Backgrounder

Published by The Heritage Foundation

No. 2479
October 25, 2010

How the "Scientific Consensus" on Global Warming Affects American Business—and Consumers

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Abstract: *The only consensus over the threat of climate change that seems to exist these days is that there is no consensus. The much-heralded 2007 United Nations report on greenhouse gas emissions has served as a catalyst for lawmakers to burden traditional energy sources with regulations in favor of so-called clean energy. The private sector has begun to "chase" these policies, shaping business decisions to align with policies preferred by politicians, not the market or the public. Recent revelations of erroneous and misleading data in the report have led many to question the wisdom of government-mandated emissions caps and costly energy-efficiency regulations. Instead of basing policy on a "scientific consensus" that is neither scientific nor agreed-upon, Congress should eliminate subsidies and reduce regulatory red tape—and let all energy technologies succeed or fail on their own merits. Artificially propping up a select few distorts the market and hurts American businesses—which means that the final bearers of the costs are, as usual, the taxpayers.*

For years businesses and the general public have been told by mainstream climatologists that the planet is warming due to human activity and that immediate action is necessary to avoid a global catastrophe. The U.S. government relied heavily on a 2007 report by the United Nations' Intergovernmental Panel on Climate Change (IPCC) to justify the need to reduce emissions of carbon dioxide (CO_2) and other greenhouse gases (GHGs) created anthropogenically. Over time, Congress enacted numerous policies to increase clean energy production, such as mandates for renew-

Talking Points

- Recently revealed flaws in mainstream reports on climate change have led the public to question the alleged scientific consensus on the dangers of global warming. Of course, many prominent scientists had been challenging the "consensus" before these gaffes.
- Despite existing scientific dissention and revelations about flawed research on global warming, Congress and the federal government have implemented costly rules and regulations to reduce carbon dioxide emissions, and are proposing to implement even more.
- The climate change policies affect how companies make decisions about expanding their business, how they invest, and which politicians they support—all of which consequently affects consumers and America's system of free enterprise.
- Global warming risks must be weighed against the risks of global warming policies. Policymakers must have accurate information on both sides to avoid measures that harm American consumers and taxpayers for little environmental benefit.

This paper, in its entirety, can be found at:
http://report.heritage.org/bg2479

Produced by the Thomas A. Roe Institute for Economic Policy Studies

Published by The Heritage Foundation
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Washington, DC 20002–4999
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able fuels, expanded tax credits for renewable energy, and new energy efficiency targets for vehicles and appliances. All of these policies had the goal of reducing America's carbon footprint. Congress is now seeking to expand and create new policies aimed at further reducing emissions by placing a national cap on carbon emissions and enforcing a federal mandate for renewable energy production. Meanwhile, the Environmental Protection Agency is on its own regulatory path to decrease CO_2.

The business landscape consequently changed, and not for the better. Energy producers became vested stakeholders and lobbied for handouts to produce what Congress determined to be cleaner energy from cleaner sources, such as windmills, solar panels, and ethanol. Major oil companies invested in renewable energy technology to capitalize on subsidies and tax breaks while enhancing their image. Most businesses factored the threat of global warming into their daily operations and became cognizant of the threat of higher energy prices caused by government policies.

Despite vigorous dissention among the scientific community concerning the effects of anthropogenic warming, the climatologists who believe the warming to be a serious problem controlled the message for years. Simply put, they convinced the general public that global warming posed an imminent threat and drastic cuts in greenhouse gas emissions were necessary to prevent a catastrophe. Recent flaws discovered in the scientific assessment of climate change have shown that the scientific consensus is not as settled as the public had been led to believe. Leaked e-mails from the University of East Anglia's Climate Research Unit in the U.K. revealed conspiracy, exaggerated warming data, possibly illegal destruction and manipulation of data, and attempts to freeze out dissenting scientists from publishing their work in reputable journals. Furthermore, gaffes exposed in the IPCC report have only increased skepticism among businesses and the public, and raised serious questions about sacrificing economic activity to reduce CO_2 emissions.

