

KEY FINDINGS

1. The energy giants China and the United States are accelerating action.

- China and the United States (US) are the world's two largest economies and together produce approximately 37% of world emissions. Both nations are on track to meet their international commitments to tackle climate change. In recent months they have each signalled they will be strengthening their efforts and in April they reached an historic agreement to tackle climate change together.
- Increasing action from the global energy giants can re-energise the global effort to tackle climate change. While China and the US cannot solve the problem alone, they are acting as significant drivers of change.
- Only a few years ago some commentators pointed to insufficient action in China and the United States to delay action in Australia. Today the energy giants are undoubtedly on the move, which will fuel global momentum.

2. China's efforts demonstrate accelerating global leadership in tackling climate change.

- China is reducing its emissions growth. In 2012 China reduced the carbon intensity of its economy more than expected. Growth in demand for electricity, which is largely generated from coal, almost halved after years of strong growth.
- China will begin introducing seven emissions trading schemes this year that cover a quarter of a billion people. A national trading scheme is planned, based on these models.
- China has emerged as the world's renewable energy powerhouse, taking ambitious strides to add renewable energy to its mix. 2012 was another year of extraordinary growth:

- Between 2005 and 2012 China increased its wind power generation capacity by almost 50 times. The amount of electricity generated from wind in 2012 was about 36 per cent higher than in 2011.
- New solar power capacity expanded by 75% in 2012. Solar power capacity is expected to triple to more than 21,000 megawatts by 2015.
- In 2012 China invested US\$65.1 billion in clean energy, 20% more than in 2011. This was unmatched by any nation and represented 30% of the entire G-20 nations' investment in 2012.
- China remains the world's largest emitter. However, if it continues to make gains in reducing growth in demand for electricity and fossil fuels, China could curb its emissions sooner than expected.

3. The United States has made a new commitment to lead.

- The US appears to be gaining momentum with President Barack Obama outlining his strong intent to address climate change and for America to play a leadership role.
- Emissions in the US have been declining. With continued efforts the US is on track to meet the national goal of reducing emissions by 17% on 2005 levels by 2020. Policy settings have made a contribution, as well as the impact of the economic downturn and a progressive shift away from coal to gas.
- Important foundations have been set that are likely to have a lasting impact in the coming decades, including:
 - In January 2013 the world's 9th largest economy, California, commenced an emissions trading scheme.
 - More than half of US states now have policies to encourage renewable energy.

- In just four years, between 2008 and 2012, the US has nearly doubled its installed renewable energy capacity.
- US investment in renewable energy was US\$35.6 billion in 2012, second only to China.

4. Global momentum to tackle climate change is growing. Every major economy is tackling climate change, setting in place policies to drive down emissions and increase investment and capacity of renewable energy.

- Ninety-eight countries have committed to limit their greenhouse gas emissions.
- The number of countries pricing carbon is increasing, with four new schemes starting so far this year. Emissions trading schemes are now operating in 35 countries and 13 states, provinces and cities. These 48 schemes, together with the 7 Chinese schemes, are expected to involve 880 million people and about 20% of global emissions.
- Global renewable energy capacity is growing quickly; in 2012 alone capacity rose 15%. The capacity of solar photovoltaic panels increased by 42% and wind capacity 21%. Total global renewable energy power generation is expected to increase by more than 40% from 2011 to 2017.
- Policy support has been central to driving investment and growth in installed renewable energy capacity in many countries. Conversely, declining support, or policy uncertainty, has stifled investment in other countries.
- The global pressure to reduce emissions is only likely to increase as the climate shifts and global action accelerates.

5. Australia is a major player and is important in shaping the global response to climate change.

- Australia is one of the most vulnerable developed countries to climate change

and is already experiencing the impacts of more frequent and severe extreme weather. For instance, during the most recent Australian summer more than 123 heat, flood and rainfall records were broken. Australia's global influence in averting these risks will depend on how effectively we implement policy solutions at home.

- Australia is the 15th largest emitter, larger than 180 other countries. This means that Australia has a responsibility to play its part and that Australian actions have a global influence.
- There have been significant developments in Australia, including:
 - Greenhouse gas emissions have declined. Greenhouse gas emissions from electricity generation in the period from June to December 2012 were the lowest since 2001-02.
 - Australia's renewable energy capacity almost doubled from 2001 to 2012. This year a significant milestone of one million households having installed solar photovoltaic panels was reached.

6. This is the critical decade for action.

- While significant progress is being made, it is not enough. Globally emissions are continuing to rise strongly, posing serious risks for our society.
- This decade must set the foundations to reduce emissions rapidly to nearly zero by 2050. The earlier such action is under way the less disruptive and costly it will be. This is the critical decade for accelerating action. All countries, particularly the major emitters like China, the United States and Australia, must move beyond their current commitments to reduce their emissions more deeply and swiftly. This is the critical decade to turn the global emissions trend downwards and to set the global foundations for accelerating reductions in decades to come.