



Behind the Numbers – Downward trend reverses as Australia begins climb to new emissions high

IN SHORT

- In late November, Environment Minister Greg Hunt announced that Australia's cumulative abatement task to 2020 had fallen to "below zero", with an interim update indicating a 264 million tonne of carbon dioxide equivalent (Mt) reduction in Australia's projected emissions through to 2020. This has led to a new cumulative emissions reduction task of minus 28 Mt.
- The government's emissions projection figures through to 2020 were released just prior to the Christmas holiday, on the 22nd of December, consisting of the underlying emissions projections behind the government's "Tracking to 2020" November update, along with the National Greenhouse Gas Inventory (NGGI) figures for the quarter ending June 2015, completing Australia's FY15 inventory.
- Taken together, the government's data releases confirm that 'projection improvements' have resulted in a decrease in Australia's cumulative abatement task. The downgrade has occurred despite a net increase in national emissions over FY15, the first increase in fiscal year emissions since 2005-06, when Australian emissions reached their historic peak.
- Government figures also indicate Australia will continue on a new upward emissions trajectory, despite current policy, with forecast emissions growth of 6 per cent through to 2020.
- This is in line with our estimates released in November, with the government confirming that emissions will grow to 6 per cent above 2000 levels by 2020, short of the 5 per cent below 2000 target.
- The government will instead utilise a carry-over credit under the Kyoto Protocol to meet its international commitment.
- The government's latest update demonstrates a disconnect between Australia's falling abatement task - an accounting measure used to track Australia's progress towards its 2020 target - and Australia's growing absolute emissions, with the former regularly misinterpreted as being representative of the latter.
- Despite the downgrade to the abatement task, government figures confirm that Australia has commenced an upward emissions trajectory. Critically, Australia's emissions growth rate is projected to be among the highest of all developed economies.
- At a time when almost all developed economies have begun to cut their emissions, including China and the United States, Australia's national emissions are projected to remain on a growth pathway, with analysis indicating Australia is on track to exceed its historic 2005-06 high, with no peak in emissions expected to occur before 2030.



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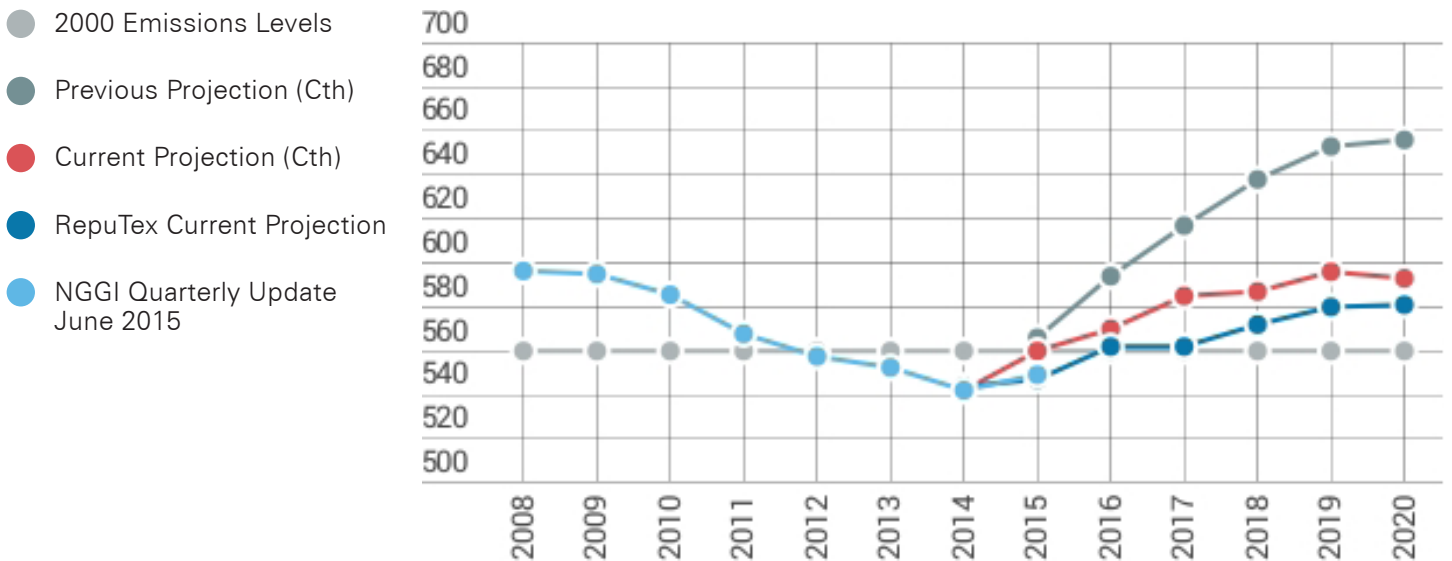
DOWNWARD REVISION IN ABATEMENT TASK DUE TO 'PROJECTION IMPROVEMENTS'

The government's abatement task fact sheet, released prior to the Paris climate conference, outlined a 264 Mt reduction in Australia's abatement task, leading to a new cumulative task of minus 28 Mt below Australia's 2020 emissions reduction commitment.

