among the Great Apes: Adventures on the Trail of our Closest Relatives” — Paul Raffaele

The last great tropical rainforests on earth lie along the equator—in the Amazon region of South America, and Asia and Africa. They are quickly disappearing—being logged off for timber, cleared and burned to grow soy beans, cattle, coffee, and palm oil—products to be sold on the international market.

Indonesia, a land of 17,000 islands in Asia, has 10% of the world’s remaining tropical rainforest. The Indonesian islands of Sumatra and Borneo (divided between Indonesia, Malaysia and Brunei) are lands of immense natural richness and biodiversity. They’re home of many unique species such as the Sumatran tiger, forest elephants, and the last remaining home of the orangutan—Asia’s only great ape. Indonesian biodiversity is so rich that it contains 10-16% of the world’s flowering plants, birds, mammals, reptiles and amphibians despite having only 1.3% of the world’s land surface. But this rich diversity of species is being threatened, as the land is plundered by logging for timber, and cleared for palm oil plantations. Almost three-quarters of Indonesia’s original forest is already gone. According to the United Nations Environmental Project (UNEP), at current rates of destruction, almost all of Indonesia’s forests will be gone by 2022.

Deforestation has driven Sumatran tigers almost to the point of extinction—only 400 or so remain in the wild. On Borneo, orangutans are endangered and on Sumatra, they are critically endangered. The forests orangutans live in are being wiped out and fragmented, often replaced by vast expanses of single crop oil palm trees. Orangs are being divided up by forest loss into smaller groups where it’s much harder for populations to interbreed. In 1997-98, massive forest fires on Borneo burned millions of acres, engulfing neighboring countries in polluting smoke. Palm oil growers intentionally set the great majority of these fires, to clear land. In the process, they exterminated as much as 1/3 of Borneo’s orangutan population—tens of thousands of animals. (Oil for Ape Scandal). At current rates of elimination, it is predicted orangs could go extinct within a decade. When they are gone, they will never be coming back.

Orangutans evolved in connection with living in the trees. They are incredibly agile swinging from branch to branch in the rainforest, but clumsy and fairly immobile on the ground. As their habitat is destroyed, these endangered apes are increasingly forced out of the forest onto the ground on palm tree plantations where they are often hunted and killed as “pests,” or captured and sold into the pet trade.

If the plunder of Asia’s rainforests was only causing ecological disaster by eliminating biodiversity and wondrous species, that would be bad enough. But the cutting and burning down of forests is also a major contributor to global warming. It’s been estimated that rainforest destruction in the world may contribute as much as 20% of the world’s greenhouse gas emissions. And rainforest destruction in Indonesia now releases so much carbon dioxide (CO2) into the air that the country is the 3rd largest emitter of CO2 in the world behind China and the U.S. Palm oil tree plantations are being developed with no regard for consequences to nature. Now palm plantations are even targeting peat lands—lands extremely rich in carbon bound up in roots and soil. The drying, draining and burning of these lands is particularly dangerous because of the great quantities of carbon that will be released.

Major multinational businesses and banks of most of the imperialist world—from Switzerland, Britain, the U.S., China and others are directly financing and profiting from sales of products based on rainforest destruction. And even more deeply, the role of the U.S. military and government, and the major financial institutions it controls, the World Bank (WB) and International Monetary Fund (IMF), lie at the heart of what set into motion and what is still driving rainforest destruction.

It was the U.S. government and U.S. military that trained top sections of the Indonesian military and backed the dictator Suharto in seizing power in Indonesia from nationalists in 1965. The CIA supplied lists of Indonesian Communists to Suharto’s military to be rounded up. The U.S backed and hailed Suharto as

Orangutan in Kalimantan, Indonesia, Photo: AP
he systematically killed between 250-750,000 leftists in setting up a brutal dictatorship. The IMF stabilized Suharto’s rule with a $51 million loan and promoted policies and development ploying Indonesia open to foreign capital. Under Suharto the destruction of rainforest for rubber plantations, mining, timber interests and palm oil sped ahead. Often Suharto’s own family and cronies benefited richly as well. During this time, Suharto’s military drowned East Timor in blood. They killed over 200,000 people to put down an independence struggle and turned East Timor into what its people called “the biggest prison island in the world.” All this could never have occurred without the support of the U.S., who saw Indonesia as a bulwark for its interests in a strategic part of the world.

Indonesia was trumpeted by the imperialist powers as being a key part of the “Asian miracle” until the Asian economy crashed in 1997. The World Bank admitted this “miracle” for Indonesia, had been the result of a strategy where Indonesia’s forests were treated “as an asset to be liquidated to support (its) growth strategy, establishing Indonesia as a world leader in the export of tropical forest products.” After the crash, Suharto was eventually forced from power and the U.S and IMF imposed new “austerity measures” forcing the Indonesian government to cut social programs and open Indonesia up even more to foreign investment. U.S., IMF and World Bank loans and bailouts dictated that Indonesia produce more crops for export—timber, paper pulp and palm oil, as the “way out” of the financial crisis.