Policy should never rest on a shaky set of assumptions, particularly when it can have far-reaching implications for American businesses and everyday Americans, and could therefore fundamentally alter decisions in ways that harm America's productive system of free enterprise. While the government can pick winners and prop them up with subsidies, every winner comes at the expense of the taxpayer and discourages the innovation necessary to discover new and economically competitive sources of energy. Moreover, business uncertainty created by the government's wavering on more climate change policy is stunting America's economic recovery. With such inconclusive scientific evidence, Congress should not implement any new GHG-reduction policies, and it should prohibit the EPA from doing the same.

The Shifting Consensus

The alleged scientific consensus on climate change holds that the planet is warming at a dramatic rate. But not long ago, scientists thought that global *cooling* was a threat to the planet. As recently as 1975, *The New York Times* ran an article titled, "A Major Cooling Widely Considered to Be Inevitable."[1] Some proposals even included covering the polar ice caps with black soot to melt them.[2] Only six years later, climatologists predicted that global warming was inevitable, and the issue gained more traction throughout the 1980s and 1990s. The IPCC published multiple reports, the first in 1990, pronouncing that human activities, predominately fossil fuel use, were warming the planet. A supplementary report followed in 1992, the second report appeared in 1995, and the third in 2001—all presenting "newer and stronger" evidence that the planet's surface was heating due to human activity.[3]

The message that warming was incontrovertible continually gained momentum and exploded in

1. R. Warren Anderson and Dan Gainor, "Fire and Ice," Business & Media Institute, May 17, 2006, at *http://www.businessandmedia.org/specialreports/2006/fireandice/FireandIce.pdf* (October 13, 2010).
2. "The Cooling World," *Newsweek*, April 28, 1975.
3. Intergovernmental Panel on Climate Change, "Climate Change 2001: Synthesis Report," at *http://www.ipcc.ch/ipccreports/tar/vol4/english/008.htm* (October 13, 2010).

2006 when former Vice President Al Gore released his book and documentary film *An Inconvenient Truth*, claiming that the planet would witness more Hurricane Katrina-like disasters and rising sea levels if humans do not drastically reduce man-made greenhouse gas emissions. The 2007 IPCC report became Al Gore's *magnum opus* on climate change and the main source for the "evidence" he relentlessly pitched to Congress. The 2007 report declared that global warming is "unequivocal," and the frequency and intensity of natural disasters is likely to increase.[4] The report's "Summary for Policymakers" warned that carbon emissions from fossil fuel production and nitrous oxide, and methane emissions from agricultural production, are significantly contributing to global warming.[5] Government officials in the U.S. and around the world continually use and exaggerate the IPCC report to justify the need for carbon reduction policies, creating a large disparity between hype and reality. For instance, even the IPCC projection of sea level rising over the next century is a modest 7 to 23 inches, with the lower end of that projection occurring over the past two centuries.

Is There a Scientific Consensus? Several recent events, including revelations that forced the IPCC to retract parts of its 2007 report, have called the scientific consensus into question. Although the study puts the probability of Himalayan glaciers melting by 2035 at "very high," the authors acknowledged that they based this and other claims on speculation.[6] Further, the IPCC's assessment of reductions in mountain ice in the Andes, Alps, and Africa came from two dubious sources. One was from a magazine that discussed anecdotal evidence from mountain climbers; the other came from a student dissertation.[7] The IPCC also acknowledged overstating crop loss in Africa, depletion of the Amazon rain forest, sea level increases in the Netherlands, and damage from weather catastrophes.[8]

Climate data sets are also raising questions. Hackers leaked thousands of e-mails and other documents from the University of East Anglia's Climate Research Unit that detailed how these climatologists, many with important roles in promulgating the official U.N. science, refused to share data, plotted to keep dissenting scientists from being published in leading journals, and discarded original data. Some have resigned and others have been investigated for breaching data laws under the Freedom of Information Act.[9] Russian climatologists blamed the scandal-laden Climate Research Unit (CRU) for omitting cooler data points from its data set.[10] In the U.S., computer programmer E. Michael Smith and meteorologist Joseph D'Aleo detailed how the National Climatic Data Center (NCDC) dropped thousands of data points from its climate data set—data points that were in cooler regions around the globe.[11]

