

## ARCHIVE

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# NEGOTIATING A GREEN COMMITMENT

BY RICARDO LAGOS

## Chile's former president calls for a new global metric to measure a country's carbon footprint.

Climate change will determine the path and future of human development for this and future generations. It will transform how we think and act into a more global way of understanding our collective destiny. With that comes the obligation to measure each country and each society's impact on our global environment.

Greenhouse gas (GHG) emissions that are responsible for global warming have increased dramatically since the beginning of the Industrial Revolution. The spike in emissions and the risk they present demand coordinated, innovative answers.

First, the facts.

The science is emphatic and unequivocal: our planet is getting warmer. Average temperatures have increased. Snow caps and icebergs are melting at a faster rate, and the average world sea level is increasing as a result. Reports from the Intergovernmental Panel on Climate Change (IPCC), chaired by 2008 Nobel Peace Prize Laureate Dr. Rajendra Pachauri, establish that for the first time since the beginning of the Industrial Revolution, human activity has produced substantial changes or modifications in the earth's temperature.

Human activities related to industrialization and modern transportation generate emissions of four long-term GHGs: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and halocarbons (a group of gases containing fluorine, chlorine, bromine, or iodine). The concentrations of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O in the world's atmosphere have risen considerably—the result of human industrial activity since 1750. Today they greatly exceed preindustrial levels. Most of the increase in carbon dioxide is due to the use of fossil fuels, with a smaller but perceptible contribution from changes in land use, particularly deforestation.

Between the preindustrial period and 2005, carbon dioxide concentration in the atmosphere increased from approximately 280 particles per million (ppm) to 379 ppm. Many experts predict that it could reach a maximum of 500 to 550 ppm.

But here's the problem. To have only a 50 percent chance of not increasing the global thermostat more than 2 degrees Celsius over preindustrial levels, we must stabilize GHG emissions to concentrations close to 450 ppm of carbon dioxide. If we exceed that limit, the earth's temperature could make life impossible. In the last 100 years, global temperatures have increased by 0.7 degrees Celsius. Eleven of the last 12 hottest years since 1850 were between 1995 and 2006. At this rate, according to the IPCC, over the course of the twenty-first century, the average world temperature could increase by more than 5 degrees Celsius—far above levels that can sustain human life as we know it on our planet.

We can and we must act now, not just for those who presently occupy the planet, but for future generations. Measures taken today will have consequences that will last more than a century. Greenhouse gases stay in the atmosphere between 110 and 120 years. It is a cumulative process. As a result, those of us in the international community fighting climate change have argued that by 2050 we have to reduce the earth's emissions by 50 percent.

Doing so, however, represents a serious challenge.

It means that developed and developing countries must pull together and compromise. The emissions levels of today are based on the total current global population of six billion people. Optimistically by 2050 our global community will add another one billion people. More realistically, our mother earth will have nine billion inhabitants by 2050—creating an even greater strain on our global climate.



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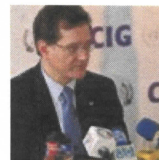
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PHOTOGRAPH BY SANTIAGO LLANQUIN (AP)

And who's responsible for adding to this global hothouse? Developed countries, representing 15 percent of the world's population, now contribute almost half of the carbon dioxide emissions. The United States has an emissions level of around 22 tons of carbon per person per year. Europe emits between 10 and 12 tons of carbon per person per year. The difference between the two reveals that per capita income and emissions levels are not directly correlated—with U.S. emission levels almost twice those of Europe, even though both regions are at the same level of development.

One interesting distinction is California. As a result of regulations adopted more than 30 years ago, California approaches the European average per capita carbon emissions of between 10 and 12 tons of carbon per year.

Latin America is at a level of between six and eight tons, China at five and India at two. To meet the 2050 goals, no country should have more than two tons of carbon per person per year, assuming that there are nine billion people on Earth at that time.

The earth does not care about the national origins of greenhouse gases. One ton of GHG produced in China has the same weight as a ton of GHG produced in the U.S., and one country's emissions are another country's climate change problem. Joint action is not an alternative; it is an obligation.

## The Unique Process of Negotiating Globally

The central negotiating forum for these issues is the 1992 United Nations Framework Convention on Climate Change (UNFCCC). The convention established the protocol of principles to guide country discussion. Among them are equity, accountability and capacity to face the tasks of reducing emissions.

