

# A Brief History of Sustainability

by David Sarokin



A 17th-century depiction of the Peach Blossom Spring

Tao Yuanming, a Chinese poet of the Jin Dynasty, wrote his most famous work, *The Peach Blossom Spring*, in 471 A.D. It tells the tale of a fisherman who accidentally stumbles across a secret community that has been hidden away for centuries, isolated from the turmoil of the outside world. It is a beautiful, serene and happy place, the air rich with the scent of peach blossoms. Its people are healthy and prosperous, farms are lush and productive, dogs and chickens frolic in the yards outside the well-built homes. The fisherman enjoys the community's hospitality for a time, then leaves, intending to reveal the secret location to his masters. But he forgets the way back and never returns. The Peach Blossom Spring is again lost to the outside world.

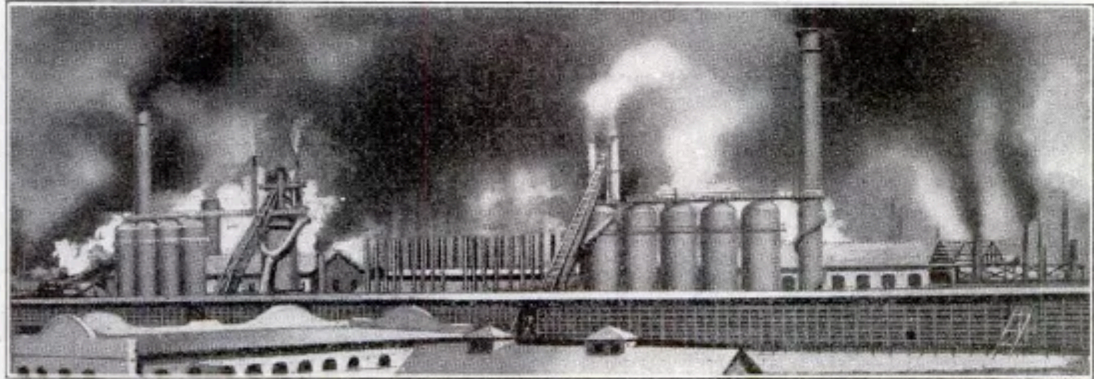
The ideal community is a staple of historical literature and cultural legend. Humankind begins in a seemingly perfect (if rather sparsely populated) Garden of Eden. Oral traditions of paradise on earth are prevalent among numerous aboriginal peoples, including the Maoris in New Zealand

and Native Americans in Canada and the United States. Plato's Republic describes the workings of an idealized society in a complex city-state, Kallipolis, ruled by a wise and just philosopher-king. Thomas More gave us the term Utopia in his book of the same name, written in 1516, describing a near perfect island society, a theme echoed in the 1936 novel Lost Horizon with its mystical community of Shangri-La.

Of course, writers and philosophers haven't always been so sanguine about the human condition; Adam and Eve did get their eviction notice, after all. Beyond simply bemoaning the human condition, however, observers came to suspect that achieving Utopia is an impossible dream. Thomas Malthus warned in 1798 that population growth pretty much doomed a large mass of humanity to a miserable life, echoing Thomas Hobbes' "nasty, brutish and short" commentary of the previous century. Malthus almost single-handedly gave economics a reputation as the "dismal science." Henry George's 1879 treatise, Progress and Poverty: An Inquiry into the Cause of Industrial Depressions and of Increase of Want with Increase of Wealth, became an international best seller, decrying the depths of poverty in a world growing ever-more wealthy, and more or less kicking off the Progressive Era.

Garret Hardin's influential 1968 essay, The Tragedy of the Commons, revisited Malthus's grim notions, arguing that human self-interest, exercised over a large scale, would almost inevitably lead to the destruction of our vital natural resources. The same year, Paul Ehrlich published The Population Bomb, predicting large-scale famine as the human race grew at a rate that far outpaced its ability to feed itself, followed by Barry Commoner's more hopeful, The Closing Circle, making the case for restructuring societal decision-making so that we can respond effectively to environmental and resource decay.

