

NATIONAL STRATEGY ON ENERGY EFFICIENCY 2009-2020 MEMORANDUM OF UNDERSTANDING

Council of
Australian
Governments

A memorandum of understanding between

- the **Commonwealth of Australia** and
- the **States and Territories**, being:
 - ◆ the State of New South Wales;
 - ◆ the State of Victoria;
 - ◆ the State of Queensland;
 - ◆ the State of Western Australia;
 - ◆ the State of South Australia;
 - ◆ the State of Tasmania;
 - ◆ the Australian Capital Territory; and
 - ◆ the Northern Territory of Australia.

National Strategy on Energy Efficiency 2009-2020

Memorandum of Understanding

Preamble

1. Improvements in energy efficiency can improve productivity of our economy, allow households and businesses to achieve savings on their energy bills and deliver significant low cost greenhouse gas abatement.
2. The Australian Government has proposed the Carbon Pollution Reduction Scheme (the Scheme) as the primary mechanism for reducing greenhouse gas emissions in Australia. The purpose of the Scheme is to drive a reduction in greenhouse gas emissions through placing a cap and therefore a price (carbon price) on greenhouse gas emissions.
3. A carbon price will provide an incentive for households and businesses to use energy more efficiently. A carbon price alone, however, will not realise all the potential cost-effective opportunities to improve energy efficiency across the Australian economy. Market barriers, such as split incentives, information failures, capital constraints, early mover disadvantage and transaction costs need to be addressed to remove impediments to investment in energy efficiency by households and business.
4. Improving energy efficiency will allow households, businesses and industry to better manage their energy consumption and to reduce the impact of the Scheme on their total energy costs.
5. Improving energy efficiency will also help to lower the energy intensity of the Australian economy overall, and this, together with a decrease in the emissions intensity of the production of that energy, will be the main contributor to Australia's carbon abatement.
6. While Governments agree that existing initiatives such as the National Framework for Energy Efficiency (the Framework) are making important contributions to improving energy efficiency, the need to transition to a low carbon future gives renewed impetus to deliver a step change in energy efficiency and to realise the benefits from cost-effective energy-saving initiatives.
7. In October 2008, the Council of Australian Governments (COAG) agreed to develop a National Strategy for Energy Efficiency (the Strategy), to accelerate energy efficiency efforts, to streamline roles and responsibilities across levels of governments, and to help households and businesses prepare for the introduction of the Scheme.
8. With this Memorandum of Understanding, Governments have committed to sign an Intergovernmental Agreement in mid-2009 (the Agreement) to deliver a coordinated and ambitious ten-year Strategy.
9. The Strategy will substantially improve minimum standards for energy efficiency and accelerate the introduction of new technologies through improving regulatory processes and addressing the barriers to uptake of new energy efficient products and technologies.
10. The Agreement will be based on the Heads of Agreement set out below.
11. The detailed Strategy will be further developed in consultation with stakeholders based on the attached draft, which encompasses a series of measures to accelerate energy efficiency improvements in Australia over the medium-term.

Heads of Agreement

Objectives

12. Governments agree that the overarching goal of the Strategy is to maximise the implementation of cost-effective energy efficiency measures across the economy.
13. Energy efficiency improvements will reduce households' and businesses' energy bills. They can also reduce the cost of greenhouse gas abatement under the Scheme and therefore strengthen the capacity for Australia to achieve more stringent targets over time.
14. The Strategy aims to:
 - 14.1. improve the efficiency of energy use and in doing so reduce energy consumption and costs for businesses and households to help their transition to a low-carbon future;
 - 14.2. ensure consumers and businesses are well positioned and informed in order to make cost-effective energy efficiency decisions;
 - 14.3. defer costly network augmentation by reducing energy demand and hence deferring future costs associated with new infrastructure;
 - 14.4. encourage the development of new energy efficient technologies and innovation in products and processes;
 - 14.5. effect changes to consumer behaviour in energy consumption;
 - 14.6. demonstrate leadership through improvements in the energy efficiency of Governments' own operations, including government procurement; and
 - 14.7. ensure that Australia has a workforce trained, skilled and qualified to achieve the Strategy's objectives and the wider needs of a low-carbon future.