The principle of equity holds that any reduction in global warming should allow for the economic growth of developing countries. In practice this means that developed countries that have already benefited from the lower standards of the past should be subject to higher standards. In contrast, this principle establishes that developing countries need sufficient flexibility to make the transition to lower carbon emissions at a pace consistent with their capacity.

Accountability for many countries refers to the historical responsibility of each country for greenhouse gas emissions from the past and future. Based on the calculation that emissions can stay 110 to 120 years in the atmosphere, the UN estimates that the U.S. is responsible for 29 percent of the greenhouse gases accumulating in the atmosphere; Germany for seven percent; China approaching seven percent; the United Kingdom six percent, and Russia with five percent—collectively representing the five largest emitters. It is on this basis that countries talk about the differentiated historical responsibilities of industrial countries based on accumulated emissions.

The principle of capacity recognizes that countries will have different scientific and technological abilities to adopt emission-reduction measures.

The Kyoto Protocol, approved in 1997, included these principles and has four main sections. These sections address the following questions: what needs to be done to mitigate emissions? What measures are taken to adapt to something that will happen? What technological elements can be transferred from one country to another in order to advance faster? What financing is needed for all the above?

The Kyoto Protocol established two national categories. The first comprises the 36 industrialized nations listed in Annex 1. And the second includes the countries not listed in Annex 1—generally, developing countries. According to the Kyoto Protocol, all countries listed in Annex 1 must reduce their collective greenhouse gas emissions by 5.2 percent from 1990 levels by 2012. Non-Annex 1 countries are encouraged to reduce emissions within their capability.

The U.S. and Australia did not ratify the Protocol, on the grounds that other big GHG emitters like China and India would be able to use their developing-country status to avoid making large reductions. Many argued that the U.S. has a historical obligation to move faster than other countries based on its record of past emissions. But in any case, the U.S. failure to join Kyoto allowed developing countries to escape their obligations as well. Many countries argued that without U.S. participation, there was even less reason to take steps that would limit their economic growth and thus their capacity to reduce poverty.

The Kyoto agreement expires in 2012. What comes next is unclear. To move the debate forward, the UN has held three meetings: the Bali Climate Change Conference in December 2007, the Poznan Climate Change Conference in December 2008 and, in December, the Copenhagen Climate Change Conference.

The 2007 Bali Conference added a fifth topic, deforestation, to the list of key climate change issues of mitigation, adaptation, technology, and financing. Deforestation contributes an estimated 18 percent to total global emissions. The other main contributors are energy power (24 percent), transportation (14 percent) and industrial development (14 percent). By reducing the capacity of the atmosphere to absorb carbon, deforestation indirectly affects carbon and has represented an important addition to the agenda.

Considered by itself, the Poznan Conference made little progress. This was largely due to the nature of international negotiations. The four topics under discussion tended to pit developed and developing

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countries against one another. Developing countries were more interested in financing and technology transfer, while developed countries focused on what they could get in mitigation in exchange for financing and technology transfer. And neither side was willing to concede until seeing what the other was willing to offer.

The importance of Poznan was that it was done almost simultaneously with the final European negotiations that led to what is called the "Three 20s." European countries agreed that by 2020 Europe will improve its energy efficiency by 20 percent; that 20 percent of its energy will come from nonconventional renewable sources; and that they would reduce emissions by 20 percent from 1990 levels. Moreover, if another "significant country" agrees to reduce its emissions by 30 percent, Europe will match it.

To achieve these levels, the European governments agreed that their main polluting industries would have 21 years to achieve zero emissions.

## The Approach to Success in Copenhagen

The negotiation of the European Three 20s signals that the developed world can reach clear and concrete agreements on emission reduction. But more important, the nature of the limits and the transparency required to reach them indicates that to achieve full global agreement in Copenhagen, developed countries must agree to provide carbon content information on all products entering their markets. In other words, products would be listed by their carbon footprint (the amount of carbon a country or product produces), and countries would impose taxes or restrictions based on ceilings. The bill presented in the U.S. Congress this past summer proposes just that. In the bill, the U.S. promises to reduce its emissions by 17 percent from 2005 levels. To put this in context, Japan has already offered to reduce its emissions by nine percent in 2020 from its 1990 levels.

There is reason for optimism that an agreement can be reached at Copenhagen. Some of that optimism is based on what appears to be a growing rapprochement between the U.S. and China over climate change. Chinese Environmental Protection Minister Zhou Shengxian has already made two visits to Washington, and there has been at least one reciprocal visit from U.S. Climate Change negotiator Todd Stern.