Physical scientists weighed in. The 19th century Swedish chemist, Svante Arrhenius, wondered if humanity's emission of carbon dioxide wasn't altering the heat balance of the planet, and made some surprisingly accurate predictions about global warming. Scientists began quantifying CO<sub>2</sub> emissions in the early 1900s and speculating about potential warming impacts. By the 1950's, concerns had crystalized to the point where popular newspaper articles carried warnings that emissions from fossil fuels would "upset the rather delicate carbon dioxide balance" in the atmosphere, possibly leading to "large scale global warming with radical climate changes ...". Simultaneously, there emerged the Peak Oil Theory, arguing that we were rapidly reaching the limits of the earth's extractable petroleum resources. Rachel Carson's Silent Spring (1962) sounded the alarm about pesticides. The first annual report in 1970 of the newly-created Council on Environmental Quality included a chapter on the "...Inadvertent Modification of Weather and Climate ."



The furnaces of the world are now burning about 2,000,000,000 tons of coal a year. When this is burned, uniting with oxygen, it adds about 7,000,000,000 tons of carbon dioxide to the atmosphere yearly. This tends to make the air a more effective blanket for the earth and to raise its temperature. The effect may be considerable in a few centuries.

*Excerpt from Popular Mechanics in 1912*

The Limits to Growth report (1972) from the Club of Rome brought computer modeling to global forecasting, and warned that the world had about a hundred years left before we begin running out of just about everything. The theme of diminishing resources and excessive growth was echoed in 1973 in E.F. Schumaker's classic economic treatise, *Small is Beautiful* who labeled society's unsustainable path as "*...conducting the economic affairs of man as if people really did not matter at all*".

As if to emphasize these themes, the world experienced its first "Energy Crisis" in 1973 and again in 1979, as gasoline and other fuels suddenly became a scarce commodity, though the shortages were more of a political creation than a matter of diminished resources. The concerns, though, have not abated in the intervening decades. In a 2019 interview, Jared Diamond, discussing his latest book, *Upheaval*, offered his speculation about the future:

*I would estimate the chances are about 49 percent that the world as we know it will collapse by about 2050...At the rate we're going now, resources that are essential for complex societies are being managed unsustainably ...by 2050 either we've figured out a sustainable course, or it'll be too late.*

And there it is: sustainability. The earth's resources can be managed either sustainably or unsustainably. Currently, we seem bent on the latter -- at least as far as Jared Diamond and others see it -- and are doing great damage. Some of it, like loss of species, is irreversible: the Tasmanian tiger and the passenger pigeon are extinct and won't be seen again. Other types of

damage may be less permanent; polluted sites can be remediated, lost wetlands can sometimes be restored, endangered species can be protected.

Concerns about sustainability, or the lack of it, often focus on the earth's natural resources and the limits of things like clean air, water and land that once seemed inexhaustible. Corporations, in particular, seem to embrace the environmental aspects of sustainability as the most concrete areas where companies can set goals, document progress and achieve results that benefit both the bottom line as well as the broader environmental good.

But sustainability is about much more than just avoiding environmental damage. Thriving natural systems are fine, but thriving human systems are also necessary to achieve a truly sustainable world. Sustainability entails matters of economic equity, financial security, human dignity and social justice, all with a weight equal to any environmental concerns. Sustainability is often envisioned as a three-legged stool representing the Environmental, Societal and Economic aspects of moving a few steps closer to achieving paradise on earth.

More robust descriptions have also been embraced, like this image popular with a number of international organizations...



Not everyone is convinced, of course, that we are as unsustainable as some fear. Malthus notwithstanding, we haven't arrived at the point of Jonathan Swift's "Modest Proposal" that we

solve food shortages by consuming our children (a notion revisited in *Soylent Green*). Some things in the world *have* gotten better. People live longer and a higher percentage of the global population is more educated and less impoverished than ever before. By some measures, the world is a less violent place, as well, though one can be excused for not believing this after watching the nightly news.

