

Australian Government

15th Asia Pacific Seminar on Climate Change

Co-Benefits of Climate Change Mitigation
Energy Efficiency – a case study

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Many Co-benefits of GhG Mitigation

- Reduced growth in energy demand and reduced cost of new infrastructure
- Improved energy security
- More sustainable development
e.g. renewables use fewer resources
- Improved production efficiency
- Health benefits
e.g. reduced air pollution, improved individual fitness
- Reduced need for adaptation measures
- Cost savings
e.g. energy efficiency



Energy efficiency a core mitigation measure

- **Australia's mitigation strategy covers all sectors and includes a range of different approaches, including:**
 - Voluntary programs for industry and local governments
 - Market measures e.g. tradable renewable energy certificates
 - Incentives e.g. competitive abatement grants
 - Information for industry and consumers
 - Regulatory measures e.g. minimum energy performance standards
- **Energy efficiency is a central element of many parts of our mitigation strategy**
 - current measures are projected to deliver about 40% of expected energy sector abatement in 2010



A 'win-win' opportunity for all

- **Energy efficiency offers all countries the potential to:**
 - Reduce energy use and peak demand
 - Reduce greenhouse emissions
 - Save money
- **Significant untapped potential remains – e.g. recent studies indicate that Australia can:**
 - reduce energy use by 3 to 7% (varies across sectors)
 - reduce greenhouse emissions by 10 Mt per year
 - increase GDP by \$US750 million a year

...even by implementing only 50% of opportunities with a payback period of 4 years or less



But there are barriers to energy efficiency ... why the \$20 notes are not always picked up

- **Lack of awareness**
 - Poor understanding of potential
 - Lack of clear information – including price signals
- **Lack of access to necessary expertise or tools**
 - No internal expertise to identify or implement opportunities
 - Perceived risk of new technologies and processes
- **Lack of sufficient incentives**
 - Split incentives - landlords pay costs, tenants get benefits
 - Energy efficiency seen as cost rather than an investment
 - Energy costs are small component of total costs for many businesses



Increasing the uptake of cost-effective opportunities – key areas and new measures

- **Residential and commercial buildings**
 - Minimum energy performance standards
 - Mandatory disclosure of performance
- **Commercial/industrial energy efficiency**
 - Mandatory energy efficiency opportunity assessments
 - Training and accreditation of energy auditors and energy performance contractors
- **Financial sector**
 - Increasing awareness – and reducing perceived risk
 - Standardised evaluation tools



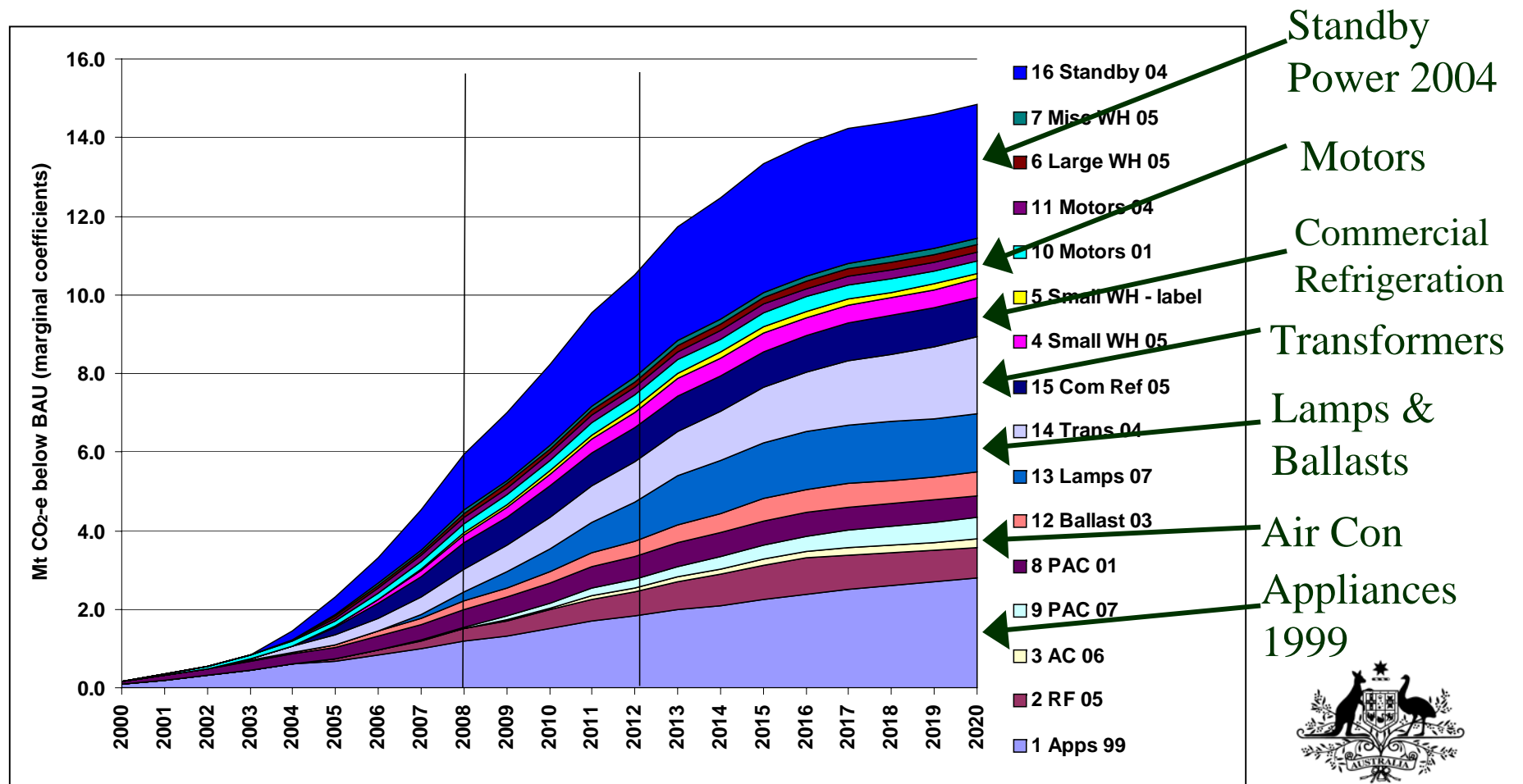
Key areas and new measures - continued

- **Appliance and equipment energy efficiency**
 - Minimum standards - to eliminate poor products
 - Energy performance labeling – to encourage both purchase and production of better products
- **Consumer awareness**
 - Benchmark data on bills
- **Government energy efficiency**
 - Targets and public annual reporting of energy use
 - Minimum standards for new buildings and leases
- **Solar Cities trials**
 - Combining renewables, energy efficiency and price signals



Case study: Appliance standards and labelling

- Greenhouse reductions of 134 Mt in 2003-2018 – at average savings of \$130 per tonne



Benefits of international cooperation

- **Sharing information on opportunities, barriers and solutions**
 - to inform national approaches
- **Access to tools, information resources and expertise**
 - avoids 're-inventing the wheel'
- **Common performance standards & testing**
 - Reduced costs and improved access to markets and economies of scale in production of traded goods



Bilateral and multilateral cooperation

- Supplying efficient products that meet each others' requirements
 - China – harmonized lighting and testing standards
 - NZ – common standards and labelling program
 - APEC – standards for air conditioners and standby power
- Learning from each other
 - Fiji – Possible adoption of Australian standards and labelling
 - EU and USA – exchange of information on tools and approaches



Questions



Australian Government

Thank you

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