4. Intergovernmental Panel on Climate Change, "Summary for Policymakers," 2007, at *http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf* (October 13, 2010).
5. *Ibid*. 620 authors and editors produced the full report.
6. "A Glacier Meltdown," *The Wall Street Journal*, January 23, 2010, at *http://online.wsj.com/article/SB10001424052748703837004575013393219835692.html* (October 13, 2010).
7. Richard Gray, "UN Climate Change Panel Based Claims on Student Dissertation and Magazine Article," *The Telegraph*, January 30, 2010, at *http://www.telegraph.co.uk/earth/environment/climatechange/7111525/UN-climate-change-panel-based-claims-on-student-dissertation-and-magazine-article.html* (October 13, 2010).
8. Jeffrey Ball and Keith Johnson, "Climate Group Admits Mistakes," *The Wall Street Journal*, February 10, 2010, at *http://online.wsj.com/article/SB10001424052748704182004575055703697897576.html* (October 13, 2010).
9. "Climate E-mails Row University 'Breached Data Laws,'" BBC News, January 28, 2010, at *http://news.bbc.co.uk/2/hi/uk_news/8484385.stm* (October 13, 2010).
10. Natalya Pivovarova, "How Warming Is Being Made: The Case of Russia," Institute of Economic Analysis, December 2009, in Russian, at *http://www.iea.ru/article/kioto_order/15.12.2009.pdf* (October 13, 2010).
11. Joseph D'Aleo, "Climategate: Leaked Emails Inspired Data Analyses Show Claimed Warming Greatly Exaggerated and NOAA Not CRU is Ground Zero," International Climate and Environmental Change Assessment Project, January 15, 2010, at *http://icecap.us/images/uploads/NOAAroleinclimategate.pdf* (October 13, 2010).

A few errors in the three-volume, almost 1,000-page IPCC report may not warrant dismissal of the entire study, but climatologists questioned the IPCC's findings before these gaffes. University of Virginia professor Fred Singer recently published an 800-page report titled, "Climate Change Reconsidered," which questions and debunks many of the IPCC conclusions and emphasizes that there is no scientific consensus on climate change.[12] Richard Lindzen, professor of meteorology at the Massachusetts Institute of Technology, notes that the IPCC's models fail to take into account naturally occurring cycles such as El Niño, the Pacific decadal oscillation, or the Atlantic multidecadal oscillation.[13] Other prominent scientists called political action "irresponsible and immoral" because of the lack of credible evidence.[14] When the IPCC released its report in 2007, 400 climate experts disputed the findings; that number has since grown to more than 700 scientists, including several current and former IPCC scientists.[15]

The profusion of scientific dissent should have been sufficient evidence for policymakers to call the alleged consensus into question, and these recent events should raise even more red flags, especially in light of the economic costs that policies to mitigate greenhouse gases carry.

Government Plans to Reduce Greenhouse Gases

Despite these revelations about scientific research on global warming, the U.S. government has aggressively pursued climate change policies to reduce carbon dioxide emissions. During the past two decades, the federal government has spent more than $79 billion on climate change policies, "including science and technology research, administration, education campaigns, foreign aid, and tax breaks."[16] Legislation signed into law in 2005 and 2007 included more steps to transition from fossil fuels and improve energy efficiency to reduce CO_2 emissions. More recently, the Obama Administration has attempted to tip the balance in favor of renewable energy by advocating a cap-and-trade system, CO_2 regulations, renewable electricity mandates, and additional billions of dollars in government spending for government-picked "clean-energy" sources. Key legislative and regulatory steps are:

- **2005 and 2007 Energy Bills and 2009 Green Stimulus.** Over the past five years, the government implemented two key policies to support renewable energy production, and passed a stimulus bill in 2009 with billions allocated to renewable energy projects. The Energy Policy Act (EPACT) of 2005 contained loan guarantees for technologies, such as nuclear energy carbon capture, and sequestration, that would reduce greenhouse gas output by increasing the supply of carbon-free energy, as well as a host of subsidies and policies to increase renewable energy production. The act also included the first requirement that renewable fuels be mixed into the gasoline supply.

