



Stop Carbon Subsidies: Make the Market Tell the Truth

By Rinaldo Brutoco and Madeleine Austin

Remarkably diverse groups across the U.S. political spectrum are calling for a [high and rising price on carbon as part of their deficit-reduction strategies](#). Extremely conservative to very liberal groups are finding common cause. This is a potentially momentous development that could spark the end of the political logjam in the U.S. over energy and climate change policy.

Agreeing to disagree

Scientific truth does not depend on what the majority chooses to believe—not today, and not in 1633 when Galileo was convicted of heresy for saying that the earth revolves around the sun. He spent the rest of his life under house arrest but the earth continued in its orbit.

Let's face the facts: The earth is not flat. The sun does not revolve around the earth. Climate change is not something that can be altered by attacking those who report it. It's not something that should be swept under the rug for any reason—the survival of human civilization is at stake.

But it's also true that more focus on economic and national security issues that transcend political divisions will speed the day when countries around the world adopt smart carbon policies that will make them more globally competitive, revitalize their flagging economies, and create jobs for the middle class.

An unprecedented opportunity for clean energy

The clean tech sector has an unprecedented market opportunity now that Germany and Switzerland

have decided to phase out nuclear power, Italy has blocked its re-launch, and Japan has announced plans to redo its energy policy “from scratch.”

Germany's decision to phase out nuclear power by 2022 means that the world's 3rd largest economy plans to replace 23% of its power in 11 years.

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Japan, the world's 4th largest economy, which now gets 30% of its electricity from nuclear plants, plans to [install solar panels on 10 million homes](#), while cutting the cost of solar power by 2/3 by 2020. Its richest man, who broke open the country's telecommunications market years ago, is moving into solar power, tackling utility bottlenecks, and eyeing the potential profits from more efficient solar cells.

Nuclear power's likely downward slope is just one of three critical energy developments this year, as [Michael Klare](#) vividly describes.

The second is the turmoil in the Middle East and North Africa, which could spread to Saudi Arabia and other major oil producers in the Gulf. Even if the Saudis' big spending on public handouts manages to keep the lid on popular protests, the government won't be able to ramp up oil production enough to make up for falling production elsewhere unless it spends hundreds of billions of dollars to build the infrastructure to get out the heavier, “tough oil” left in its reserves. Its “easy oil” is running out, although



the precise degree of exhaustion of Saudi fields is a “state secret.”

The third key energy development is the “intense drought over the past year in Australia, China, Russia, parts of the Middle East, South America, the United States, and most recently northern Europe.”

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In addition to driving up food prices, the drought has led to sharp drops in river levels and hydroelectric power plants’ output. China’s loss of hydropower has created severe electricity shortages and increased its demand for imported oil—which

will drive oil prices higher.

All three of these developments portend unprecedented growth in the global clean energy sector. Countries who want a piece of the action need sound energy policies that send price signals to businesses, investors, and citizens that will shift their spending from fossil fuels to clean energy.

The market is not telling the truth

The market is not telling the truth about the cost of fossil fuels. You can’t believe the price at the gas pump. People pay twice for a tank of gas—once at the pump and once when they pay their taxes.

In 2009, [global subsidies for fossil fuels were 12 times as great as subsidies for renewables](#), according to *Bloomberg New Energy Finance*.

The \$4 billion in annual U.S. taxpayer subsidies for Big Oil, the wealthiest industry on the planet, comes in many different forms. Many indirect subsidies aren’t included in that number, such as the billions spent on the military’s efforts to maintain the security of the Middle East oil pipeline. One form of

subsidy in particular is too often overlooked—pollution.

All pollution is a subsidy. By tolerating pollution, we’ve made a policy decision to let corporations foist some of their costs onto the public. We need to undo this transfer and put the “off-balance sheet” health and environmental costs of corporations’ carbon pollution back where they belong—with the companies that make a business decision to profit from dirty energy.



If the environmental and health impacts of coal, oil, and natural gas were monetized and included in energy prices, more renewable energy technologies would become economically attractive. Wind, geothermal, and solar are already fully competitive on that basis.

Fixing this problem will put people back to work.

Pricing carbon

Slapping a fee on carbon would be the simplest way to include the environmental and health costs of fossil fuels in their retail prices.

We should impose a simple, transparent, gradually rising [tax on carbon-based energy sources at the points where they enter the economy](#)—such as at ports of entry or the mouths of mines—with most of the revenue returned to the public to offset higher energy prices, as James Hansen and others propose.

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Every citizen would periodically receive the same size “dividend” by check or electronic transfer, to



make up for higher energy prices as a result of energy companies passing along their higher costs.

Partly because of public aversion to the word "tax," the past few years' debate over carbon policy has focused on creating a cap-and-trade system. In the 1990's, such a system did enable the U.S. to dramatically lower its industrial sulfur dioxide (SO₂) emissions, but the size of the affected market was a fraction of the size new carbon trading markets would be.

