

American Clean Energy and Security Act

2009-06-30 03:06:05 by Chris Holt

Here's another article by Dr. Mir Ali on the Obama Administration's attempt to reduce carbon emissions. It certainly is a change; but is it enough?

American Clean Energy and Security Act

Dr. Mir F. Ali

The approach to limit or reduce greenhouse gas (GHG) emissions which was adopted by both the United Nations Framework Convention on Climate Change (UNFCCC) and by the Kyoto Protocol (KP) is known as an absolute target approach. This approach requires that GHG emissions be reduced by a specific amount by a specific time. However, the emission targets set up by the UNFCCC for developed countries are non-binding whereas the emission targets set up by the KP for developed countries are binding. The non-binding targets set up by the UNFCCC for the USA were ratified by the US Senate but the binding targets that were set up by the KP for the USA were rejected by the Bush Administration.

On March 13, 2001, President Bush backed away from his campaign pledge to seek cuts in emissions of carbon dioxide (CO₂) as part of a strategy to regulate together, rather than separately, four air pollutants emitted by power plants. In a letter to Sen. Chuck Hagel (R-Neb.) explaining his reversal, the president cited a recent Department of Energy report that concluded it would be too costly to regulate CO₂; he also claimed that CO₂ is not considered a pollutant under the Clean Air Act.

President Bush announced a new climate change strategy on February 14, 2002, setting a voluntary "GHG Intensity" target for the nation which expanded existing programs encouraging companies to voluntarily report and reduce their GHG emissions, and proposed increased federal funding for climate change science and technology development. Some elements of the Administration's strategy may provide additional incentive to companies to voluntarily reduce GHG emissions. This strategy set a target for GHG intensity: the ratio of GHG emissions to economic output expressed in gross domestic product (GDP).

This approach minimizes economic impact by allowing emissions to rise or fall with economic output; however, it provides no assurance that a given level of environmental protection will be achieved since the degree of environmental protection is measured in relation to GDP. Theoretically a GHG intensity target can lead to a net reduction in emissions, but only if it is sufficiently stringent. The Administration's target - an 18 percent improvement in GHG intensity over the next decade - allows a substantial increase in net emissions.

Just to give an idea about the baseline and the increase in GHG emissions, in 1990, total U.S. GHG emissions were 1,671 million metric tons in carbon equivalents (MMTCE) or 6,128 million metric tons in carbon dioxide equivalents (MMTCO₂E). As of 2000, total U.S. GHG emissions were 14.1 percent above 1990 levels, or 1,907 MMTCE (6,994 MMTCO₂E).

[According to a report](#), although total emissions continued to rise, GHG intensity in fact fell over the last two decades. Contributing factors include energy efficiency improvements, the introduction of new information technologies, and the continued transition from heavy industry to less energy-intensive, service-oriented industries. In the 1980s GHG intensity fell by 21 percent. During the 1990s GHG intensity fell by 16 percent.

The Administration's strategy aims to cut GHG intensity to a level of 151 metric tons carbon equivalent per million dollars of GDP by 2012, 18 percent below its present level. While this would represent a very modest improvement over the "business as usual" emissions projections for 2012 used by the Administration, it appears to continue the same trend of GHG-intensity reductions and GHG emissions increases experienced over the last two decades.

Consequently, in terms of actual emissions, total U.S. GHG emissions would grow 12 percent by 2012, resulting in GHG emissions of 2,155 MMTCE (7,900 MMTCO₂E). Emissions in 2012 would be 30 percent above 1990 levels (1990 is often used as a "base year" because the Framework Convention on Climate Change called for industrialized countries to return to their 1990 levels by 2000).

George W. Bush has said the US was committed to reducing global warming but disappointed many by refusing to drop his opposition to mandatory limits on carbon output. In a major speech (2007) in Washington Mr. Bush told representatives of the world's 16 most

polluting countries, which account for 80 per cent of harmful emissions, that each nation should design its own strategy, reflecting each country's "different energy resources, stages of development and economic needs".

On June 2, 2008, President George Bush weighed in against a Senate bill that would drastically cut GHG emissions, warning that it would impose crippling costs on "job creators" and consumers. The administration threatened to veto a bipartisan Senate climate bill, the Lieberman-Warner Climate Security Act, expected to be debated would cut emissions of carbon dioxide from burning fossil fuels and other GHG by about 66% over the next four decades.

On June 26, 2009, within six months of the Obama's presidency, the House of Representatives passed the landmark American Clean Energy and Security Act, sponsored by Rep. Henry A. Waxman, Chairman of the House Energy and Commerce Committee, and Rep. Edward J. Markey, Chairman of the House Select Committee on Energy Independence and Global Warming.

It was reported that the vote was the first time either house of Congress had approved a bill meant to curb the heat-trapping gases scientists have linked to climate change. The legislation, which passed despite deep divisions among Democrats, could lead to profound changes in many sectors of the economy, including electric power generation, agriculture, manufacturing and construction.

The bill's passage, by 219 to 212, also established a marker for the United States when international negotiations on a new climate change treaty begin later this year. Here are the details on the voting:

Affiliation	AYE Votes	NAY Votes	ABSTAIN Votes
Democrats	211	44	1
Republicans	8	168	2
TOTAL	219	212	3

At the heart of the legislation is a cap-and-trade system that sets a limit on overall emissions of heat-trapping gases while allowing utilities, manufacturers and other emitters to trade pollution

permits, or allowances, among themselves. The cap would grow tighter over the years, pushing up the price of emissions and presumably driving industry to find cleaner ways of making energy.