Human ingenuity has solved some of our most intractable problems. It will take care of our future as well. Or so the sustainability skeptics imagine. The urgency-versus-skepticism tension creates an interesting dynamic in a corporate world striving to be -- or at least, appearing to strive to be -- much more sustainable.

## **Sustainability: A Brief Timeline**

The International Union for Conservation of Nature is a Swiss-based organization best known for maintaining its comprehensive "Red List" of threatened and endangered species. In 1980, IUCN published the World Conservation Strategy, urging governments and international organizations to better protect the world's natural resources.

Although focused on environmental protection, the report recognized the necessity of tackling problems of human poverty, both as a moral imperative and as a means of furthering protections of natural resources. Degradation of the natural world was seriously undermining the capacity of the planet to support a rapidly-expanding human population. The World Conservation Strategy was subtitled: *Living Resource Conservation for Sustainable Development*.

The IUCN report captured the essence of sustainability with its statement that "*...we have not inherited the earth from our parents, we have borrowed it from our children.*" The report drew little attention, though, outside the community of wildlife and policy experts that professionally focus on these matters. Sustainable development had its breakout moment several years later, with the publication of yet another report, this time from the United Nations.

The UN asked the former prime minister of Norway, Gro Harlem Brundtland, to head up an effort known as the World Commission on Environment and Development. The commission would help galvanize country efforts towards more systematic protection of the environment and commitments to pulling the bulk of humanity out of poverty. The Brundtland Commission, as it came to be known, released its call to action in its 1987 report entitled *Our Common Future*. Sustainable development was central to the charge of the commission and provided the overarching theme of its final report.

The report makes a point of noting the key dramatic challenges that motivated much of the concerns of the day:

*"The World Commission on Environment and Development first met in October 1984. and published its Report 900 days later, in April 1987. Over those few days:*

- *The drought-triggered, environment-development crisis in Africa peaked, putting 36 million people at risk, killing perhaps a million.*
- *A leak from a pesticides factory in Bhopal, India, killed more than 2,000 people and blinded and injured over 200,000 more.*
- *Liquid gas tanks exploded in Mexico City, killing 1,000 and leaving thousands more homeless.*
- *The Chernobyl nuclear reactor explosion sent nuclear fallout across Europe, increasing the risks of future human cancers.*
- *Agricultural chemicals, solvents, and mercury flowed into the Rhine River during a warehouse fire in Switzerland, killing millions of fish and threatening drinking water in the Federal Republic of Germany and the Netherlands.*
- *An estimated 60 million people died of diarrhoeal diseases related to unsafe drinking water and malnutrition; most of the victims were children."*

To address the interlocking environmental and societal issues documented in the report -- issues that threaten not only the current population, but future populations as well -- the Brundtland Commission embraced a definition of sustainable development that has become widely known:

*Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.*

The report goes on to note:

*...technology and social organization can be both managed and improved to make way for a new era of economic growth. The Commission believes that widespread poverty is no longer inevitable. Poverty is not only an evil in itself, but sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes.*

The Brundtland Report galvanized a flurry of high-level attention to sustainability, culminating in a two-week-long meeting in Rio de Janeiro, convened by the United Nations, to create an internationally-approved set of sustainability goals. The importance given to the 1992 Earth Summit, as the meeting was known, is reflected in its attendance: to this day, it is considered the largest collection of political leaders to ever convene in one spot, with 172 countries represented and 108 heads of state participating in person.

The Earth Summit produced an enormous amount of spectacle, verbiage and controversy, but also laid the foundations for the sustainability movement in the decades ahead. The meeting resulted in a document focused on the 21st century, Agenda 21, detailing a set of non-binding goals and action items that, it was hoped, would be pursued by the nations, organizations and corporations in attendance. Follow-on events focused on building momentum, tracking progress and responding to new concerns. Nations and regions responded with their own goals and plans,

such as the President's Council on Sustainable Development, convened in 1996 in the U.S., and the Sustainable Development Strategy adopted by the European Union in 2001.