Today, Malaysia and Indonesia produce at least 75% of the world’s palm oil and are competing to out-produce each other. Palm oil is used in everything from ice cream, to cosmetics, to margarine. And palm oil tree plantations are now the leading cause of rainforest destruction. Financing for these plantations comes from many sources, including the Asian Development Bank, several British and Swiss Banks, etc. And it is capitalist multinationals like Unilever, Nestlé, Proctor & Gamble, along with rich Indonesian interests, that profit from palm oil production.

Now, especially with rainforest destruction and climate change in the spotlight, it is common for these companies and imperialist financial groups to speak of “responsible” palm oil development and to bring forward programs they claim will “save the rainforests.” But looking underneath the hype reveals that “green” and capitalism just cannot go together. Instead, rainforests, as the World Bank admitted, continue to be just “assets to be liquidated.” For example, the World Bank touts its “strategic framework” for protecting rainforests and combating climate change. But an internal WB audit showed the Bank’s International Finance Corporation (IFC) has been fueling rainforest destruction— financing palm oil plantations with $200 million dollars despite being aware there were big dangers to the environment.

Palm oil is also used as a biofuel to replace oil and gas, with the logic that biofuels will be “cleaner” and not produce large amounts of carbon dioxide when burned. In the name of cutting greenhouse gas emissions, the European Union directed European countries to have 10% of transport fuel supplied by biofuels by 2020. But much of this will come from palm oil which is readily available and relatively inexpensive. And as we’ve shown, palm oil production itself is fueling climate change by destroying the rainforests with total disregard for the consequences, releasing tremendous quantities of carbon dioxide.

The destruction of rainforests, the annihilation of precious forest life and the massive release of carbon dioxide that results raise again the high stakes of the environmental emergency we face. ≈≈

Today, some efforts are underway to prevent environmental destruction—the photo here shows one of the wolves reintroduced to Yellowstone Park area (predators like wolves play a crucial role in preserving various ecosystems). However, under capitalism, such efforts are always limited, partial, under constant assault. Preserving and protecting ecosystems requires “taking the long view”—something that capitalism society, with its “get-rich-quick” mode of operating and “expand-or-die” nature, cannot do. By contrast, socialism makes it possible to take such a “long view.” Photo: National Park Service
Communism and Ecology: How Revolution Opens the Way for Humanity to Confront the Environmental Crisis and to Become the Caretakers of the Planet

The only viable way to deal with the crisis of the environment is revolution. The recent message and call from the Revolutionary Communist Party, USA, The Revolution We Need...The Leadership We Have, puts it this way:

"It is this system that has got us in the situation we’re in today, and keeps us there. And it is through revolution to get rid of this system that we ourselves can bring a much better system into being. The ultimate goal of this revolution is communism: A world where people work and struggle together for the common good...Where everyone contributes whatever they can to society and gets back what they need to live a life worthy of human beings...Where there are no more divisions among people in which some rule over and oppress others, robbing them not only of the means to a decent life but also of knowledge and a means for really understanding, and acting to change, the world.

In a country like the USA, socialist revolution is the first step in getting to, and struggling for, a communist world. The new state power of socialism is radically different from that of capitalism. It unfolds its priorities from the needs of humanity overall. Socialist society is organized around the principle of people working cooperatively and struggling for the common good. In a socialist economy, ownership and control of production is socialized through the socialist state. The means of creating wealth are placed in the service of society and humanity.

Under socialism, the rules of commodity production—of profit first, of expand or die—no longer set the terms and framework for what is possible and desirable to produce. This will be an incredibly liberating step. For the first time, it becomes possible to organize and coordinate production in a planned and rational way. It becomes possible to interact with the environment in a sustainable way. For the first time, the creativity of masses of people can be fully unleashed, with steps taken to open up the sphere of scientific understanding to all of society, while giving much greater, and more meaningful, scope to professional scientific endeavor. But, as this special issue has been emphasizing, humanity is facing an environmental catastrophe in the making. Time is running out.

Any new socialist society must, as a crucial priority, set out to protect and preserve a variety of ecosystems in order to prevent widespread environmental collapse and to ensure the well-being of the planet for future generations. Socialist society will promote deep understanding of people’s connection to nature and their responsibility to the planet.

The Real History of Socialist Revolution

In the contemporary world, there are no socialist countries. Socialism did exist in the Soviet Union in the years 1917-1956, and in China in the years 1949-1976. In 1976, after the death of Mao and the subsequent arrests of those closest to him in a military coup, socialism was reversed and capitalism was restored—even though some of the outer trappings of socialism have been retained.

But prior to that coup, and especially during the Cultural Revolution, socialist China accomplished extraordinary things. Life expectancy doubled between 1949 and 1976: from 32 years to 65 years. This was a society that put enormous focus on issues of gender equality, popularizing the slogan “women hold up half the sky.” Maoist China pioneered a model of balanced and self-reliant growth that provided food security. Industrial output grew by some 10 percent a year during the decade of the Cultural Revolution. Uniquely, socialist China’s industrialization was not at one and the same time a process of massive and uncontrolled urbanization.

