

australian energy projections

- » Under a 'no new policies' scenario, Australia's energy consumption is projected to grow by 1.6 per cent a year to 2029-30. Over that time, Australia is expected to become less energy intensive as it moves to a more services oriented economy and continues to implement currently established energy efficiency and conservation measures.
- » Coal and oil will continue to supply the bulk of Australia's energy needs, although the share of natural gas is expected to increase strongly. With the support of existing policy measures such as the Mandatory Renewable Energy Target, renewable energy consumption is also projected to increase by an average rate of more than 2 per cent a year, but from a much smaller base.
- » Australia is expected to continue to expand its production base for coal and natural gas over the period to 2030, with exports of these commodities continuing to make a major contribution to Australia's total export earnings. However, Australia is likely to become less self sufficient in crude oil and refined petroleum products over the next twenty years.
- » ABARE's practice in making these projections is to include only those policies that have been implemented at the date of publication. Policies that have been announced but not implemented have not been included in the projections. To the extent that an emissions trading scheme would impose a constraint on carbon dioxide emissions, total energy use and the relative contribution of different sources is likely to differ from the results in this set of projections. Further, an increase in the Mandatory Renewable Energy Target to 20 per cent of electricity supply by 2020 has not been included in these projections.

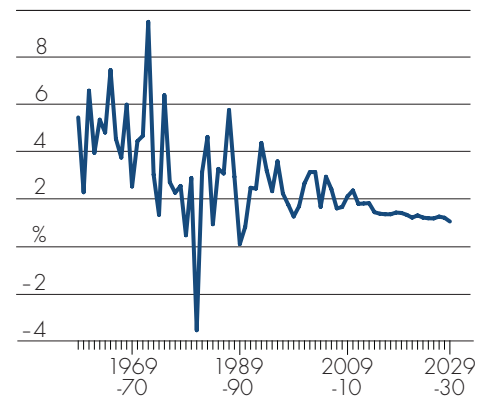
energy consumption

- » Historically, growth in Australia's energy consumption has fallen and this trend is expected to continue to 2029-30. During the 1960s, the growth rate in energy consumption in Australia was 5 per cent a year, before falling to 3.8 per cent a year during the 1970s, 2.6 per cent a year during the 1980s and 2.3 per cent a year during the 1990s.
- » Under a 'no new policies' scenario, Australia's energy consumption over the medium term (2005-06 to 2011-12) is projected to grow by 2.2 per cent a year. Over the long term (2005-06 to 2029-30), energy consumption is projected to grow by 1.6 per cent a year.

energy consumption growth in Australia

- » Queensland is expected to be the major contributor to energy consumption growth and is projected to overtake Victoria and New South Wales to become Australia's largest energy consuming state by 2012.
- » The transport sector is the largest consumer of energy in Australia at the end use stage, but its share of total final energy consumption is projected to fall from 39 per cent in 2005-06 to 36 per cent in 2029-30. In contrast, with a large number of minerals and energy mining projects expected to be commissioned, the mining sector's share of total final energy consumption is projected to increase from 7 per cent to 12 per cent over the same period.
- » Fossil fuels will continue to dominate Australia's primary energy consumption and electricity generation, with natural gas expected to gain market share at the expense of coal.

average annual growth of primary energy consumption in Australia



- Fossil fuels accounted for around 92 per cent of total electricity generated in 2005-06 and this share is projected to be maintained to 2029-30.
- The share of electricity generation using gas is projected to grow from 15 per cent in 2005-06 to 24 per cent in 2029-30. The share of electricity generation using coal is projected to fall from 76 per cent to 67 per cent over that period.
- While the share of renewables is not expected to grow, renewable electricity generation is projected to increase by around 2 per cent a year, with most of this growth coming from wind, biomass and biogas. This reflects the impact of existing Australian and state Government policies.

energy production and trade

- » Total energy production in Australia is projected to grow faster than energy consumption at 2.6 per cent a year between 2005-06 and 2029-30. Natural gas production is projected to achieve the strongest growth over that period at 5.4 per cent a year, followed by renewable energy (2.4 per cent), black coal (2 per cent), crude oil (0.8 per cent) and brown coal (0.5 per cent).
- » Australia's net exports of most energy products are expected to increase between 2005-06 and 2029-30. LNG exports are projected to lead the way with potential growth of more than 7 per cent a year, followed by LPG (3.1 per cent) and black coal (2.2 per cent). In contrast, net imports of refined petroleum products are projected to increase by 2.8 per cent a year and net crude oil imports are projected to increase by 1.9 per cent a year between 2005-06 and 2029-30.