Expected Outcomes

15. Governments expect the Strategy will:
 - 15.1. drive substantial growth in the number of highly energy efficient homes and commercial buildings.
 - 15.1.1. An estimated 150,000 new houses and apartments¹ and an estimated 26,500 commercial building projects² are constructed in Australia each year. Higher energy efficiency standards will apply to all these new homes and commercial projects, as well as the significant number of major building renovations that take place each year.
 - 15.1.2. Higher efficiency performance for around eight million existing homes will also be achieved through measures such as the national Energy Efficient Homes Package and State and Territory residential energy efficiency programs. In addition, a range of measures will target new and existing commercial buildings.

¹ ABS (Cat 8752.0) - Building Activity, Australia, September 2008

² ABS (Cat 8731.0) - Building Approvals, December 2008

- 15.2. enable Australians to purchase highly energy efficient appliances and equipment for residential, commercial and industrial applications.
 - 15.2.1. An indicative estimate of the magnitude of potential energy savings from appliance and equipment energy efficiency measures alone is 32,000 gigawatt-hours per annum by 2020.³
- 15.3. facilitate the adoption of highly efficient and innovative industrial processes and transport means, resulting in reduced energy intensity of the Australian economy compared to business-as-usual.
- 15.4. ensure that Australia's workforce is trained and fully engaged to provide sufficient numbers of skilled people to achieve Australia's energy efficiency potential.

Principles

- 16. The Strategy will:
 - 16.1. be nationally-consistent and coordinated while recognising the need for flexible approaches across jurisdictions to allow for the emergence of innovation to target regional conditions and local expertise; and
 - 16.2. complement the Scheme and focus on addressing market failures that impede the carbon price from effectively encouraging the take-up of greater energy efficiency.
- 17. The measures will:
 - 17.1. be implemented by the level of government most appropriate to deliver the measure and facilitate partnerships with relevant service providers in the private and community sectors;
 - 17.2. be streamlined across jurisdictions – to avoid layering or duplication of effort or financial incentives (such as rebates);
 - 17.3. be transparent in operation where subsidies or rebates are provided to encourage energy efficiency;
 - 17.4. support markets and foster competition to allow for innovative and cost-effective solutions; and
 - 17.5. seek to minimise regulatory burden – regulatory action should only be used where analysis indicates it is the most effective method, and be based on best-practice regulatory principles.

Coverage/Scope

- 18. The Strategy's scope will encompass all areas where substantial energy efficiency opportunities exist:
- 19. *Commercial Buildings*: The commercial building sector represents an important focus for energy efficiency, distributed energy generation including co-generation and

³ Prevention is Cheaper than Cure – Avoiding Carbon Emissions through Energy Efficiency, George Wilkenfeld and Associates, January 2009

tri-generation, and greenhouse gas abatement, due to the rapid growth in this sector and the significant technical and economic potential for emissions reduction that exists. Energy use in commercial buildings accounts for around 10 per cent of Australia's greenhouse gas emissions;