The United Nations continued to play a leading role in the international dialogue on sustainability, convening major meetings to refine and update goals. These included the World Summit on Sustainable Development in Johannesburg in 2002, and the Rio+20 meeting in 2012.

The UN being what it is, countries played the major role in organizing these international sustainability forums, coming to consensus on the outcomes and, it must be noted, limiting their actual obligations. But national governments were far from the only presence. Non-governmental organizations sent thousands of participants, some to the formal meetings and many in outside roles as demonstrators and commentators, in hopes of keeping the meetings focused on the most ambitious outcomes.

Industry was also well-represented. Too well, as far as some critics were concerned. The 1992 Earth Summit was organized and chaired by Maurice Strong, a Canadian businessman with strong ties to the oil and mineral industries. The business community as a whole formed a new group, the Business Council for Sustainable Development (later renamed the World Business Council for Sustainable Development) to formalize business participation in the Earth Summit and translate the goals of sustainability into language that would (it was hoped) resonate with corporate leaders.

## **Corporations Get the Message...Sort Of**

On a recent visit to the webpage of the World Business Council for Sustainable Development, the site opens with a large banner promoting the group's *CEO Guide to Human Rights*. The UN's Sustainable Development Goals feature prominently throughout WBCSD's literature and guidance to corporations. Their ambitious goal for humanity is clearly stated: *Our vision is for 9+ billion people to live well, within planetary boundaries, by 2050*. The group envisions corporations playing a leading, transformative role in bringing about a world that is far more equitable and less environmentally destructive than the current state of global affairs.

This type of broad recognition of the three-leggedness of sustainability was not always the case. The private sector has had a sizable and largely positive embrace of sustainability since the early days of the Brundtland Commission, but its initial embrace centered almost exclusively on the environmental leg of the sustainability stool. A cynic might say that business embraced environmental protection because it was already required to do so by national environmental laws; signing on to a set of sustainability principles that committed them to obeying the law amounted to a feel good measure with no real benefit other than public relations.

Some amount of what fell under the umbrella of "sustainability" was, without doubt, mere rebranding of existing activities. Some undeniably new and occasionally bold activities were also launched under the same umbrella. But whether lip service or genuine innovation, industry

studiously ignored the social and economic aspects of sustainability in the early days of the movement, focusing almost exclusively on the familiar realm of environmental protection.

A perfect example is the *Business Charter for Sustainable Development*, crafted by the International Chamber of Commerce as the business community's response to the 1992 Earth Summit. The Charter begins: "*There is widespread recognition today that environmental protection must be among the highest priorities of every business...*" and continues with a set of environmental principles the ICC wishes its members to consider. In 1991, Xerox was one of the first companies to feature sustainable development in its annual report, and devotes the entire section to the Xerox Environmental Leadership Program.

Environmental responsibility was familiar territory for big business. A plethora of environmental laws and programs came into being in the 1970s, regulating air and water pollution and hazardous wastes. Concerns over toxic chemicals -- PCBs, DDT, asbestos -- multiplied almost daily, it seemed, and were brought into even sharper focus by the catastrophic accident with poisonous gas at a Union Carbide pesticide plant in Bhopal, India. Companies around the world were already engaged in extensive commitments to improve their environmental performance; casting these efforts in the language of sustainability was an easy and natural step.

Of course, companies were active in other areas as well: community engagement, corporate philanthropy, racial and gender equity programs (this last topic was highlighted in Xerox's 1991 report). But these topics were not generally included under the umbrella of sustainability. Instead, these issues were typically lumped together under the heading of "corporate responsibility." Business' focus vis-a-vis sustainability was on the environment. Even when all three legs of sustainability were considered, the context was usually environmental. A 1995 report from Weyerhaeuser, for example, described their commitment to sustainable economic issues as managing "environmental challenges to create competitive advantages" and social issues as working "in good faith" with public interest groups and communities to "resolve environmental quality problems".