In line with the government's emissions projection figures, released on December 22, the downward revision of Australia's abatement task is underpinned by a 140 Mt emissions downgrade, attributed to 'projection improvements', along with the inclusion of 92 Mt of abatement which is estimated by the government to be delivered under the Emissions Reduction Fund (ERF) by 2020.

As outlined in Figure 1, this has led to a fall in the government's previous emissions projection from 17 per cent above 2000 levels by 2020 (dark grey line) to 6 per cent above 2000 levels by 2020 (red line), equivalent to a 264 million tonne reduction in Australia's abatement task.

Figure 1 – Australia's updated cumulative abatement task, 2013 to 2020.



Source: Tracking to 2020, Commonwealth of Australia 2015.



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Over half of the downgrade to Australia's abatement task is attributed to 'projection improvements', which have led to lower emissions projections across all sectors for the period 2013-20. Notably, major revisions have been made to assumptions underpinning domestic electricity and resource export demand growth, which is now projected to be slower.

The December update therefore unwinds highly optimistic economic assumptions built into previous national emissions projections published by successive Labor and Coalition governments. The overstatement of emissions projections was discussed in our June Market Update, in which we projected that over 200 Mt would be downgraded from the government's emissions outlook over the next five years as improvements are made to more accurately depict flatter economic activity.

In line with that report, we continue to anticipate further downward revisions in government projections over subsequent updates. This is likely to lower emissions in the direct combustion and fugitive categories of the NGGI as slower Asian growth, particularly for the energy sector, translates into reduced demand for Australian coal and liquefied natural gas (LNG) exports.

ABATEMENT TASK FALLS, BUT AUSTRALIA ENTERS PERIOD OF EMISSIONS GROWTH

Despite the downgrade to Australia's abatement task, government figures indicate that Australia has entered a period of emissions growth.

The government's NGGI figures, released for the quarter ending June 2015, indicate annual emissions for 2014-15 were 537.0 Mt¹. This represents a 0.8 per cent increase in emissions when compared with the previous year. This figure grows to an annual increase of 1.3 per cent when Land Use, Land Use Change and Forestry (LULUCF) are included (Figure 2).

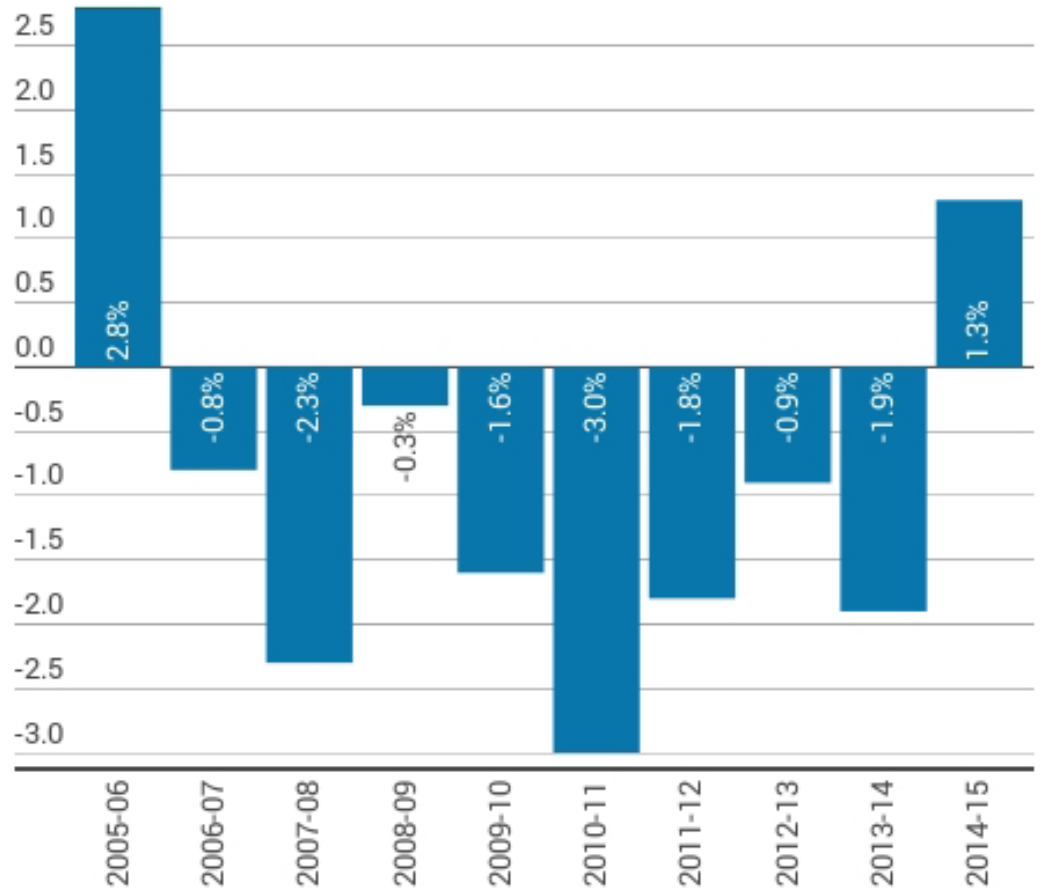
As shown in Figure 2, the upward trend in emissions growth between FY14 and FY15 represents the first increase in financial year-on-year emissions since 2005-06, when Australian emissions reached their historic peak.