20. *Residential Buildings:* Residential buildings also represent an important opportunity to improve energy efficiency in the Australian economy. Our homes consume a significant amount of energy and this energy consumption leads to around 10.5 per cent of Australia's total greenhouse emissions (excluding those associated with construction and materials and residential transport);⁴
21. *Appliances and Equipment:* Appliances and equipment account for a considerable share of the energy consumption in residential, commercial and industrial sectors of the economy. The products include hot water systems, heating, ventilation and cooling systems, light globes and lighting systems, whitegoods, consumer electronics, electric motors and motor drive systems, compressed air systems and many others;
22. *Industry and Business:* Industry and business accounts for almost half of Australia's total energy end-use, and includes the mining, manufacturing and construction sectors that together are the largest energy users in the Australian economy;
23. *Government:* Governments are major players in the commercial buildings market, with the Commonwealth Government alone representing around 13 per cent of the commercial office market.⁵ Governments also undertake significant equipment procurement to support their operations, for example, information and communications technology equipment;
24. *Transport:* There is considerable scope for energy efficiency gains in the transport sector. Greenhouse gas emissions from the transport sector in Australia grew by 30 per cent between 1990 and 2006⁶, amounting to some 13.7 per cent of total emissions in 2006. Road transport emissions (87.1 per cent) dominate other transport modes such as air (7.7 per cent), rail (2.4 per cent) and coastal shipping (2.8 per cent); and comprise two distinct sub-sectors, passenger transport and freight;⁷
25. *Skills and Training:* The transition to a low-carbon future will demand the development and application of knowledge, skills and know-how that will better enable us to adapt to a low-carbon future. The skills and knowledge requirements for a sustainable future are many, from professionals in engineering, architecture, industrial design, energy services including audit and advice, environmental sciences, planning and policy, to technical skills in a wide range of trades and industries;
26. *Innovation:* To encourage the development, enhancement, deployment and operation of more energy efficient technologies in Australia, including through streamlining information dissemination and fostering communication between a range of groups to assist cross fertilisation of ideas and quick uptake of new technologies; and
27. *Advice and Education:* The efficient use of energy requires information that motivates, facilitates and reinforces rational and responsible behaviour by business and consumers.

⁴ Department of Climate Change (DCC 2008) National Greenhouse Gas Inventory, 2006

⁵ Derived from the Property Council of Australia's office market space survey and Energy Use in Government Operations data for Tenant, Light and Power, 2006-07

⁶ Overall emissions growth for domestic transport, between 1990 and 2006, tracked real GDP per capita (which averaged about 2% per annum over this period)

⁷ Department of Climate Change (DCC 2008) National Greenhouse Gas Inventory, 2006

28. Governments also recognise the benefits associated with demand-side management and support the continued identification and removal of barriers within the energy markets in order to maximise the efficient use of energy. These issues are being investigated through the Ministerial Council on Energy and the Australian Energy Market Commission (AEMC). Following the AEMC's review, further opportunities to increase the uptake of cost-effective energy efficiency measures and reduce the growth of energy demand will be investigated, if required.

Key Elements of the Strategy

Assisting Households and Businesses to Transition to a Low-Carbon Future:

29. This Strategy will assist households and businesses to transition to a low-carbon future.
30. It will encompass a range of incentives and support for households and businesses, where there is a strong case for government intervention to improve energy efficiency and thus lower energy costs. For example:
 - 30.1. financial assistance with the installation of ceiling insulation and solar hot water systems (the Commonwealth's Energy Efficient Homes Package and other State and Territory rebates and incentives schemes);
 - 30.2. the auditing of energy efficiency of existing State and Territory public housing stocks, and consideration of implementing a program of cost-effective upgrades;
 - 30.3. encouraging business to identify and implement cost-effective energy efficiency opportunities;
 - 30.4. incentives to improve the energy efficiency of buildings and equipment including the early retirement of inefficient equipment; and
 - 30.5. coordinated support programs (across Commonwealth, State and Territory Governments) targeted at supporting small- to medium- sized enterprises to improve their energy efficiency.
31. The Strategy will include measures to assist the energy services sector and firms to ensure they have sufficient numbers of adequately trained people to enable industry to meet the challenges of operating in an environment with a price on carbon.

Reducing Impediments to the Uptake of Energy Efficiency:

32. The Strategy will identify and reduce impediments to the uptake of energy efficiency.
33. The Strategy will improve the extent and accessibility of information and advice to households and businesses on effective and practical action that can be taken to adopt energy efficiency measures with demonstrated net economic benefits. For example:
 - 33.1. coordinated use of the Commonwealth's on-line portal as a single point of inquiry for all energy efficiency programs for households and businesses;
 - 33.2. broadening the range of appliances covered by minimum energy performance standards and labelling requirements to enable informed choice; and
 - 33.3. consumer and business advice programs.