  The Energy Independence and Security Act (EISA) of 2007 increased the renewable fuel mandate from 7.5 billion gallons in 2012 to 36 billion gallons by 2022,[17] and included more tax credits for wind power, solar energy, and

12. Craig Idso and S. Fred Singer, "Climate Change Reconsidered," Report of the Nongovernmental International Panel on Climate Change (NIPCC), May 2009, at *http://hatch.senate.gov/public/_files/ClimateChangeReconsidered.pdf* (October 13, 2010).
13. Richard S. Lindzen, "The Climate Science Isn't Settled," *The Wall Street Journal*, November 30, 2009, at *http://online.wsj.com/article/SB10001424052748703939404574567423917025400.html* (October 13, 2010).
14. Kesten C. Green, J. Scott Armstrong, and Willie Soon, "Climate Change Forecasts Are Useless for Policymaking," Enter Stage Right, March 9, 2009, at *http://www.enterstageright.com/archive/articles/0309/0309climatechangeforecasts.htm* (October 13, 2010).
15. Marc Morano, "UN Blowback: More Than 650 International Scientists Dissent over Man-Made Global Warming Claims," U.S. Senate Committee on Environment and Public Works, March 16, 2009, at *http://epw.senate.gov/public/index.cfm?FuseAction=MinorityBlogs&ContentRecord_id=2158072e-802a-23ad-45f0-274616db87e6* (October 13, 2010).
16. Joanne Nova, "Climate Money," Science and Public Policy Institute, July 21, 2009, at *http://scienceandpublicpolicy.org/images/stories/papers/originals/climate_money.pdf* (October 13, 2010).
17. This mandate comes on top of other pro-ethanol provisions, most notably a 51 cent per gallon tax credit.

small irrigation power. Congress implemented a number of other energy-efficiency mandates for vehicles, buildings, and appliances to reduce energy consumption and consumers' carbon footprint. Energy-efficiency mandates were first put in place by the National Energy Conservation and Policy Act of 1978, but EPACT and EISA were the major policy drivers behind efficiency mandates. EISA placed stringent efficiency requirements on incandescent light bulbs in an attempt to phase them out beginning in 2012 and replace them with more energy-efficient bulbs, the most popular being compact fluorescent bulbs (CFLs).

The 2009 American Recovery and Reinvestment Act included funding for renewable energy as well. Also known as the stimulus bill, the $814 billion package allocates nearly $47 billion for renewable energy sources, smart grids, and energy-efficiency programs. Congress granted an additional $20 billion to manufacturers of renewable energy technology in the form of tax credits.

The reason these sources of energy need government help is that they are too uncompetitive to reach the market otherwise. To the extent that there is a valid economic case for wind energy, solar energy, and ethanol fuel, industry will provide them even in the absence of government dictates and subsidies. Moreover, government-mandated energy-efficiency programs may sound good to consumers, but it is rarely good when Washington controls the market, since the forced energy-efficiency standards can result in decreased product performance, features, or reliability, which destroys value for the consumer. Mandatory improvements in efficiency usually raise the purchase price of appliances; sometimes the increase is more than enough to negate the energy savings.

- **Cap and Trade.** One way to make clean energy more competitive is to tax fossil fuels to make them more expensive through a cap-and-trade system. Under cap and trade, emitters of greenhouse gases, primarily carbon dioxide derived from fossil fuel production, would be required to obtain permits (also known as allowances) for each ton of CO_2 emitted. The price of the allowances, in essence the tax on energy, is determined by supply and demand. As the carbon cuts become more stringent, the government allocates fewer permits, thus driving up the price for the energy-intensive sectors required to buy them. By taxing fossil-fuel-derived energy with artificial caps on carbon dioxide, clean energy artificially becomes more economically viable. In July 2009, the House of Representatives passed a cap-and-trade bill to reduce greenhouse gases 83 percent below 2005 levels by 2050. Since nearly 85 percent of America's energy needs come from fossil fuels, capping carbon dioxide amounts to an enormous tax on energy consumption.
- **EPA Regulations.** With Congress unable to deliver a final cap-and-trade bill to the President, the Environmental Protection Agency (EPA) has been working on a backdoor policy to regulate greenhouse gas emissions much like cap and trade. A 2007 Supreme Court case decided that carbon dioxide and five other GHGs are pollutants and can be regulated under the Clean Air Act. The court ordered the EPA administrator to determine whether these GHG emissions were dangerous to human health and the environment and whether the scientific consensus on the effects of GHGs was settled. In April 2009, the EPA issued an endangerment finding, saying that current and future greenhouse gas emissions pose a serious threat to public health and safety. The EPA relied on the 2007 IPCC report as well as data from the NCDC to establish this finding. Thus, questionable science is guiding major changes in economic regulation. Under this approach, almost any activity that emits carbon dioxide and other greenhouse gases could be regulated under the Clean Air Act. Like cap and trade, regulating CO_2 emissions under the Clean Air Act would similarly burden the economy with higher energy costs, and would also include higher administrative compliance costs for businesses, higher bureaucratic costs for enforcing the regulations, and higher legal costs from the inevitable litigation.