In terms of China’s environmental orientation when it was a genuine socialist society (not the China of today): it undertook large-scale expansion of forests in the rural areas to prevent soil erosion; it invested in extensive water conservancy projects; and it encouraged wide use of indigenous bacterial fertilizers and microbe insecticides in farming. The recycling of waste by industry was a major feature of China’s socialist economy. And one of the most significant breakthroughs in economic-environmental management was the development of “area planning”: in addition to industrial plans, society was also carrying out all-around planning at the local and area levels that evaluated community and social impacts of economic growth.

There are positive lessons here. Still, these first socialist societies, including China, did not adequately grasp the importance of protecting the planet’s ecosystems. And since the time of these revolutions and their defeat, the degradation of critical ecosystems is reaching dangerous tipping points.

We Need A Truly Radical Approach

So we need a truly radical approach for developing a socialist society that is ecologically sustainable... a society that fosters an appreciation of the wonder and diversity of nature... and, critically, a society committed to saving this planet and making it habitable for human beings. Such an approach is possible.

On the one hand, scientists and others around the world have decades of experience, going back to the 1960s, studying...
environmental matters. They actually already know a lot about what needs to be done to reverse these destructive trends and prevent critical damage to the environment of this planet as a whole. And some important initiatives are being taken to protect ecosystems—like coral reefs. There is growing use of and experimentation with renewable sources of energy.

Yet and still, this is not happening on a large enough scale for it to be meaningful over the long term. Scientists and others keep hitting walls in trying to do what needs to be done. That is, they run smack up against the profit-above-all relations that dominate economic and social life on the planet and that constrain humanity from acting in the way it must to preserve the planet.

But the fact remains: conservationists and other scientists have long known much of what needs to be done, even as there are always new theories and debates about the scope and solutions to the environmental emergency. So this is one positive factor for coping with the environmental crisis in a new society.

On the other hand, there is a new breakthrough in understanding that can enable humanity to make the kind of liberating and multifaceted socialist revolution needed in today’s world. This is Bob Avakian’s new synthesis of communism. Avakian has built on the achievements of past revolutions, while critically sifting through and going beyond them in important ways; on that basis, he has synthesized a vision of socialism as a truly vibrant and transformative society. This new synthesis also provides the necessary orientation for spreading and promoting the world revolution.

Socialist revolution does not promise a utopia. Any new socialist society will face enormous challenges, pressures, and contradictions. There is the very gravity of the environmental emergency. A revolution will liberate people and unlock technical and scientific potential from the fetters of the capitalist system of ownership and profit. But revolution will also be wrenching. The imperialists will stop at nothing to preserve their rule; they will cause great destruction and dislocation. And any revolution that comes to power will, for some time, have to confront still considerable swaths of a hostile imperialist-capitalist world.

At the same time, the new society will face counter-revolutionary attempts from overthrown exploiters, as well as from some forces in power who would bring back capitalism. And socialist society will be riven with social divisions and backward ideas inherited from exploiting-class society. To make revolution, and keep it going forward, requires the leadership of a vanguard, communist party. The new leadership faces a monumentally complex task of both holding onto power, and making it a power worth holding onto—one that draws ever increasing masses of people into the administration of society, one leading a society full of ferment and vitality, one that is actually moving toward the goal of eliminating all class divisions and exploitative production relations, all oppressive social relations and institutions, and all the ideas that reflect them, and on that basis eliminating the state itself and the very need for any institutionalized leadership.

This is the historic challenge: to make revolution in this heartland of imperialism, to come out of what will be a convulsive struggle for power with the political and moral will, and continue to forge the will, so that the new socialist state and society can truly be a beacon—for the emancipation of humanity and for the preservation of the planet.

Socialist Society and Socialist Planning

Under capitalism, social production and economic calculation are governed by profit. Under socialism, this will no longer be the case. A socialist society and economy will be consciously working to promote and advance the world revolution towards a communist world. Economic decision-making and accounting will be governed by planned and rational production—and by the deployment of society’s skills, resources, and capabilities—to serve what is useful and important for the betterment of world humanity.

As a point of orientation, socialist society has to be proceeding, first and foremost, from the long-term interests of humanity and the planet. Preserving and protecting ecosystems requires “taking the long view”—looking ahead over many decades and generations. This is something that capitalist society, with its “get-rich-quick” mode of operating and the necessity imposed by expand-or-die competition, cannot do—and which has led to the situation we are now facing.

By contrast, socialism makes it possible to take such a “long view.” It allows for a whole new philosophy and way of doing things. To give some examples:

• Economic calculation in the new socialist society will be guided by broad criteria and goals: uprooting the inequalities carried over from the old society; environmental sustainability; achieving rational balances between industry and agriculture; seeking new ways to integrate town and country; overcoming the division between mental and manual labor. Funds and resources can be transferred from one sector, or from one region, to another in order to address such problems.