34. Governments have agreed to develop, subject to a Regulatory Impact Analysis, a streamlined national system for mandating minimum appliance and equipment energy performance standards and labelling, with an expanded coverage and ambitious timetable to raise standards in step with international standards.
 - 34.1. The proposed system will have a clear timetable and a pathway to increase future standards.
 - 34.2. The proposal will include a rigorous Regulatory Impact Analysis process to ensure enhanced standards can be delivered over time in a cost-effective way, increasing certainty for business and minimising implementation costs, while ensuring Australia remains at the forefront of appliance energy efficiency.
35. The Strategy will identify and develop measures to address market barriers to the rapid deployment of energy efficiency technologies and practices, including barriers to the uptake of greater energy efficiency in the transport sector, with particular focus on land transport.
36. Split incentives in the private rental market (where energy efficiency benefits accrue to tenants but upfront costs are borne by landlords) will be addressed through initiatives such as the Low Emission Plan for Renters program which provides rebates to landlords for the installation of insulation in rental properties.

Making Buildings More Energy Efficient:

37. The Strategy will set the foundation for the transformation of Australia's building stock. It will drive substantial growth in the number of highly energy efficient homes and commercial buildings.
38. At the same time the Strategy will raise the energy efficiency of the existing building stock through voluntary action supported by information on building energy performance and government support such as the Energy Efficient Homes package and State and Territory incentive programs.
39. This transformation will be achieved by progressively increasing the energy efficiency standards of new commercial and residential buildings, and major renovations of existing buildings, across the nation.
40. The transformation will be supported by the development of a consistent national outcomes-focused standard-setting framework that covers thermal performance and fixed appliances and fittings, for both commercial and residential buildings.
41. Governments at all levels will facilitate the transformation by greater consistency in the application of higher building efficiency standards across all States and Territories, having regard to climatic differences.
42. As a first step, Governments have agreed to the following measures, subject to a Regulatory Impact Analysis:
 - 42.1. significantly increasing energy efficiency requirements for all classes of commercial buildings in the Building Code of Australia (BCA) from 2010;
 - 42.2. increasing energy efficiency requirements for new residential buildings to target a minimum of six stars, or equivalent, in the BCA 2010 update, to be implemented by May 2011, as well as introducing new efficiency requirements for hot-water systems and lighting;

- 42.3. phasing in mandatory disclosure of the energy efficiency of commercial buildings and tenancies commencing in 2010; and
- 42.4. phasing in mandatory disclosure of residential building energy, greenhouse and water performance at the time of sale and lease, commencing with energy efficiency by May 2011.

Government Working in Partnership and Leading the Way:

- 43. Governments have agreed to work in partnership to ensure a coordinated and collaborative approach to the delivery of energy efficiency policies and measures.
- 44. Governments will clarify the roles and responsibilities of the different levels of government in energy efficiency to improve accountability, reduce duplication, maximise economies of scale, and in turn, deliver improved outcomes.
- 45. Governments commit to improve the energy efficiency of their own operations in cost-effective ways such as:
 - 45.1. rolling out an intergovernmental, high end, videoconferencing system by [June 2010] - a collective government action that will reduce greenhouse gas emissions from government travel;
 - 45.2. raising the performance standards of government-occupied office and other buildings;
 - 45.3. showcasing innovative building technology and energy efficient processes;
 - 45.4. accelerating the adoption of higher energy efficiency equipment and low stand-by power specifications;
 - 45.5. implementing green procurement policies and measures; and
 - 45.6. public reporting on Governments' energy efficiency performance.

