



Australia's Low Pollution Future Fact Sheet

Sectoral Impacts

While mitigation policies result in relatively small costs to the overall economy, the impacts vary across different sectors. A structural shift will occur with the move from high-emission to low-emission goods, services, technologies and processes.

Market-based mechanisms reduce the economic costs of mitigation

A market-mechanism, such as the Carbon Pollution Reduction Scheme, will reduce the risks of climate change at the lowest cost.

It is impossible to accurately predict which mitigation opportunities will be the most cost-effective. By pricing emissions, a market-mechanism creates incentives for mitigation across all sectors without mandating where that mitigation occurs. Emissions reductions will occur where the cost of abatement is lowest, reducing the overall cost to the economy.

Sustained economic growth

The modelling shows that sustained economic growth can be achieved while substantially reducing emissions. Large reductions in emissions do not require reductions in economic activity because the economy restructures in response to the introduction of an emission price.

Impacts will vary across sectors, as the economy shifts from emission-intensive goods, technologies and processes towards low-emission goods, technologies and processes. Almost all sectors of the economy are projected to grow from current levels, but emissions pricing may affect the rate of growth.

For example, emission-intensive sectors, such as coal and gas, are expected to grow, but at a slower rate than they would in a world without climate change or an emissions price. In contrast, growth is expected to accelerate for low and negative-emission sectors, such as forestry and renewable energy.

Australia's comparative advantage

Australia's comparative advantage will change in a low-emission world. While global demand for emission-intensive goods and services is expected to decline, many of Australia's emission-intensive trade-exposed sectors (EITES), such as coal and iron and steel are likely to maintain or improve their international competitiveness and share of global trade.

This is because Australian producers are either less emission-intensive or energy-intensive than comparable sectors in competitor economies.

Australia is likely to lose competitiveness where its production is more emission-intensive than its competitors in other parts of the world.

The report notes that the Government's proposed assistance for EITES as outlined in the *Carbon Pollution Reduction Scheme Green Paper* eases the transition to a low-emission economy for shielded sectors while maintaining incentives for emission reductions.

Other sectors

Demand for low-emission goods and services will grow more strongly, particularly where they provide an alternative to higher-emission goods and services.

These effects are particularly evident in the forestry sector, where the report finds that consumers will substitute towards wood products (a low-emission good), and forests will expand to generate permits for sale in the Carbon Pollution Reduction Scheme.

The pricing of emissions will drive significant changes in the technology mix of the electricity sector. It will improve the competitiveness of renewable energy sources and accelerate the development and deployment of new low-emission technologies such as carbon capture and storage. By 2050, the alternative energy sector will be 30 times larger than it is today.

The transport sector has relatively higher marginal mitigation costs than electricity, so delivers less mitigation in the short term. Nevertheless, emission pricing drives significant reductions in the emission intensity of transport. This will include changes in the fuel mix — such as a move to lower-emission fuels, changes in vehicle types to hybrid and smaller vehicles and changes to transport modes.