• Planning under socialism will be integrated and multidimensional. It will take in issues of health and the alienation from work that people might experience; it will forge new relations of community and cooperation. Attention will be paid to issues of cost and efficiency, but this will no longer be in the
interest and pursuit of profit.
• This will be a unified socialist economy. There has to be centralization: overall leadership and coordination, and an overall guiding sense of where things have to go. Unified and centralized socialist planning is essential to establish key priorities, such as overcoming the legacy of racism; to establish key requirements in production and technology; and to spread knowledge and breakthroughs in practice.

But centralization has to be combined with extensive decentralization: with local management, with grassroots initiative, with all kinds of incredible experimentation and discovery throughout society. All of this has to be summed up and learned from. There have to be all kinds of flows of information and experience. This is part of the dynamism of socialist society.

Planning With All of Society—And All of Life—In Mind
In the discussion of capitalism and the environment in this special issue, the concept of “externalities” was introduced. This refers to the fact that any given economic enterprise or sector of production has impacts, beyond its own operations, on the larger economy and society. Under capitalism, individual capitalists do not take into account these larger environmental and societal costs, of their activities, like pollution (and thus make society and future generations pay).

In a genuine socialist economy, the larger costs and benefits of economic activity must become the concern of society as a whole. On the one hand, at the highest planning levels, there must be deep and ongoing analysis of the problems and contradictions thrown up by economic development. On the other hand, all units and levels of society must function with a sense of larger social and global responsibility. And the socialist state must marshal the know-how and resolve of people to analyze and solve new problems and challenges presenting themselves to society and world humanity.

How would an interconnected economy and society function and make crucial decisions affecting all-around development in this model?

It will be very important at local levels for people to be rethinking and reconfiguring various aspects of the organization and processes of production, transport, and so forth. There will be both the technical capacity and social need to be developing alternative energy projects, innovating truly “green” industrial forms. There will be knowledge of conditions and the capability to mobilize to solve major problems. But activities at this level will still have broader economic and environmental effects. A local water conservancy project, for instance, will influence regional water balances and may create new strains on other users of water. Recycling may address some problems at local levels but not be sufficient to deal with longer-term problems of global warming.

There would be a spontaneous tendency for local units to decide issues of development based on their existing endowments of resources (material and social) and their own priorities. Some units will be better off and stronger than others and may seek to preserve these advantages. You need some centralized form, a national plan, with the scope and breadth of vision to coordinate and link different levels of society in a way that contributes to all-around societal development—and to consciously link all that to the larger goal of emancipating world humanity.

Large-scale operation and centralized coordination is needed to give coherence and direction to the numerous aspects of a just and rationally organized economic system—whether we are talking about regional and national transport, basic energy and the transitions away from fossil fuel, or the input-output requirements of industry.

Moreover, while any genuine socialist society would strive for the maximum participation in every sphere, will policies on overcoming racism, patriarchy and aiding revolution internationally be mainly subject to the moods of people in any given autonomous unit at any given time? Or what about the environment itself—isn’t the sustainable development of the world, and the preservation of large parts of it in more or less pristine form, going to require coordination on a whole new scale?

The frame of reference of a socialist society is not its own development as an end in itself. The point of departure must be this: how can the development of the socialist economy be shaped, and how can this society function, so that it benefits the entire planet, doing all it can to advance the world revolution—while this society is also meeting the urgent needs of people and contributing to their all-around development. Centralization carries with it real dangers of remote and out-of-touch decision-making that cuts against the long-term task of overcoming the separation of leaders and led. This too must be a problem that is put before socialist society. And it is critical that the role of decentralized decision-making and responsibility, and all kinds of initiatives from the grassroots, be enhanced at every stage to the greatest degree possible, within this overall framework.

Socialist planning—with centralization that concentrates the direction that society needs to go in, and decentralization that maximizes the scope of decisions being taken collectively at the local levels within the overall central plan—is a way to guide development in accordance with conscious revolutionary goals. And the most fundamental goal is the achievement of a world without classes. Socialist planning is, at the same time, a vast learning process.
A new socialist state power must concentrate the highest interests of revolution and the emancipation of humanity. This power must be used to radically remake society; and the masses of people must be increasingly drawn into the actual exercise of this power and the administration of new institutions of governance.

But this cannot happen without the leadership of a revolutionary party. This leadership must lead in identifying and solving key contradictions in creating a rational, socially just, and environmentally sustainable economy. And this must be a process of leading and learning—learning from all directions and quarters, from all perspectives, from all criticisms.

As part of the new synthesis, Bob Avakian has focused on the “unresolved contradictions” that will teem in socialist society. There are still tremendous social struggles and ideological battles to wage to overcome patriarchy and the legacy of the oppression of minority nationalities...still-existing social differences between professionals and intellectuals and those who are mainly working with their hands...still the need to use money...still gaps in development between regions. There will be tensions between centralization and decentralization in a planned socialist economy.

All of this will bring forward questioning, will bring forward new ideas, protest, dissatisfaction, struggle, and even upheavals. Is this a good or a bad thing? Avakian sees this as a driving force for continuing the revolution.