Business Responds to Government

Recognizing policymakers' commitment to reducing greenhouse gases, businesses shaped their

plans around government policies, despite the fact they are based on poor scientific evidence. Companies worldwide are taking climate change into consideration when making short-term and long-term business decisions. A June 2009 PricewaterhouseCoopers global survey asked 1,124 CEOs how their respective businesses were responding to climate change policies. In a series of yes or no questions, when asked about making changes to the products and services provided due to climate change policies, 46 percent said they were already making changes to day-to-day operations, and 40 percent are already changing how they manage risk.[18]

Businesses are not just changing day-to-day operations and preparing for higher energy costs, but also how they invest for the future. Johnson & Johnson is investing in renewable energy and now uses the most hybrid vehicles of any company in America.[19] Wal-Mart CEO Scott Lee made a pledge that each of his stores would eventually run on 100 percent renewable energy.[20] Coca Cola's environmental initiative focuses not only on water stewardship and sustainable packaging, but also climate protection.[21] Goldman Sachs invested $1.5 billion in wind, solar, and ethanol projects in 2006.[22]

There is nothing wrong with these business decisions if they are made voluntarily. But if they are made in response to government policies favoring renewable energy over other sources, especially on questionable scientific grounds, it misallocates private resources, crowds out innovation, and wastes taxpayer money. In Spain, solar companies enjoyed lucrative subsidies for years; when the global recession forced the Spanish government to cut back its handouts, the Spanish solar market crashed.[23]

In a free market, the private sector should bear the risk and, therefore, reap the reward or suffer the consequences of an investment decision. If the government dictates these decisions by subsidizing a portion of the project, businesses receive all rewards with minimal risk. With start-up companies and large corporations alike receiving money from the government through stimulus funds or tax credits, firms will divert investments to clean-energy technology away from other—potentially more profitable and value-creating—investments.

As the government moves more actively toward funding renewable technology, investors are waiting to determine who the government winners will be before they spend more of their own money on innovative ideas, expanding their businesses, and hiring more employees. As Darryl Siry, former head of marketing at Tesla Motors, put it, "The existence of an 800-pound gorilla putting massive capital behind select start-ups is sucking the air away from the rest of the venture-capital ecosystem. Being anointed by DOE [U.S. Department of Energy] has become everything for companies looking to move ahead."[24]

Large corporations also flooded the halls of Congress with thousands of lobbyists to ask for preferential treatment on energy policy. In 2007, 10 of the largest companies in the U.S. formed the United States Climate Action Partnership (USCAP) urging the government to cut GHG emissions. USCAP has

18. "Capitalizing on a Climate of Change," PriceWaterhouseCoopers, June 2009, at *http://www.pwc.com/en_US/us/transaction-services/publications/assets/capitalizing-climate-change.pdf* (October 13, 2010).
19. "Johnson & Johnson Ranked Third on *Newsweek*'s Green Rankings List, 2009," at *http://www.jnj.com/connect/caring/environment-protection/recognition/* (October 13, 2010).
20. Press release, "Remarks as Prepared for Wal-Mart CEO and President Lee Scott at the Wal-Mart U.S. Year Beginning Meeting," Walmart, January 23, 2008, at *http://walmartstores.com/pressroom/news/7896.aspx* (October 13, 2010).
21. The Coca Cola Company, "Environmental Initiatives," at *http://www.thecoca-colacompany.com/citizenship/environment.html* (October 13, 2010).
22. "10 Green Giants: Goldman Sachs," CNN Money, at *http://money.cnn.com/galleries/2007/fortune/0703/gallery.green_giants.fortune/8.html* (October 13, 2010).
23. "Solar Bubble Bursts in Spain amid Subsidy Cuts, Fraud Allegations," *Climate Wire*, May 6, 2010, at *http://www.eenews.net/cw/2010/05/06* (October 14, 2010).
24. Neil King, Jr., "Venture Capitol: New VC Force," *The Wall Street Journal*, December 15, 2009, at *http://online.wsj.com/article/SB126074549073889853.html* (October 13, 2010).