Some observers now refer to the "G2" (U.S. and China), rather than the G20, as the key players in climate negotiations. If the "G2" reach a certain level of consensus, much of the hard nut of the negotiations will be cracked: China, which emits close to 21 percent of current global greenhouse gases, is now the world's largest emitter—narrowly edging past the U.S., which emits 20 percent. Together, the two countries represent a hefty 40 percent of GHG emissions of the planet.

Despite the apparent divisions between Annex 1 and non-Annex 1 countries, the best way forward is to look for a kind of "voluntary" obligation from developing countries to reduce emissions, that is, something that would not necessarily commit them but would provide a menu of options to meet that goal.

## Here are Some Goals and Proposals That Could Be Put on the Table for Discussion

**Establish the framework for energy efficient growth.** This could be done by setting a standard that for each percentage point of GDP growth, energy demand must decrease less than the expected rate of growth.

**Establish agreements in specific sectors that set acceptable levels of emissions per product type.** Some voluntary agreements along this line have already been developed. To stretch them, we have to develop comparable categories for sectors regarding productivity and technology.

**Institute national programs and policies that seek to implement the plans already agreed to within the international community.** Countries that have adopted international goals to reduce emissions within their national plans could voluntarily take on commitments with the international community.

**Reduce emissions by slowing deforestation.** This is a key issue for our region. In Latin America, deforestation contributes 49 percent to the region's total emissions. Latin American countries can and should move forward with a plan to provide financing to reduce deforestation, and, with it, other countries could explore increasing reforestation.

Whether there is success or failure in Copenhagen, the countries of the developed world have already developed significant commitments to reduce emissions. Whether the EU standards of the Three 20s or the pending laws within the U.S. are adopted, these norms should provide a further workable concrete framework for "clean production." In this case, all the factors of carbon emissions, including sector-by-sector measures, should be at the negotiation table. Such negotiations could include establishing carbon standards for products that enter the global market.

Success requires a fundamental change in the approach to global trade. All nations, particularly those in the developing world, will need to realize that reducing emissions is central to their ability to compete in the world economy. Countries that fail to take appropriate climate change measures will face higher costs in marketing their exports. At worst, they risk being excluded from many trade sectors altogether.

To move this along, I propose a global trade version of regulatory and tariff standards based on carbon gas emissions. During the first half of the twenty-first century we could have a market with very different rules, where carbon emission levels will serve as a basic yardstick for a nation's participation in the global marketplace.

The carbon track made by each society will also be crucial to the image it projects to the world. Establishing this "green paradigm" will depend on determining how to measure carbon output and designating an organization that would receive the reports and verify the information. This will require a multilateral body vested with the consensus authority of participating governments. But ultimately, to be effective, this will require sanctions against violators, most likely in the form of taxes (similar to tariffs) on products that exceed set limits and that are enforced by the governments. Fortunately there is already some precedent. In 1991, Sweden imposed a tax of 28 euros per ton of CO<sub>2</sub> emitted. Currently, they levy a tax of 128 euros per ton of CO<sub>2</sub> (except for exporting companies). Other Scandinavian countries have followed. France is debating a similar measure proposed by President Nicolas Sarkozy in early September this year.

Such a multilateral framework would break the deadlock between developed and developing countries and use the power of the global market to reduce carbon emissions.

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#### IT'S TOTALLY RIGHT TO BE

Submitted by [Sylfaen](#) on Tue, 07/13/2010 - 17:22.

It's totally right to be seriously concerned about these matters. We need to seek better solutions.

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#### THE TIME HAS COME FOR US

Submitted by [bobby12](#) on Tue, 07/06/2010 - 00:31.

The time has come for us to agree and actively participate on green commitment. All of us should contribute however we can. I have planted trees in my backyard. We should do whatever we can to save our environment and planet.

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#### EVERY PERSON ON THE PLANET

Submitted by [Slava](#) on Mon, 02/15/2010 - 08:19.

Every person on the planet should understand their own moral duty of rescuing the Earth. Our task is to let people know about it. Slava Rybalka

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#### WE CAN MAKE A CHANGE AND

Submitted by [kimchie](#) on Fri, 12/11/2009 - 01:01.

We can make a change and could save the environment from harmful pollution, if we all help one another and start cleaning right at our homes including our cars, surroundings and all.

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