The new society will have to handle great contradictions. For instance:

• There is the need for a military capability to defend the revolution. But this cannot be the same kind of monstrous and oppressive military of imperialism.
• The new society will face great needs of reconstruction and of meeting the material and cultural requirements of the great majority of society, especially those who had been on the bottom and suffered enormously in the old society. There will be acute short-term necessity—not least, to provide shelter, food, and health care.

Such needs cannot be met by disregarding long-term effects on ecosystems. And in the name of “urgency,” it will be easy to fall back on old ways of doing things. These kinds of contradictions have to be analyzed and acted on—on the basis of a vision of a truly liberating and ecologically sustainable society and world.

So one of the biggest challenges of socialist society will be to balance long- and short-term requirements.

What is urgent? What is socially just? It will be necessary to phase in and phase out particular technologies, products, forms of transport, and so forth. How quickly can transitions from environmentally damaging production and energy systems be effected?

All of this will be a matter of continual concern and learning. And all this will also become questions of the class struggle in socialist society—because there will be political and social forces seeking to act on all these contradictions and requirements in a way that leads back to capitalism.

How will this learning and transformation go on? How will it be led? In speaking to this truly pivotal question, Avakian’s new synthesis is innovative, illuminating—and absolutely necessary.

Socialist State Power and the Unfettering of Science

A critical element of this new synthesis of communism is the importance it attaches to intellectual, scientific, and cultural ferment in socialist society. Science must be freed from all the institutional fetters and constraints of capitalism—in how capitalism limits and distorts scientific inquiry owing to commercial-corporate considerations and the role of a military serving the interests of global empire.

On the one hand, socialist society will need to mobilize scientists, engineers, and other specialists to work on pressing environmental problems. There will be a need to organize great efforts and enormously focused projects to address the kind of calamitous situation we face. A socialist society, freed from the dictates of profit and private control, will be able to prepare for and confront natural disasters such as floods, hurricanes and droughts, whose dangers and effects will require concerted and society-wide efforts and mobilization among professionals and basic people. It will be able to bring this capacity to bear on helping people in other parts of the world to deal with such natural disasters, like earthquakes.

On the other hand, society and humanity will also require far-ranging research, new thinking, and experimentation that will not be so directly related to focused projects within the socialist society. There must be room in socialist society for scientists ranging research, new thinking, and experimentation that will be useful for solving immediate problems—and this experimentation must also be supported and funded. Again, science must be unfettered.
Science will be popularized in society. The great debates among climate and environmental scientists—about how to solve the problem of global warming, about its scale, and how it is developing—these debates, these discussions, these insights will be popularized and taken up in society. Socialist society must be promoting understanding and debate worldwide.

And science must be uncloistered. There is the knowledge that comes from basic people in workplaces and communities. There is the knowledge that comes from basic people around the world—from farmers, fisherfolk, and people in pollution-impacted communities. Socialist society must be promoting all kinds of cross-pollination of understanding and experience: meteorologists and engineers exchanging knowledge about the sciences and scientific method with basic people getting into science, while professionals will be learning from the insights, experience, and aspirations of basic people.

Science will be popularized in society. For instance, the great debates among climate and environmental scientists—about how to solve the problem of global warming, about its scale, and how it is developing—these debates, these discussions, these insights will be popularized and taken up in society. Socialist society must be promoting understanding and debate worldwide.

Socialist society, through the socialist state led by a vanguard party, will need to establish priorities in development: in reconfiguring industry, in allocating funds and materials and protecting natural resources.

As mentioned, socialism will have to meet the great and immediate needs of the masses of people; at the same time that it has to be developing an economy that is no longer based on fossil fuels. That is going to require extraordinary innovation and extraordinary effort. It is going to require a correct understanding of priority and how to mobilize and unleash people to address these problems.

Socialist State Power and the Role of Dissent, Debate and Initiative “From Below”

But these policies, and indeed the very direction of society, all of this must be debated out broadly in socialist society. And, again, the unresolved contradictions of socialist society will give rise to controversy and struggle. This is a source of dynamism in socialist society.

Specifically with regard to the environment, Bob Avakian has given the example of Arundhati Roy. She is the novelist and social activist who has been in the forefront of struggles against the construction of environmentally destructive dams in India. Hydro-power is a renewable source of energy. But it is not always and everywhere a good thing. Will Arundhati Roy and people like her still be able to protest under socialism?

Avakian has emphasized that socialism must be a society where dissent is not only allowed but encouraged and valued. And people like Arundhati Roy must also be looked to—in order to help develop solutions to these very deep and serious environmental problems, even as there will be ideological struggle over issues of socialism, communism and where humanity is headed and needs to go. While the former capitalist exploiters will not be allowed rights to organize for their return, opposition among the broadest masses to various policies and even to socialism itself will not be suppressed—it will be debated and struggled over—as long as that opposition does not take the form of organized attempts to overthrow the socialist state.