since grown to 28 businesses and environmental organizations.[25] Businesses heavily ramped up lobbying efforts in the past decade. More than 1,700 firms and groups sent lobbyists to work in the area of energy in 2009, up from 1,300 the year before, and 900 in 2006.[26]

Businesses rightfully have an interest in protecting their bottom lines. Many of them have calculated that some hodgepodge of green policies is inevitable and that their interests will be best served by trying to influence how Congress creates those policies. The best way to do that will be to position themselves as supporters of the legislation and then to provide helpful suggestions on how to "improve" it. Representatives from the oil, coal, gas, wind, and solar industries, among others, have a stake in the game one way or another—either to stave off harmful legislation or to ensure that legislation is favorable to their business.

This process, known as rent-seeking (because it causes businesses to lobby for rules in their favor at the expense of others), is bad economics and bad for the consumer. Not only is there an opportunity cost to lobbying (business resources spent on lobbying could be spent elsewhere); politics governed by special interests typically worsens conditions for the consumer. Consumers are the ones who bear the costs of these government policies; meanwhile, industry receives a seemingly free windfall. The more that government becomes involved in energy decisions, the more money will be used for special interest politicking. As founding father Ben Franklin said, "When the people find that they can vote themselves money, that will herald the end of the republic."[27]

Congressional Action Required

Congress has spent years and billions of dollars building policy around an alleged scientific consensus, and is on a path to spend billions more as well as implement policies that would significantly reduce this country's economic potential. Congress should instead focus on the following measures to prevent more unnecessary economic damage and promote sound energy policy that would create jobs and increase energy supply:

1. **Refrain from Legislating for the Purpose of Reducing GHGs.** Congress should not pursue policies, such as cap and trade, a renewable electricity standard, or subsidies for "clean energy" as long as grave scientific disputes remain. Even if a scientific consensus emerges, Congress should still refrain from taking any action unless the economic cost of climate change mitigation justifies any benefits.
2. **Prohibit EPA Regulations.** Congress should rein in the EPA's regulatory authority by amending the Clean Air Act to exclude carbon dioxide and other greenhouse gases from coming under the EPA's purview.
3. **Focus Energy Policy on Energy, not GHGs.** Instead of artificially propping up certain energy sources with subsidies and mandates based on a false scientific consensus, Congress should focus on creating a regulatory and legal framework for all energy policies to succeed or fail on their own merit by removing subsidies and reducing regulatory red tape that prevents the development of all energy sources.

Uncertain Science, Certain Cost

If the scientific consensus behind global warming is crumbling, so, too, should the economically harmful policies that stem from it. When asked about the scientific consensus on climate change, Phil Jones, former climate-research director at the University of East Anglia, said, "I don't believe the vast majority of climate scientists think this. This is not my view. There is still much that needs to be undertaken to reduce uncertainties, not just for the future, but for the instrumental (and especially the paleoclimatic) past as well."[28] If the vast majority of climatologists do not believe that the debate on climate change is over, politicians should not be pushing for greenhouse gas reduction policies that

25. United States Climate Action Partnership, at *http://www.us-cap.org* (October 13, 2010).
26. OpenSecrets.org, "Lobbying: Energy & Nuclear Power," at *http://www.opensecrets.org/lobby/issuesum.php?year=2009&lname=Energy+%26+Nuclear+Power&id* (October 13, 2010).
27. John Petrie's Collection of Ben Franklin Quotes, at *http://jpetrie.myweb.uga.edu/poor_richard.html* (October 13, 2010).

not only have significant economic costs, but will also deeply alter the business landscape of the United States.

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28. "Q&A: Professor Phil Jones," BBC News, February 13, 2010, at *http://news.bbc.co.uk/2/hi/science/nature/8511670.stm* (October 13, 2010).