Corporate responsibility and sustainable development each had a certain buzzword quality -- a visible and much-repeated concept, but one that may not, itself, be very sustainable. But both notions persisted, to the point where corporations around the world increasingly found themselves responding to concerns in both the social responsibility and environmental arenas. Companies were recasting their environmental departments with new titles that included sustainability and at the same time were creating new positions with titles like Director of Social Responsibility.

The experience of Nike (#340 on the Global 500) is instructive. The company created a new executive position, the Vice President of Corporate Responsibility in 1998 and a new department combining the functions of community affairs, environmental action, and labor practices. The title was a nod to the growing importance of corporate responsibility as a social movement and an expectation among consumers (their annual report that year featured dozens of letters, faxes and emails from the public, many raising social issues). The job morphed over the years with changing language and expectations. By 2009, the position was now the Vice President of

Sustainable Business and Innovation and by 2014 Nike had changed it to Chief Sustainability Officer. Two Board of Director-level committees, the Corporate Responsibility, Sustainability & Governance Committee, along with the Purpose Committee, provide overall guidance to the firm regarding their sustainability objectives.

Nike has been reporting regularly on its activities, releasing its first corporate responsibility report in 2001, changing the name to the sustainable business performance report in 2010 and most recently (2018) renaming it once again to the Nike Impact report .

Most large and mid-sized companies have ended up in a similar position as Nike, even if the path followed was different. An international survey of company practices in 2020 revealed that, among the 250 largest companies in the world, 96% produced a corporate sustainability or social responsibility report; for a larger selection of 5,200 companies (the Top 100 firms in each of 49 countries), the figure was 80%. About two-thirds of these reports followed the guidelines established by the Global Reporting Initiative, a tool for reporting institutional sustainability goals and practices. Increasingly, companies are adopting the UN's Sustainable Development Goals as a central framework for their reports.

## **The United Nations Goals for Sustainability**

The upshot of all this international dialogue over the course of several decades was the publication, in 2015, of the United Nations Sustainable Development Goals. The goals translate the lofty-but-vague notion of sustainability into 17 target areas for substantial achievements by 2030.



The target areas themselves may appear to be equally as lofty or hard to pin down as sustainability itself: meeting the needs of the current generation without compromising future generations. What, after all, is meant by a "sustainable city" or "responsible consumption"? How is "gender equality" to be measured? How realistic is it to suppose we can simply "End Poverty" in the course of the next decade or so?

But underlying each of the 17 target areas is a set of much more concrete goals that, the UN hopes, are clear, ambitious and achievable. The poverty goal, for example, includes a set of seven specific targets for 2030, such as:

- ...eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.
- ...reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

There are 169 specific goals embedded in the 17 overall categories. Some of them are readily measurable (though nothing, on a global scale, is easily measurable) and some are not. The Sustainable Cities goal, for example, includes this target:

*By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums*

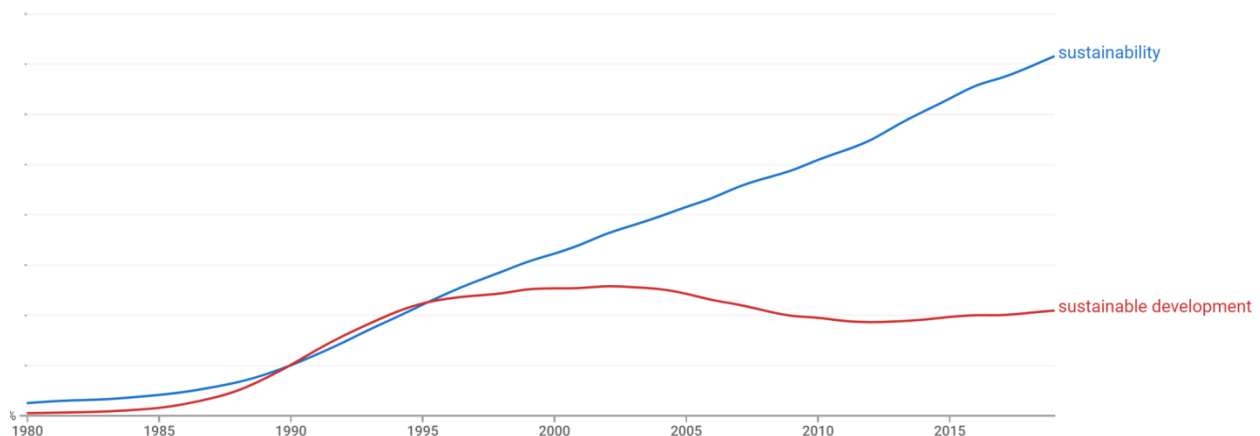
Laudable, but not easy to quantify or track. What is meant by "adequate", for example, who gets to certify housing as adequate or not, and how will changes be documented over the years?