There will also be initiatives “from below”—initiatives and projects which bubble up from different parts of society which are not directly led or inspired by the party, but which the party will need to learn from and give leadership to, as part of a very broad and encompassing process of moving forward.

This is all part of the process of getting at the truth of society and the world, of promoting critical thinking in socialist society, and enabling the masses to more deeply understand and more profoundly transform the world. And this will get very tense and wild at times, including protests and upheavals that can destabilize society. But all this is part of the process of getting to communism: maximum elasticity and experimentation—without losing power, without losing the revolution and everything it means for world humanity. You need visionary communist leadership, a solid core, as Avakian calls it, to lead this complex process forward.

With this understanding of socialism, it becomes clearer why the masses of people are the single greatest resource. And with all their creative energy, knowledge, and concern, the people can be mobilized to struggle out, to argue and debate, and work together to figure out how to build a society that truly emancipates humanity and that is working urgently to save the planet for current and future generations. ≈≈

Under socialist society, science must be freed from all the fetters and constraints of capitalism—in how capitalism limits and distorts scientific inquiry because of corporate considerations and the role of a military serving interests of a global empire. And the socialist society must be promoting all kinds of exchange of ideas and experiences between scientists and basic people. Above a marine biologist studies a coral reef on the Florida coast. Photo: NOAA
Some Key Principles of Socialist Sustainable Development

The following are some key principles of socialist sustainable development, which appeared as part of the special issue of Revolution newspaper on the environment (Issue #199, 4/18/10, revcom.us/environment). These principles, though not exhaustive, concentrate an orientation that enables socialist society to begin to tackle the environmental emergency with a global and internationalist perspective. In putting these principles before people today, we hope to open up debate and discussion that can contribute towards raising understanding of what we are confronting—and raise sights about the viability and desirability of communist revolution.

The International Dimension and Internationalism

The socialist state must use its strengths and resources to promote revolution. The new socialist state must be a “base area” for the world revolution. The emancipation of humanity demands this. The preservation of the planet demands this: for humanity to deal with the environmental crisis on the requisite scale and with the requisite urgency requires a totally different economic and social system and set of values. That requires socialist revolution and the spread of that revolution.

The new socialist society will put the interests of the preservation of the ecosystems of the entire planet above its own national development. It will encourage and give scientific, technical, and organizational backing for bold international initiatives to prevent widespread ecosystem collapse of coral reefs, rainforests, critical savanna regions, etc.

The new society will share scientific knowledge and technology with the rest of the world. It will contribute research to aid other parts of the world in dealing with various aspects of the environmental emergency—for instance, helping populations in low-lying poor countries deal with rising sea levels and flooding resulting from climate change.

Such initiatives will require unprecedented planet-wide cooperation of scientists and others, engagement of diverse populations and systems of governance, and the involvement of local communities. And the socialist state will seek to learn from the experiences, insights, and struggles of people around the world.

But for such initiatives to be truly effective and take hold over the long term, more of the world will have to break out of the capitalist stranglehold. Capitalist growth and development lead to massive environmental degradation. In the face of economic dislocation and societal breakdown, impoverished and desperate populations in vast parts of the world resort to environmentally destructive activities in order to survive. Civil wars fanned by the imperialists ravage land and water resources.

All of this emphasizes, again, why the new society must spread socialist revolution as far and wide as possible—and as fast as possible.

In its international relations, the new socialist society cannot be based on exploitation and plunder.

A revolution in the former United States will put an end to the pollution-intensive, cheap-labor, global manufacturing grids of production. The structure of production and the resource base of a new socialist economy will no longer rely on labor and materials from other countries—like cheap parts from hellish factories in Mexico and inflows of oil from abroad. The new society will provide technical and financial assistance for helping to clean up environmental damage in other parts of the world caused by the energy and mining operations, agribusiness and forestry, and industrial activities, as well as the export and dumping of toxic waste, of the former U.S. empire.

The new socialist state will immediately dismantle all military bases and occupations. It will vastly downsize the military industry and begin to convert huge components for productive, social use.

Consciously Planning and Regulating Growth; Protecting and Preserving a Variety of Ecosystems to Prevent Environmental Collapse and to Ensure the Health of the Planet for Future Generations

In place of the blind and environmentally reckless expansion of capitalism, a socialist sustainable economy will seek planned, regulated growth informed by:

- **Qualitative criteria.** Production must be organized to meet the needs of the great majority of society—raising the quality of living—and to meet the requirements of advancing the world revolution.
- **Awareness of natural limits and the interconnected web of fragile ecosystems.** Socialist society must undertake the necessary large-scale conservation of wilderness tracts and critical natural areas—and buffer them from intrusion and development. It must utilize resources to sustain people in a way that will replenish renewable resources and conserve non-renewable resources.
- **Recognition of the historical legacy of U.S. imperialism’s contribution to climate change.** The United States and Europe are responsible for about 60 percent of fossil-fuel carbon dioxide emissions currently in the atmosphere. The new society must act radically and urgently to cut carbon emissions and aim for energy conservation in all spheres.