1. Excluding emissions from Land Use, Land Use Change and Forestry (LULUCF).



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Figure 2: Percentage change in Australian fiscal year emissions (2005-06 to 2014-15)



Source: RepuTex Carbon, Department of Environment (Cth).

Emissions growth over FY15 was driven by the electricity sector, which increased emissions by 5.3 Mt (2.9 per cent) as brown and black coal generation began to grow its share of the fuel mix. Land-use emissions grew by 3.1 Mt (33.7 per cent) as land clearing activity in Queensland increased, while stationary energy and fugitive emissions grew by 0.7 Mt (0.7 per cent) and 0.6 Mt (1.6 per cent), respectively, as coal and gas production rose.

Notably, the government’s long-term outlook confirms that Australia’s emissions growth is projected to continue, increasing 6 per cent from 2015 levels through to 2020.

The government estimates an 18 Mt (19 per cent) and 8 Mt (21 per cent) increase in direct combustion and fugitive emissions between 2015 and 2020, almost entirely due to new liquefied natural gas (LNG) and coal mining facilities ramping up. Mining-related combustion and fugitive emissions are both projected to increase 25 per cent between 2015 and 2020.



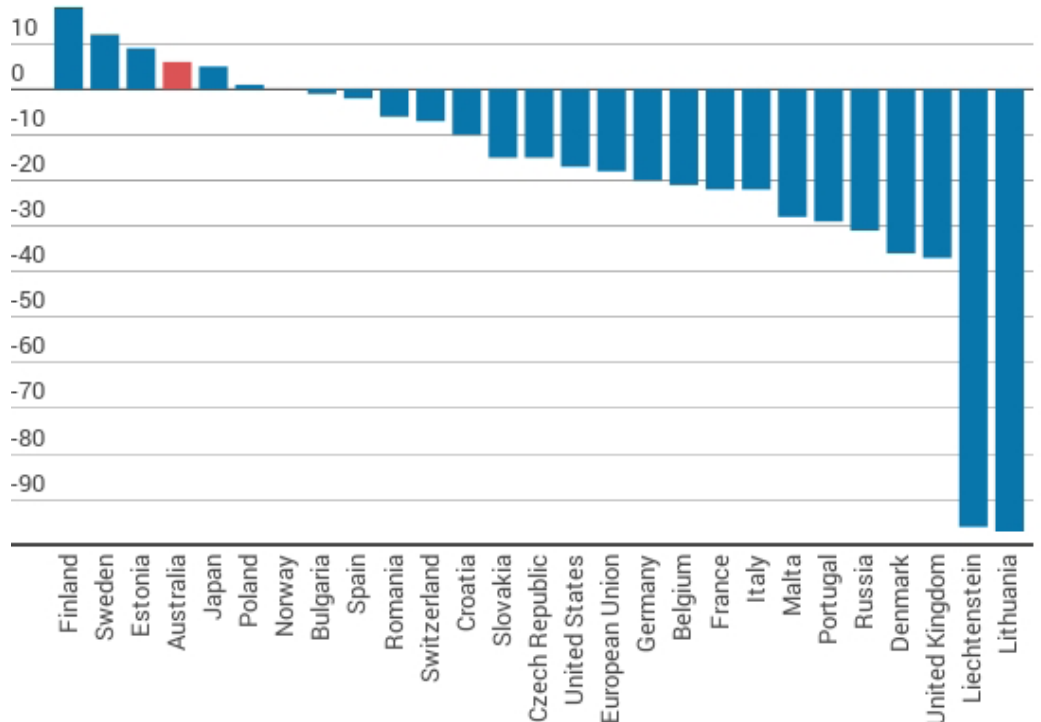
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In response to new demand from LNG projects, electricity sector emissions are projected to increase 5 per cent through to 2016-17 when the addition of large-scale renewable electricity is predicted to come online after years of stalled investment. In parallel, land-use emissions are projected to increase 20 per cent through to 2018-19 with further increases in deforestation resulting from rising land clearing and forest harvest rates.