It's not the intent of this book to fully describe the complete set of UN sustainability goals, but to simply note their existence and their important role in focusing the meaning of sustainable development and in embracing the Social/Economic/Environmental triad at the heart of the term sustainability.

## The Vocabulary of Sustainability

A number of different terms have arisen in the field of sustainability, and particularly in corporate sustainability, that are very close to one another in meaning.

For starters, "sustainability" and "sustainable development" mean the same thing, but the latter term has fallen a bit out of favor, as some observers consider *development* to be incompatible with achieving a more *sustainable* future. Economic and population growth will inevitably lead to declining circumstances, they argue, in a more or less Malthusian manner.



*Trends in the use of the terms sustainability and sustainable development*

Corporations have relied on a number of terms to describe their sustainability efforts, often in the form of published reports. These may directly be called a Sustainability Report, but are also frequently labeled an ESG or CSR report, acronyms for, respectively, Environment, Social and Governance, or Corporate Social Responsibility. The terms are also reflected in corporate departments, as someone with the job title ESG Director may find the title changed to Director of Sustainability or Director of CSR, depending on the whims of senior management.

There are instances of corporations trying to separate functions, producing both a sustainability report and an ESG or CSR report. Conceptually, though, these terms have so much overlap and similarity that they are used interchangeably in the literature of sustainability and, similarly, are used interchangeably in this book.

Another commonly-used acronym is SDGs, or sustainable development goals, a reference to the goals established by the United Nations that are find widespread use as a touch point for discussions of sustainability practices and progress.

## **Sustainability Progress?**

With sustainability on the global agenda for several decades now -- and brought into sharp focus in 2015 with the publication of the UN Sustainability Goals -- is the world, in some meaningful way, more sustainable now?

