Newsweek 15.06.2011

A Roadmap for the Planet

How we live today is clearly unsustainable. Why history proves that is completely irrelevant.

By Bjørn Lomborg

From the 18th through the mid-19th century, whale oil provided light to much of the Western world. At its peak, whaling employed 70,000 people and was the United States' fifth-largest industry. The U.S. stood as the world's foremost whale slayer. Producing millions of gallons of oil each year, the industry was widely seen as unassailable, with advocates scoffing at would-be illumination substitutes like lard oil and camphene. Without whale oil, so the thinking went, the world would slide backward toward darkness.

By today's standard, of course, slaughtering whales is considered barbaric.

Two hundred years ago there was no environmental movement to speak of. But one wonders if the whalers, finding that each year they needed to go farther afield from Nantucket Island to kill massive sea mammals, ever asked themselves: what will happen when we run out of whales?

Such questions today constitute the cornerstone of the ever-louder logic of sustainability.

Climate alarmists and campaigning environmentalists argue that the industrialized countries of the world have made sizable withdrawals on nature's fixed allowance, and unless we change our ways, and soon, we are doomed to an abrupt end. Take the recent proclamation from the United Nations Environment Program, which argued that governments should dramatically cut back on the use of resources. The mantra has become commonplace: our current way of living is selfish and unsustainable. We are wrecking the world. We are gobbling up the last resources. We are cutting down the rainforest. We are polluting the water. We are polluting the air. We are killing plants and animals, destroying the ozone layer, burning the world through our addiction to fossil fuels, and leaving a devastated planet for future generations.

In other words, humanity is doomed.

It is a compelling story, no doubt. It is also fundamentally wrong, and the consequences are severe. Tragically, exaggerated environmental worries—and the willingness of so many to believe them—could ultimately prevent us from finding smarter ways to actually help our planet and ensure the health of the environment for future generations.

Because, our fears notwithstanding, we actually get smarter. Although Westerners were once reliant on whale oil for lighting, we never actually ran out of whales. Why? High demand and rising prices for whale oil spurred a search for and investment in the 19th-century version of alternative energy. First, kerosene from petroleum replaced whale oil. We didn't run out of kerosene, either: electricity supplanted it because it was a superior way to light our planet.

For generations, we have consistently underestimated our capacity for innovation. There was a time when we worried that all of London would be covered with horse manure because of the increasing

use of horse-drawn carriages. Thanks to the invention of the car, London has 7 million inhabitants today. Dung disaster averted.

In fact, would-be catastrophes have regularly been pushed aside throughout human history, and so often because of innovation and technological development. We never just continue to do the same old thing. We innovate and avoid the anticipated problems.

Think of the whales, and then think of the debate over cutting emissions today. Instead of single-mindedly trying to force people to do without carbon-emitting fuels, we must recognize that we won't make any real progress in cutting CO2 emissions until we can create affordable, efficient alternatives. We are far from that point today: much-hyped technologies such as wind and solar energy remain very expensive and inefficient compared with cheap fossil fuels. Globally, wind provides just 0.3 percent of our energy, and solar a minuscule 0.1 percent. Current technology is so inefficient that, to take just one example, if we were serious about wind power, we would have to blanket most countries with wind turbines to generate enough energy for everybody, and we would still have the massive problem of storage. We don't know what to do when the wind doesn't blow.

Making the necessary breakthroughs will require mass improvements across many technologies. The sustainable response to global warming, then, is one that sees us get much more serious about investment into alternative-energy research and development. This has a much greater likelihood of leaving future generations at least the same opportunities as we have today.

Because what, exactly, is sustainability? Fourteen years ago, the United Nations World Commission on Environment and Development report "Our Common Future," chaired by Gro Harlem Brundtland, provided the most-quoted definition. Sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs." The measure of success, then, is whether or not we give future generations the same opportunities that we have had.

This prompts the question: have we lived unsustainably in the past?

In fact, by almost any measure, humans have left a legacy of increased opportunity for their descendants. And this is true not just for the rich world but also for developing countries. In the last couple of hundred years we have become much richer than in all previous history. Available production per capita—the amount that an average individual can consume—increased eightfold between 1800 and 2000. In the past six decades, poverty has fallen more than in the previous 500 years. This decade alone, China will by itself lift 200 million individuals out of poverty. While one in every two people in the developing world was poor just 25 years ago, today it is one in four. Although much remains to be done, developing countries have become much more affluent, with a fivefold increase in real per capita income between 1950 and today.