Notably, analysis indicates that Australia’s projected emissions growth through to 2020 is among the highest of large developed economies currently reporting under the United National Framework Convention on Climate Change (UNFCCC). Figure 3 compares the percentage change in greenhouse gas projections between 2000 and 2020 among large Annex 1 countries/regions under a ‘with measures’ scenario, accounting for policies and measures that are either implemented or adopted by each country.

This indicates that Australia’s emissions growth of 6 per cent places it as one of only five developed economies currently expected to grow its emissions to 2020, behind Finland, Sweden, and Estonia.

Figure 3 – Percentage change in emissions projections 2000-2020 (reporting large Annex 1 countries/regions)



Source: UNFCCC, Reputex Carbon.

Australia’s emissions growth is projected to continue rising as almost all developed economies begin to strongly cut their emissions. In line with UNFCCC submissions, other large developed economies are projected to reduce their emissions from 2000 levels over the next five years, with the United States expected to cut emissions by 17 per cent under ‘current policy’, along with the European Union (18 per cent), Russia (31 per cent) and the United Kingdom (37 per cent).



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AUSTRALIA BEGINS CLIMB TO NEW EMISSIONS HIGH, WITH NO PEAK IN SIGHT

The government's updated emissions figures confirm our estimates published in our [November Market Update](#), "Accounting our way to the 2020 emissions reduction target", in which we projected 6 per cent growth in national emissions from 2015-2020, with emissions projected to increase from minus 2 per cent on 2000 levels in 2015, to 4 per cent above 2000 levels by 2020.

As noted above, we continue to project that more than 200 Mt may be downgraded from the government's emissions figures (in total) due to projection improvements, implying further downgrades to the national abatement task at subsequent updates.

This is reflected in Figure 1 (dark blue line), which presents our emissions expectations through to 2020, which continues to track under the government's updated outlook (red line).

While Australia will meet its 2013-2020 emissions reduction commitment, government figures confirm that national emissions will not reach the target of minus 5 per cent on 2000 levels by 2020, with the government indicating it will utilise an accounting benefit to meet its international commitment, as permitted under the Kyoto Protocol.

The government's figures also confirm that national emissions growth will continue to rise despite current climate policies, such as the Emissions Reduction Fund (ERF).

As noted in earlier updates, in spite of increased carbon removals through forest regeneration, the ERF is failing to purchase enough abatement to outpace Australia's projected emissions growth, resulting in a projected net increase in emissions through to 2020. This indicates a disconnect between Australia's calculated abatement task, actual national emissions, and government policy, with the government's own updated estimates indicating a strong upward trajectory.

Government climate policy notwithstanding, analysis indicates that Australian emissions will grow close to their 2005-06 peak by 2019, before reaching a new high in latter half of the next decade. Notably, we project that this pathway will continue to grow, with no peak in emissions expected prior to 2030 under current policy. therefore in Australia's national interest to make the shift away from a carbon-intensive economy.



PRESSURE MAY BUILD FOR POLICY DIRECTION AHEAD OF THE FEDERAL ELECTION

The government has announced an intention to review its Direct Action Plan policy in June 2017, reporting by November 2017. Policy amendments are unlikely to take effect before 2018-19 at the earliest, in around three years' time.

This timeline, combined with the declining ERF budget (expected to be fully committed by the end of 2016) and the light touch nature of the government's Safeguard Mechanism, suggests that the Australian market may face a policy gap from end-2016 until 2018-19, whereby record emissions growth will continue largely free of accountability.

Although the Coalition's policy review is a positive step, Australia's growing emissions profile, and current policy shortfall, has the potential to become either an Achilles heel for the government, or a catalyst for more pronounced action as it enters an election year.

While the Coalition is unlikely to jump the gun on its 2017 review, Australia's growing emissions profile may compel the government to provide further direction on the "how," "what," and "when" of its climate policy – particularly the next phase of the safeguard mechanism – in order to counter increased scrutiny ahead of the 2016 federal election, and increased international pressure following the Paris climate conference. Such a 'Statement of Intent' may be sufficient to provide renewed certainty to the market, while demonstrating that the government has a sincere, and effective, plan to curb Australia's emissions growth, even should the final detail come at the 2017 review.



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