The World Business Academy's 2007 book, *Freedom from Mid-East Oil*, stated that a carbon tax would be preferable to a cap-and-trade system, but we thought only the latter was politically palatable. Experience has since shown that a cap-and-trade system for carbon is neither politically viable nor workable.

The last thing the U.S. needs is a vast new market for trading emissions allowances, offset credits, and the new financial derivatives they will spawn.



The financial crash that brought us the Great Recession proved that regulators can't keep up with Wall Street's ability to turn the financial sector into a casino by slicing, dicing, and repackaging tradable instruments into new complex derivatives for even bigger bets. The Greek debt crisis vividly shows how little reform there has been since the last financial crisis and [how urgently we need to implement reforms that would regulate derivatives](#) and reduce speculation.

Traders and polluters have gamed the EU and UN carbon markets

Global carbon markets surged from about \$15

billion in 2005 to a high of about \$144 billion in 2009, before falling to about [\\$142 billion in 2010](#). About 97% of all trades now take place in the EU carbon market, appropriately named the "Emissions Trading Scheme" (ETS).

Like the 2008 market crash, the UN and EU carbon trading programs have shown that we should beware of a system based on financial trading. The problems go far beyond computer hackers' theft of 2 million emission allowances worth 32 million euros.

Academy Fellow Hazel Henderson has described how large polluting industries in the ETS gamed the Kyoto Protocol and how Wall Street and London [financial traders got what they wanted: "a single commodity: carbon, to construct tradable financial instruments."](#)

The result? A costly new bureaucracy and precious little carbon removed from the atmosphere. [Carbon emissions increased by a record amount in 2010](#), to 5% above levels in 2008, the last record year. (The slight dip in 2009 was a result of the recession.)

The use of emissions "offsets" has been a dismal failure. Investors can earn tradable credits known as "Certified Emission Reductions" or offsets by participating in so-called greenhouse gas mitigation projects in developing countries. The projects have been rife with fraud.

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As of 2013, the EU will ban offsets tied to industrial greenhouse gases used and produced in air conditioning and refrigeration; HFC-23 can trap up to 11,700 more heat per molecule than carbon dioxide. [Factories have upped production of the dangerous gases to get credits for reducing them.](#) The EU has admitted that these offsets have generated "exorbitant" returns for investors and



“undermined the market’s integrity.”

Such projects account for 78% of the total Certified Emissions Reductions used to comply with 2010 emissions limits, according to an analysis by *Bloomberg New Energy Finance*. It added, “Of all credits issued so far, 66% are of this type.” Those numbers pretty much say it all.

States consider a carbon tax and cap-and-trade

Recent events in New Jersey and California also put a spotlight on carbon taxes and cap-and-trade. Last month, Governor Chris Christie [pulled New Jersey out of a regional carbon trading system](#) created by a group of Northeastern states that tired of waiting for the federal government to put a price on carbon. Christie couldn't give a clear explanation of his actions.

A recent California court decision sided with environmental lawyers who challenged proposed rules to implement the state’s climate change law on the grounds that regulators hadn’t taken a hard look at a carbon tax as an alternative to cap-and-trade, as the law required.

The lawyers argued that the cap-and-trade system wouldn’t cut carbon emissions because it would let corporations buy cheap “offsets” and continue to pollute. The regulators have just issued a new, more thorough [report that looks at other jurisdictions that have a carbon tax](#), including British Columbia, where there is reportedly wide support for a carbon tax that was accompanied by cuts in other taxes.

Moving forward

It goes without saying that sounder energy policies would help the planet. But with millions of Americans still suffering from unemployment, it’s time to focus on the economic benefits of ending

fossil fuel subsidies and putting a price on carbon that makes the market tell the truth about the exorbitant cost of fossil fuels.

As a direct result of its carbon policy, the U.S. is falling behind in the global competition to capture a piece of the booming clean energy market. It now [ranks 17th in the world](#) in the percentage of its GDP that comes from its clean energy sector.



The global clean energy economy represents [a \\$2.3 trillion opportunity over the next 10 years](#) if G-20 countries significantly strengthen their

clean energy policies, such as by putting a price on carbon, according to a report by the Pew Center.

The U.S. has fallen behind on clean tech and is one of three countries (along with India and the UK) with “the most to gain from adoption of aggressive clean energy policies,” the report concludes. “Time and again, it has been shown that nations with the strongest policy frameworks have attracted the most capital and enjoyed the associated economic benefits, including job creation.”

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—Goethe

It will require human ingenuity to find solutions to our energy challenges. As Goethe said, “First and last, what is demanded of genius is love of truth.” The opportunity for humanity to rediscover its genius lies in its ability to begin telling the truth: we must switch from fossil fuels to a new planetary fuel system. There is no other choice.