Roles and Responsibilities

- 46. Parties recognise that each level of government in Australia – Commonwealth, State and Territory, and local – has an important role to play in improving energy efficiency. Collaboration between Governments will be critical to implementing this strategy.
- 47. Determining the level of government that should act requires consideration of which Government has the appropriate power to act (for example, if the activity comes within the Commonwealth's heads of power under the Australian Constitution), which can deliver objectives at the lowest cost, and which is best placed to coordinate delivery.
- 48. Jurisdictions' responsibilities are generally based on the 'subsidiarity' principle: that is, that the lowest level of government with the ability to address the problem should do so. State and Territory and local government delivery should generally be used where their understanding of local issues and capacity to implement will lead to better outcomes.
- 49. The Strategy will adopt a national approach for energy efficiency policy and measures where national standards and consistency are needed for optimal outcomes.

- 49.1. The appliance market is a national one with products sold in all States and Territories. Governments have agreed to adopt national legislation for Minimum Energy Performance Standards to ensure a seamless regulatory system for businesses across the nation, reflective of the single national market, and support a move to more ambitious standards over time.
 - 49.2. Similarly, a nationally consistent regulatory framework for energy efficiency of commercial and residential buildings, based on consistent performance standards, which recognise climatic differences, is needed to ensure consumer and industry confidence in the rigour of building energy ratings and improve the efficiency of information measures such as mandatory disclosure.
 - 49.3. Consistency is also required to apply the national building code and standards to reduce compliance costs, with regional variations limited to demonstrable differences in climatic requirements.
50. National approaches also afford significant economies of scale. Coordination between different levels of government will be essential to maximise the effectiveness of energy efficiency measures, such as incentive programs, and where it is necessary to ensure measures are complementary to the Scheme. For example, the Energy Efficient Homes package is of a scale where COAG agreed to re-direct State and Territory funding for other energy efficiency programs such as insulation programs to home energy advice programs.
 51. Generally, State and Territory Governments direct policy design and program delivery in areas where specific issues have been identified that relate to local circumstances or to promote regional opportunities. States' and Territories' access to local and regional knowledge enables them to assess the success of national measures and augment or amend these measures to suit specific local needs.
 52. As relevant, Commonwealth, State and Territory Governments will collaborate with local governments to ensure that the best outcomes are achieved at regional and community levels. At the local level, State and Territory Governments are well placed to act as brokers, coordinating planning measures that cut across local councils, leveraging investment and providing support to local councils and other groups in delivering programs.
 53. Many energy efficiency measures will require interaction with households or businesses to help realise the benefits from changed behaviours. Businesses, industry organisations, community groups and other non-government organisations have a major role to play, working with all levels of government, in helping secure the full potential of energy efficiency.
 54. Coordinated and flexible approaches across jurisdictions can in some cases facilitate the emergence of innovative measures, or measures that target regional conditions, or that benefit from leveraging local delivery networks and expertise, without compromising the benefits of streamlined national action.
 55. Joint program design and delivery between the Commonwealth and States and Territories, or between jurisdictions, can leverage the inherent strengths of each jurisdiction, while providing for additional program scope through co-financing.
 56. Clear and consistent messages on energy efficiency are needed. Collaborative approaches which promote information sharing between jurisdictions can facilitate better consumer and industry access to information. Governments will conduct their information

campaigns according to agreed common principles and messages to ensure coherent energy efficiency messages are conveyed to the public.

Governance and Implementation

57. The draft Strategy attached to this Memorandum of Understanding sets out the proposed measures to be developed in consultation with industry and the community over the next few months. Implementation arrangements for each measure will be developed, including which entity, body or agency will be responsible for implementation.
58. Overarching governance arrangements will also be developed over the coming months to ensure well coordinated, comprehensive and focused delivery of the Strategy.

Monitoring and Reporting

59. As part of the implementation plan for each measure, performance indicators will be developed to assess the effectiveness of the Strategy. Systems will be developed to enable aggregation and comparable assessment of the progress in energy efficiency improvements across all jurisdictions.
60. Progress will be monitored to verify performance of all energy efficiency measures. To support this, the Strategy will include actions to ensure adequate data is available to track performance over time, and to meet international reporting requirements. This will build upon work already in progress under the Framework.