This overall orientation will not only influence the specific mix of what is produced and how it is produced in the new socialist society. This orientation will influence levels of output, including decisions to consciously restrict or cut growth in particular sectors contributing to climate change and straining the planet’s ecosystems, and curbing the use of certain resources that are dwindling.

Transforming the Structure of Industrial Production, Agriculture, and Transport

The new socialist society will set out to transform the environmentally destructive structure and functioning of today’s imperialist economy:

- It must immediately begin to move decisively away from reliance on non-renewable and polluting fossil-fuel energy (oil, coal, and natural gas)—and to adopt and develop ecologically sound technologies, like solar, wind, and geothermal power. To move in this direction, the socialist economy must combine
diversified large-scale with diversified small-scale production, and
develop a rational mix of advanced and intermediate technologies.
• Major efforts must be made towards reorienting transportation
away from private automobile ownership and from the auto-
highway and fossil-fuel-centered systems of transport. Safe
and efficient mass transit will be given priority in all new
development, restructuring, and research.
• It will be necessary to develop agricultural systems based on
principles of long-term land-use planning, comprehensive soil
and water conservation, and agro-biodiversity. These agricultural
systems—large, medium, and small-scale—must allow for
technologies and practices that can be locally adapted, fitted to
particular conditions, and that can respond to climate change
and changes in demand. In reorienting agriculture, the goal must
be to achieve high and sustainable yields of agricultural goods
and healthful food products that minimize use of resources and
minimize damage to nature and to people.
• Socialist society must be working to make conservation of
resources a standard in all aspects of economic and social life:
in technology development, in production, in the consumer
goods that are produced and how they are used. It must promote
recycling and multi-use of materials and products—this in place
of the irrational upgrading of products (annual “new models”) and
the wasteful consumption of materials of capitalist society.

A Different Kind of City and Social Fabric

Given their privileged position in the global division of labor, the
imperialist countries have evolved in a certain way. Their
economies, and where people work and live, depend on high
levels of mobility, the automobile complex, and long-distance,
energy-intensive supply chains.

The system of production in a sustainable socialist economy
cannot be focused on this kind of supply and delivery system.
It must aim towards a system of interchanges within local and
regional economies functioning as part of a unified socialist
economy.

Cities must become more sustainable—more capable of
producing more to meet basic needs and requirements, including
efforts to develop local urban food production. The huge
and wasteful consumption of energy associated with the parasitic
commercialization of the contemporary city—office structures
serving global financial invest-ments, advertising, insurance,
etc.—will be transformed. The kind of intensive and speculative
commercial and residential development encroaching on “green
spaces” in the areas outside of cities, in suburbs and “exurbs,” will
be put a stop to.

Economic-social planning will strive to connect work that is
meaningful and creative with people’s sense of community—and
forge new relations between work and where people live. Planning
will seek to create a new kind of “social space” in the cities, where
people can interact, organize politically, create and enjoy culture,
and relax. At the same time, planning must seek to break down the
distinctions between the cities and the outlying suburban and rural
areas—and find new ways to integrate the economic and social
activities of these adjoining regions.

Struggling Against Consumerism

A sustainable socialist economy in the former United States
will strive to produce a rational variety of consumer goods. But
this will not be the same “consumer society” (it would take the
resources of almost five earths if the rest of the world had the same
ecological footprint of the average person in the United States).

The “convenience” of having Indonesian workers cater to the
athletic clothing needs, or peasants and plantation workers in
Kenya and Jamaica catering to the upscale coffee sensibilities of
people in this society—that will be no more. The “convenience”
of the “Wal-Mart price,” based on super-exploitation and
environmental damage abroad, will be no more (and Wal-Mart
will be no more).

Consumer goods must be functional and durable (not the “used
once and thrown away” of today). Society will pay attention to
changing demand, taste, and aesthetic. But there will not be the
same obsession with private consumption, with the need to define
yourself on the basis of what and how much individuals own
and consume. This will be a matter of education and ideological
struggle in society.

With the transformation of social life—with the creation of
more “social space” allowing for richer and more meaningful
connectedness among people—new values can take hold. With
people gaining greater awareness of humanity’s connectedness
to nature, and of the ecological cost that imperialist “consumerism”
has exacted, attitudes can change.

Valuing the Planet,
Becoming Caretakers of the Planet

There is an ecological imperative for us to care about and value
the planet. We depend for our survival on the natural world, from
green plants that produce oxygen to other living species that
provide food and medicine; we cannot live without fresh water,
nutrient-rich soils, and clean air. At the same time, we are linked
with the natural world: through complex evolutionary chains and
through networks of ecosystems that provide flows of energy for
life to maintain itself.

There is a moral imperative to care about and value the planet.
We must strive to become the stewards of the planet: protectors
and enhancers of the natural world of which we are part, and
with which we are always interacting and transforming. Knowing
more about our connections with the natural world and our
responsibilities to it also enriches us as human beings.

There is an urgent time line to act: if we do not protect and
preserve fast-vanishing natural ecosystems around the world, if we
do not move to stem climate change, this planet could very well
become uninhabitable for billions of people, and possibly all of
humanity.

