Are US carbon cuts about to stall? And could California kick-start them again?

Bob Ward warns encouraging emission reductions from the US could be about to grind to a halt - but could California ride to the rescue

By Bob Ward, the Grantham Research Institute
02 May 2014

Last month, the United States Environmental Protection Agency (EPA) proudly announced that the nation's total annual emissions of greenhouse gases in 2012 were 3.4 per cent lower than the previous year. The detailed analysis showed that emissions were at their lowest level since 1994, and 10 per cent lower than in 2005, a step closer to the target set by the Obama administration of a 17 per cent cut by 2020.

The EPA noted that a major factor was the continuing low cost of natural gas, due mainly to the increase in production from shale and other unconventional sources, which resulted in a fall in the amount of coal being burned for electricity generation. Carbon dioxide emissions from energy, the largest single contributor, dropped by 3.8 per cent between 2011 and 2012, according to the United States Energy Information Administration (EIA).

This is good news, but, sadly, the downward trend in emissions from the United States is set to end. Provisional figures published by the EIA in January 2014 estimated that energy-related emissions of carbon dioxide were two per cent higher in 2013 than in the previous year, as coal made a slight comeback. The EIA's projections also suggest that emissions this year and in 2015 will remain higher than in 2012.

While these projections do not take into account the potential effect of President Obama's plans to stop the construction of the most polluting coal-fired power plants, they do reflect the weakness of national-level action against climate change in the United States resulting from the lack of support from Congress, particularly the Republican Party.

Without a strong federal policy framework for reducing greenhouse gas emissions, private investors are cautious about the transition to the low carbon economy. But there are some glimmers of hope at state-level, particularly in California. Politicians in 'The Golden State' are demonstrating the kind of leadership that is so sadly lacking among their counterparts on Capitol Hill.

It is now almost eight years since the then (Republican) Governor of California, Arnold Schwarzenegger, signed Assembly Bill 32 (AB32) into law, to create the Global Warming Solutions Act. It committed the State to cutting its emissions of greenhouse gases by 2020 to the same level as in 1990.

An alliance of vested interests, including the billionaires Charles and David Koch, put forward Proposition 23 in 2010 to try to suspend the Act, but it was eventually rejected by Californian voters.
The survival of the Act provided the basis for the creation of new a cap and trade programme, overseen by the California Air Resources Board. The programme has established a gradually strengthening cap on about 85 per cent of the greenhouse gases emitted in California.

While implementation of the programme was slightly delayed, the first compliance period eventually began at the start of 2013. After initially peaking at about $16 per tonne of carbon-dioxide-equivalent, credits are now trading at about $10 per tonne, just above the floor price. Although some had hoped for a higher carbon price, the cap and trade scheme has been a success, largely because the architects of California's scheme learned to avoid some of the initial shortcomings of the European Union Emissions Trading System.

As Blas Luis Pérez Henríquez, Director of the Center for Environmental Public Policy at the University of California, Berkeley, points out in his book on *Environmental Commodities Markets and Emissions Trading*, the support for the scheme shown by the California Air Resources Board has been crucial in "sending strong signals of a credible commitment from government to this policy approach". A weaker approach could have completely undermined the confidence of companies due to participate in the market, possibly dooming the cap and trade programme to failure.

California has become a bright beacon for low carbon energy because of this combination of strong commitment, consistency and credibility, as well as political leadership.

When Arnold Schwarzenegger ended his term as Governor in 2011, his Democrat successor, Jerry Brown, reassured businesses about the direction and continuity of policy.
Such bi-partisan agreement seems impossible at federal-level on any issue, let alone climate change. Yet, if anything, Governor Brown has sought to outdo his predecessor by accelerating California's low-carbon transition.

Last October, Governor Brown signed a pact with his counterparts in Oregon, Washington and British Columbia to combat climate change and promote clean energy, and to explore opportunities to create linked programmes for carbon pricing.

California has also been working closely with other States and Canadian Provinces through the Western Climate Initiative, and since the start of this year, its cap and trade programme has been formally linked to that of Quebec.

In this way, California and its partners have shown how a country-wide price on carbon might eventually be achieved, state by state.

But it is not only on carbon pricing that California is setting a clear example. It has also introduced policies to promote energy efficiency, including standards for electrical appliances and public buildings. And the California Renewable Portfolio Standard has set a goal of generating 33 per cent of the State's annual electricity from renewable sources by 2020.

This strong political leadership and clear policy-making is reaping both environmental and economic benefits for California, the economy of which was larger than that for all but nine countries in the world in 2012.

California is the national leader in generating electricity from geothermal, solar and biomass, and ranks third in terms of wind power even though eligible areas are restricted to the less than a quarter of the State's lands which are not protected parks and wilderness.

The strong growth of renewables, along with a reduction in the consumption of coal, has meant that California's annual energy-related emissions of carbon dioxide have declined steadily since a peak in 2007, and in 2011 were at their lowest level since 1996.
Meanwhile Governor Brown has turned around the State's notoriously rocky finances, thanks in part to $850m raised from the auction of credits for the cap and trade programme, which he intends to invest to "modernize the state's rail system, including high speed rail, encourage local communities to develop in a sustainable manner, reduce transportation emissions, increase energy, water, and agricultural efficiency, restore forests in both urban and rural settings, and create incentives for improved recycling".

What will it take for federal lawmakers in Washington DC to learn from this powerful example being set by California, and break the dismal deadlock that is paralysing Congress?

Bob Ward is policy and communications director at the Centre for Climate Change Economics and Policy and the Grantham Research Institute on Climate Change and the Environment at London School of Economics and Political Science.

Article Published in: http://www.businessgreen.com/