Evaluation and Review

61. The Strategy will be evaluated and reviewed in 2015 to:
 - 61.1. determine the level of improvement in energy efficiency performance in its first five years;
 - 61.2. assess overall progress of the Strategy in meeting its objectives;
 - 61.3. assess the effectiveness of the measures in contributing to Strategy objectives, including identifying alternative approaches to its implementation;
 - 61.4. identify the potential for further enhancements to the Strategy in light of prevailing economic conditions and technological advances; and
 - 61.5. review program implementation – to identify whether implementation has been successful as well as the likely availability of data for a subsequent assessment of program impact.
62. The detailed terms of reference and process for the review are to be agreed by COAG and will include public and industry consultation and an independent assessment.

Annex

National Framework for Energy Efficiency

The Framework is a landmark example of collaboration and cooperation between the Commonwealth and State and Territory Governments, including agreed funding arrangements and a significant ongoing work program to achieve the common goals of Commonwealth, State and Territory Governments in improving the efficiency of the residential, commercial, government and industrial sectors. The Framework has three primary objectives:

- to maximise economic benefits with the increased uptake of energy efficient technologies and processes across the Australian economy;
- to enhance Australia's energy efficiency performance to reduce energy demand; and
- to reduce greenhouse gas emissions.

The Framework commenced in August 2004 with the agreement by the Ministerial Council on Energy (MCE) to a comprehensive package of measures constituting Stage One of the Framework. Detailed implementation plans for eight measures, for the period 2005-07, were agreed by the MCE in December 2004. Stage One is largely complete, with a small number of continuing projects. Stage Two of the Framework was only recently agreed by the MCE (in December 2007). Stage Two includes:

- expanding and enhancing the Minimum Energy Performance Standards program;
- heating, ventilation and air conditioning high efficiency systems strategy ("Cool Efficiency");
- phase-out of inefficient incandescent lighting;
- government leadership through green leases;
- development of a national hot water strategic framework (which was subsequently approved by the MCE in December 2008); and
- an energy efficiency data project.

The Framework continues to make an important contribution to improving Australia's energy efficiency, including the establishment of the Energy Efficiency Opportunities program, the setting of new minimum energy performance standards for a range of appliances, the development of minimum energy efficiency standards for new buildings (in conjunction with the Australian Building Codes Board), and the development of a range of training and information provision measures across all sectors. The Framework does not cover all sectors (notably transport, and to a lesser extent building standards), which has limited its capacity to ensure consistent effort across all sectors of the economy.

The Parties have confirmed their commitment to this Agreement as follows:

Signed for and on behalf of the Commonwealth of Australia by

The Honourable Kevin Rudd MP
Prime Minister of the Commonwealth of Australia
30 April 2009

Signed for and on behalf of the State of New South Wales by

The Honourable Nathan Rees MP
Premier of the State of New South Wales
30 April 2009

Signed for and on behalf of the State of Victoria by

The Honourable John Brumby MP
Premier of the State of Victoria
2009

Signed for and on behalf of the State of Queensland by

The Honourable Anna Bligh MP
Premier of the State of Queensland
30 April 2009

Signed for and on behalf of the State of Western Australia by

The Honourable Colin Barnett MP
Premier of the State of Western Australia
30 April 2009

Signed for and on behalf of the State of South Australia by

The Honourable Mike Rann MP
Premier of the State of South Australia
30 April 2009

Signed for and on behalf of the State of Tasmania by

The Honourable David Bartlett MP
Premier of the State of Tasmania
30 April 2009

Signed for and on behalf of the Australian Capital Territory by

Jon Stanhope MLA
Chief Minister of the Australian Capital Territory
30 April 2009

Signed for and on behalf of the Northern Territory by

The Honourable Paul Henderson MLA
Chief Minister of the Northern Territory of Australia
30 April 2009