But it's not just about money. The world has generally become a much better educated place, too. Illiteracy in the developing world has fallen from about 75 percent for the people born in the early part of the 1900s to about 12 percent among the young of today. More and more people have gained access to clean water and sanitation, improving health and income. And according to the U.N. Food and Agriculture Organization, the percentage of undernourished people in the developing world has dropped from more than 50 percent in 1950 to 16 percent today.

As humans have become richer and more educated, we have been able to enjoy more leisure time. In most developed countries, where there are available data, yearly working hours have fallen drastically since the end of the 19th century: today we work only about half as much as we did then. Over the last 30 years or so, total free time for men and women has increased, thanks to reductions in workload and housework. Globally, life expectancy today is 69. Compare this with an average life span of 52 in 1960, or of about 30 in 1900. Advances in public health and technological innovation have dramatically lengthened our lives.

We have consistently achieved these remarkable developments by focusing on technological innovation and investment designed to create a richer future. And while major challenges remain, the future appears to hold great promise, too. The U.N. estimates that over this century, the planet's human inhabitants will become 14 times richer and the average person in the developing world a whopping 24 times richer. By the end of the century, the U.N. estimates we will live to be 85 on average, and virtually everyone will read, write, and have access to food, water, and sanitation. That's not too shabby.

Rather than celebrating this amazing progress, many find it distasteful. Instead of acknowledging and learning from it, we bathe ourselves in guilt, fretting about our supposed unsustainable lives. Certainly many argue that while the past may have improved, surely it doesn't matter for the future, because we are destroying the environment!

But not so fast. In recent decades, air quality in wealthy countries has vastly improved. In virtually every developed country, the air is more breathable and the water is more drinkable than they were in 1970. London, renowned for centuries for its infamous smog and severe pollution, today has the cleanest air that it has had since the Middle Ages.

Today, some of the most polluted places in the world are the megacities of the developing world, such as Beijing, New Delhi, and Mexico City. But remember what happened in developed countries. Over a period of several hundred years, increasing incomes were matched by increasing pollution. In the 1930s and 1940s, London was more polluted than Beijing, New Delhi, or Mexico City are today.

Eventually, with increased affluence, developed countries gradually were better able to afford a cleaner environment. That is happening already today in some of the richest developing countries: air-pollution levels in Mexico City have been dropping precisely because of better technology and more wealth. Though air pollution is by far the most menacing for humans, water quality has similarly been getting better. Forests, too, are regrowing in rich countries, though still being lost in poor places where slash-and-burn is preferable to starvation.

These days, of course, the specter of global warming overshadows any discussion of the environment. Even if we are making progress elsewhere on air pollution, water pollution, or reforestation, what difference does it make when we are overheating the planet? Global warming is caused by our reliance on fossil fuels. It is going to exacerbate many of the issues that we experience today, and in some of the world's poorest regions it will slow our progress against malnutrition and disease. It is certainly a real problem. However, far too often we exaggerate its impact and indulge in fearmongering with imagery of devastation of biblical proportions.

We know from experience that more prosperous countries are more able to respond to the challenges that climate change will pose. They are much more resilient to natural disasters while more able to

invest in measures such as greener cities and flood protection. Yet instead of first making sure that everybody is better off and more resilient, our response to global warming has been to try to cut back carbon emissions too soon. In reality, this means reining in growth and making do with less than we could have otherwise.

But this approach flies in the face of history. The way we have made progress against disease, malnutrition, and environmental degradation in the past is by growing, by discovering, and by innovating. Naturally, it is a hard sell to tell the hundreds of millions of people lifted out of poverty in China and elsewhere that they ought to stop burning coal, roll back their prosperity, and go back to a life of poverty.

Not surprisingly, since industrialized nations first promised with great fanfare in Rio de Janeiro to cut emissions to 1990 levels by 2000, our approach of early and substantial cutbacks has failed repeatedly. Despite not meeting emission-cut promises in Kyoto and failing even to agree on promises in Copenhagen in 2009, negotiators plan to try again in South Africa later this year. Making empty promises does not make us sustainable.

Anybody who has traveled through polluted industrial areas of China or other developing nations knows that we have serious challenges to resolve. But our journey of the last centuries does show that developing better technology has most often been how humanity has achieved better lives and less pollution.

We forget too easily that innovation and ingenuity have solved most major problems in the past. Living sustainably means learning the lessons from history. And chief among those is that the best legacy we can leave our descendants is to ensure that they are prosperous enough to respond resiliently to the unknown challenges ahead.

Lomborg directs the Copenhagen Consensus Center and is the author of The Skeptical Environmentalist and Cool It.