This is our orientation. Revolution makes it possible
to live lives worthy of human beings and to protect
the environment. It is why socialist revolution, and
the creation of a new socialist state in one or several
countries, would have an incredible effect on the
world. The establishment of even one new socialist
state—especially in a significant country, in terms
of geography and population—would dramatically
change political alignments in the world. It would
give hope and inspiration to people throughout the
world. This heightens our determination to make that
revolution and to call on others to join and contribute
to this most vital undertaking. ≈≈≈
The following are brief explanations of some of the terms used in this issue of Revolution:

**Ecosystem**: An ecosystem is a system that includes all the living organisms (the plants, animals and micro-organisms like bacteria) in an area, as well as its physical environment (the climate, land, waters, etc.). Organisms in any given ecosystem are interdependent and interact with each other.

**Ecology**: The branch of biology which investigates the interactions of organisms with one another and with their physical environments, and the larger patterns and dynamics of whole ecosystems.

**Habitat**: The location and features of the area in which an organism lives. For instance, many rattlesnakes live in a desert habitat.

**Imperialism**: Imperialism is the globally integrated system of capitalist production and exploitation, and political power relations, that emerged in the late 19th century. Imperialism means the domination of economic life by huge blocs of capital, where massive monopolies and gigantic banks are intertwined; the concentration of capital in a handful of wealthy countries (the U.S., the European powers, Japan, etc.) and the super-exploitation by that capital of the people of the impoverished world (Asia, Africa, Latin America) and the domination of those nations through war, occupation and colonial or neocolonial political control; and rivalry between the imperialist powers themselves, often leading to war or other forms of deadly competition.

**Capitalism**: A system of economic relations, and the political power that defends and extends those relations, which is based on the private ownership and control of socially worked means of production (the resources, factories, farms, laboratories, etc. through which society creates things to meet its needs). This system rests on the exploitation of those who own no such means by those who do, and the appropriation of the wealth produced thereby. This system of production is driven forward through the competition between competing owners of capital, leading to anarchic, unplanned expansion.

**Tipping point**: A point when the momentum for change becomes unstoppable. Tipping points in the warming of the earth refer to unstoppable climate impacts, irreversible on a practical timescale, such as the disintegration of large ice sheets, extermination of animal and plant species, and regional climate disruptions.

**Global climate change**: Changes in climate that may occur on a timescale of years and decades or over centuries, affecting earth as a whole. While climate changes vary from region to region, global climate change involves changes in average global temperature on land and in the ocean; regional temperature changes; changes in global rainfall patterns, storm intensities or frequencies; changes in ocean currents, ocean level, wind and weather patterns, etc. Climate varies naturally according to many factors but on earth today climate change is happening much more quickly than most natural variation or past climate change in earth’s history and is primarily the result of human activity. It is mainly caused by the warming of the planet from the build-up of greenhouse gases (carbon dioxide, methane, water vapor and others). This buildup has begun over the last 200 years with capitalist production and is now accelerating, as a result of burning of fossil fuels (coal, oil and gas), as well as deforestation, and other causes.

**Species**: A basic unit of biological classification, involving a group of organisms that have common characteristics and that are generally capable of interbreeding (mating with one another) and producing viable offspring (young which will be able to survive and reproduce). To qualify as a species, a group of organisms has to be reproductively incompatible with all other species.

**Organism**: An individual living thing that can react to stimuli, reproduce, grow, and maintain a stable internal environment. It can be a virus, bacterium, protist, fungus, plant or an animal.

**Biodiversity**: The existence of a wide range, a large diversity, of different types of plant and animal life in a given place at a given time.

At the December 2009 climate conference in Denmark, the U.S. and other great powers contended with each other for advantage instead of seriously dealing with the problem of global climate change. Protesters, some of whom have dedicated their lives to saving the planet, were locked out, often arrested, and sometimes beaten by the police—like the protesters in the photo above.

*Photo: AP*
CONSTITUTION
For The
New Socialist Republic In North America
(Draft Proposal)
From the Revolutionary Communist Party, USA

TAKE A RADICAL STEP INTO THE FUTURE...
Based on the new synthesis of communism developed by Bob Avakian, this radical constitution provides a framework for a whole new society: a new political system in which the will of the people will be expressed... and a new economic system that will actually be geared to meeting people's material needs, and will have, as a fundamental principle governing the development of the economy, “protecting, preserving, and enhancing the ecosystems and biodiversity of the planet for current and future generations.”

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Destruction of the rain forest, Riau province, Indonesia. Photo: Greenpeace
This system and those who rule over it are not capable of carrying out economic development to meet the needs of the people now, while balancing that with the needs of future generations and requirements of safeguarding the environment. They care nothing for the rich diversity of the earth and its species, for the treasures this contains, except when and where they can turn this into profit for themselves... These people are not fit to be the caretakers of the earth.

Bob Avakian
Chairman of the Revolutionary Communist Party, USA

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