The bill contains the following key provisions:

- Requires electric utilities to meet 20% of their electricity demand through renewable energy sources and energy efficiency by 2020;
- Invests \$190 billion in new clean energy technologies and energy efficiency, including energy efficiency and renewable energy (\$90 billion in new investments by 2025), carbon capture and sequestration (\$60 billion), electric and other advanced technology vehicles (\$20 billion), and basic scientific research and development (\$20 billion);
- Mandates new energy-saving standards for buildings, appliances, and industry;
- Reduces carbon emissions from major U.S. sources by 17% by 2020 and over 80% by 2050 compared to 2005 levels. Complementary measures in the legislation, such as investments in preventing tropical deforestation, will achieve significant additional reductions in carbon emissions; and
- Protects consumers from energy price increases. According to recent analyses from the Congressional Budget Office and the Environmental Protection Agency, the legislation will cost each household less than 50 cents per day in 2020 (not including energy efficiency savings).

The American Clean Energy and Security Act (ACES), H.R. 2454, is supposed to create jobs, reduce oil dependence, cut global warming pollution, and increase American competitiveness. It is considered to be a fragile compromise with support from utilities, energy companies, labour unions, and environmentalists. [The debate guide](#) describes below the major expectations of the Act:

1. **Create Jobs:**

A very recent [study by the Pew Center on the States](#) found that there are already at least 770,000 clean-energy jobs in the United States. A [new analysis by the Center for American Progress and University of Massachusetts](#) projects that the bill, combined with the clean-energy investments in the American

Recovery and Reinvestment Act, could generate \$150 billion in annual public- and private-sector clean-energy investments. This would create 1.7 million net new jobs. This includes 38,000 jobs in Indiana, 67,000 in Ohio, and 72,000 in Pennsylvania;

1. **Reduce Dependence on foreign oil:**

The United States imported 57 percent of its oil last year, sending \$342 billion out of the country. Nearly three-quarters of oil use goes toward transportation.

The new fuel economy standards announced by [President Barack Obama on May 19, 2009 will reduce oil use by 1.8 billion barrels of oil over the life of the program](#). The standards will produce a car and light truck vehicle fleet that would achieve the equivalent of 35.5 miles per gallon by 2016. This is nearly a one-third improvement in fuel economy.

The American Clean Energy and Security Act would assist automakers in complying with these standards by providing resources for the development and production of plug-in hybrid electric vehicles and other ultra-fuel-efficient cars.

1. **Cut global warming pollution:**

The United States produces about one-fifth of global carbon dioxide pollution. And U.S. emissions have grown by about 1 percent per year since 1990 except during recessions. Emissions will grow by an additional 20 percent to 52 percent by 2025 without action. The global warming report determined that “sizable early cuts in emissions would significantly reduce the pace and overall amount of climate change.”

Coal-fired power plants and motor vehicles are responsible for half of U.S. global warming pollution. The American Clean Energy and Security Act would reduce emissions from power plants and other sources. President Obama’s announced fuel economy standards would reduce global warming pollution from motor vehicles. The ACES requires greenhouse gas emissions to be 17 percent lower than 2005 levels by 2020. This is equivalent to taking half a billion cars off the road.

The provision to prevent tropical forest destruction would achieve another 10 percent reduction by 2020.

The bill would reduce greenhouse gas pollution by setting a

“cap” on greenhouse gas emissions, and requiring all emitters over 25,000 tons to have an “allowance” for each ton of pollution. Companies can buy or sell allowances to meet their needs. The Congressional Budget Office projects that this bill [“would reduce budget deficits ... by about \\$24 billion”](#) from 2010-2019.

1. **Increase American competitiveness:**

Germany leads the world in solar energy, while China has produced the first plug-in hybrid electric vehicle for sale. ACES would require utilities to generate 15 percent of their electricity from wind, solar, geothermal, biomass, and other renewable energy sources by 2020 (although state governors could petition to allow utilities to substitute 3 percent of renewables with 3 percent efficiency). Utilities would also have to reduce electricity demand by 5 percent via efficiency measures. These provisions would lower global warming pollution as well as drive investment toward the clean-energy technologies of the 21st century.

The bill would provide incentives for research and development of cleaner cars, better batteries, and more efficient buildings. The [Green Bank](#) would provide capital to develop these and other new clean-energy technologies.

Stavros Dimas, the European Union commissioner for the environment, warned on Thursday that President Barack Obama’s goals to cut emissions over the next decade may not be ambitious enough to meet long-term targets. Under Mr. Obama’s plan, the United States would cut emissions by 1.5 percent each year until the end of the next decade. But [Mr. Dimas](#) warned the United States that small annual reductions now would require much larger annual reductions — as much as 5 percent a year — after 2020, if Mr. Obama’s long-term goal of reducing planet warming gases 80 percent by mid-century is to be reached.

In December, the 27 member states of the E.U. agreed to bring emissions down to 20 percent below 1990 levels by 2020. They pledged to make it 30 percent if developed countries, including the United States, took measures to reduce emissions that are roughly in line with European efforts. So far, E.U. officials say, Mr. Obama has only pledged to bring emissions down to match 1990 levels by 2020.

Perhaps what matters most, is the drastic change in the American policy as well as the attitude towards climate change. The passage of American Clean Energy and Security Bill sent a dramatic signal to

the world that America at last understands the need to put its own house in order on climate change and that it can see commercial advantages in clean energy that would have been lost to Europe for ever.

It takes 60 votes to end the debate. Even though Democrats hold 59 seats in the Senate but the question is -Is this bill vulnerable due to the internal divisions among Democrats or/and the lack of support from Republicans? The reality is that the whole world is watching with keen interest and no Senator in his or her right mind can afford to take the risk of not support the bill.

Dr. Mir F. Ali is a Sustainability Analyst with Turner Lane Development Corporation, a real estate development company with the commitment to build sustainable community in British Columbia, Canada.
