

The New Climate Economics

By Felipe Calderón and Nicholas Stern

NEW YORK – This Friday, in its latest comprehensive assessment of the evidence on global warming, the United Nations Intergovernmental Panel on Climate Change will show that the world's climate scientists are more certain than ever that human activity – largely combustion of fossil fuels – is causing temperatures and sea levels to rise.

Over recent years a series of extreme weather events, including Hurricane Sandy in New York, floods in China and droughts in the US Midwest, Russia and many developing countries, have caused immense damage. Last week Mexico saw simultaneous hurricanes in the Pacific and in the Gulf of Mexico devastate towns and cities in their path. Climate change will be a major driver of such events, and we risk much worse.

This puts a new debate center stage: how to reconcile increased action to reduce greenhouse gas emissions with strong economic growth.

This debate has become mired in controversy. As most countries have started making serious investments in renewable energy, and many are implementing carbon prices and regulations, critics complain that such policies may undermine growth. With the global economy still emerging from the 2008 financial crash, higher energy costs – not yet fully offset by greater energy efficiency – are worrying business and political leaders.

The advent of shale gas has confused the energy debate even more. If gas is substituted for coal, it can be a useful bridge to a low-carbon future. But astonishingly, it is coal, the dirtiest fuel, that is experiencing the sharpest increase in use. Companies and investors are hedging their bets by taking a few resource-efficiency measures and investing in some low-carbon assets, but leaving their high-carbon portfolios and activities largely intact. Policy vacillation in some countries has not helped.

Advocates of stronger action respond that low-carbon investments can generate much stronger, cleaner growth. They point to the savings available from energy efficiency, and to the opportunities generated by clean-energy technologies as the processes of learning and discovery in markets take hold. They seek to demonstrate the benefits that a more sustainable pattern of development can bring to the world's cities, to people's health (from the reduction in air pollution), to energy security, and to access to energy for the world's poor. And they propose green bonds and public investment banks to finance new infrastructure and jobs at a time when world interest rates are low and demand is depressed in many countries.

These are serious economic debates, but too often they have become entangled in ideological disputes about the appropriate response to the economic crisis and the value of government intervention in markets. That is regrettable. Climate change is not a partisan issue, and climate policy is essentially market-based. It is about correcting market failures so that markets and entrepreneurship can play their proper role of ensuring innovation and efficient resource allocation.

In order to escape this impasse, we have helped to launch the Global Commission on the Economy and Climate. The Commission's [New Climate Economy](#) project brings together seven leading policy research institutes from six continents, overseen by a panel of former

heads of government and finance ministers and prominent business leaders, and advised by a panel of leading economists from across the world. Its purpose is to provide authoritative new evidence concerning how governments and businesses can achieve stronger economic growth and simultaneously address climate risks.

Few governments or investors start from the standpoint of climate change. They want to promote investment and economic growth, create jobs, stabilize public finances, expand markets, turn a profit, ensure reliable energy and food supplies, produce goods and services, reduce poverty, and build cities. So the primary question that we need to ask is not whether we can reduce emissions, but how public policy can help to achieve these core goals while reducing emissions and building a more climate-resilient economy.

There is now a lot of experience around the world in this area. When the Stern Review on the economics of climate change was published seven years ago, the subject was largely theoretical. Now countries at all stages of development are developing new patterns of economic growth that take climate into account.

Germany, for example, is planning the world's most ambitious low-carbon energy transition, based on energy conservation and renewables. South Korea has made "green growth" a central economic goal. Mexico's 2012 Climate Change Act has put it on course for a major increase in clean power. China has placed the industrial development of green technologies at the top of its agenda. Ethiopia is seeking to move to lower-carbon farming. Brazil has significantly reduced the rate of deforestation in the Amazon.

Some major businesses are providing powerful examples of what is possible. Unilever has committed to the sustainable sourcing of agricultural and forest products. Coca-Cola is phasing out all use of climate-polluting HFCs. The retail giant Walmart is driving emissions reduction throughout its supply chain. Meanwhile, the World Bank and the European Investment Bank have stopped lending to high-emission coal plants.

Yet genuine questions remain about how fast economies should move on to a low-carbon path, and the most effective way to do so. Some low-carbon policies have clearly been expensive, while other, apparently cost-effective options, have not been pursued at all. Any structural transformation involves costs, trade-offs, and uncertainties, and it is vital that we understand these properly.

Powerful interests will, of course, oppose *any* low-carbon transition, dismissing and often drowning out those who stand to benefit. That makes it even more important to clarify the choices. As science makes clear how imperative the climate question is, it is time for economists and policymakers to explain how it can be answered.

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