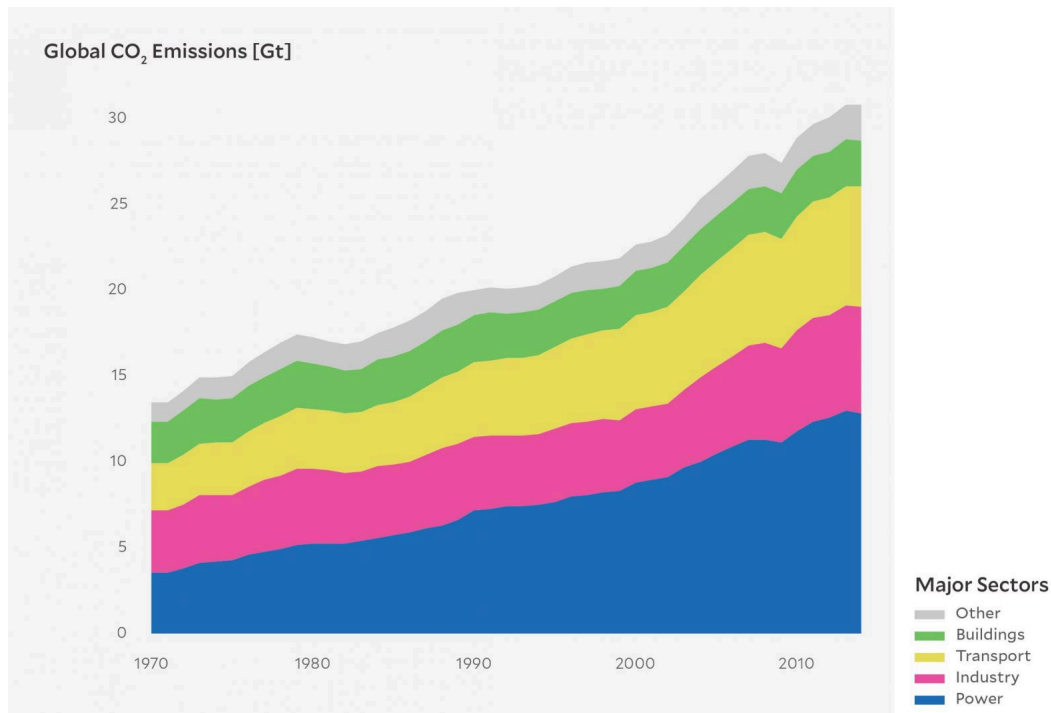
Progress has been erratic, at best. The most significant change has undoubtedly been the reduction in global poverty. The emergence of a robust middle class in China and India (and to a lesser degree, in Indonesia) has brought more than a billion people out of extreme poverty. More than one-third of the world's population lived in extreme poverty in 1990, but that figure had fallen to about 8% in 2019. This is an impressive and heartening achievement, but still a long way from the UN goal of eliminating extreme poverty by 2030 -- a goal that seems unlikely to be met . And even as the percentage of extremely poor people falls, population growth creates a countervailing pressure adding to the actual numbers of the poor: the global population of 5.3 billion in 1990 has since grown to 7.9 billion and climbing and many of the newcomers are born into dire poverty.

Progress in reducing poverty, as obviously desirable as this goal is, poses its own challenges to sustainability. A person's purchasing power is an imperfect but reasonable proxy for their environmental footprint: the wealthy consume more resources than the middle class and those in the middle outspend and out-consume those in poverty. Increased wealth and the consumption that goes with it means more greenhouse gas emissions, more land-clearing, more coal mining, more automobile exhaust, more plastic waste, etc, etc.

The twin pressures of population growth and greater economic activity go a long way to explaining the lack of progress in many areas targeted by the UN's Sustainability Goals. Take greenhouse gas emissions, for example. The evidence of action is everywhere: countries have signed pledges and set reduction targets; giant companies have committed to going "carbon neutral"; both hybrid and electric vehicles have become a sizable chunk of the global fleet; solar power cells and wind generators are visible the world over, supplanting conventional sources of power that rely on carbon-rich fossil fuels.

Yet, greenhouse gas emissions are increasing just about everywhere around the world, having grown by about 50% since 1990 . The experience of the United States is revealing: on a per

capita basis, emissions have dropped quite considerably, from nearly 25 tons of CO<sub>2</sub> (and other greenhouse gasses) per person in 2000, down to about 21 tons in 2018. Yet, these reductions are masked by the growing US population, which has prevented the country from seeing any significant overall reduction in emissions. For India and China, with rapidly expanding economies, emissions have increased rapidly on both a per capita and overall basis .



*CO<sub>2</sub> emissions have more than doubled since 1970, and other major greenhouse gases have seen similar increases. No sector has seen significant decreases and only major economic disruptions -- the global recession circa 2008-9 and the 2020 coronavirus pandemic (not shown on graph) -- has resulted in any recent year-to-year reductions in overall emissions .*

The efforts at stemming emissions of greenhouse gases are seen as ambitious by some and too little, too late by many others, but have clearly not yet been successful at meaningfully reducing the overall levels of releases to the atmosphere, or even at slowing the rate of their increase.

Can corporate sustainability efforts accelerate progress towards achieving this, and other, sustainability goals? In particular, what roles and responsibilities should we expect from the world's largest corporations? These questions are explored in the chapters to come.

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Note to readers: This is a chapter excerpt from a book I am working on:

## **Corporate Sustainability -- Does It Make A Difference?**

All comments and feedback are most welcome.