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Commercial sector greenhouse emissions profile

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Introduction

- Discussion of source documents
- Current contribution of the built environment to national GHG emissions
- Historic growth in emissions
- Projected future Business-As-Usual trends
- Comparison to long term emissions targets

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Main sources of information

- Economy wide emissions – Department of Climate Change
- Building sector contributions – Department of Environment, Water, Heritage and the Arts, ABARE
- Building sector potential – ASBEC, McKinsey

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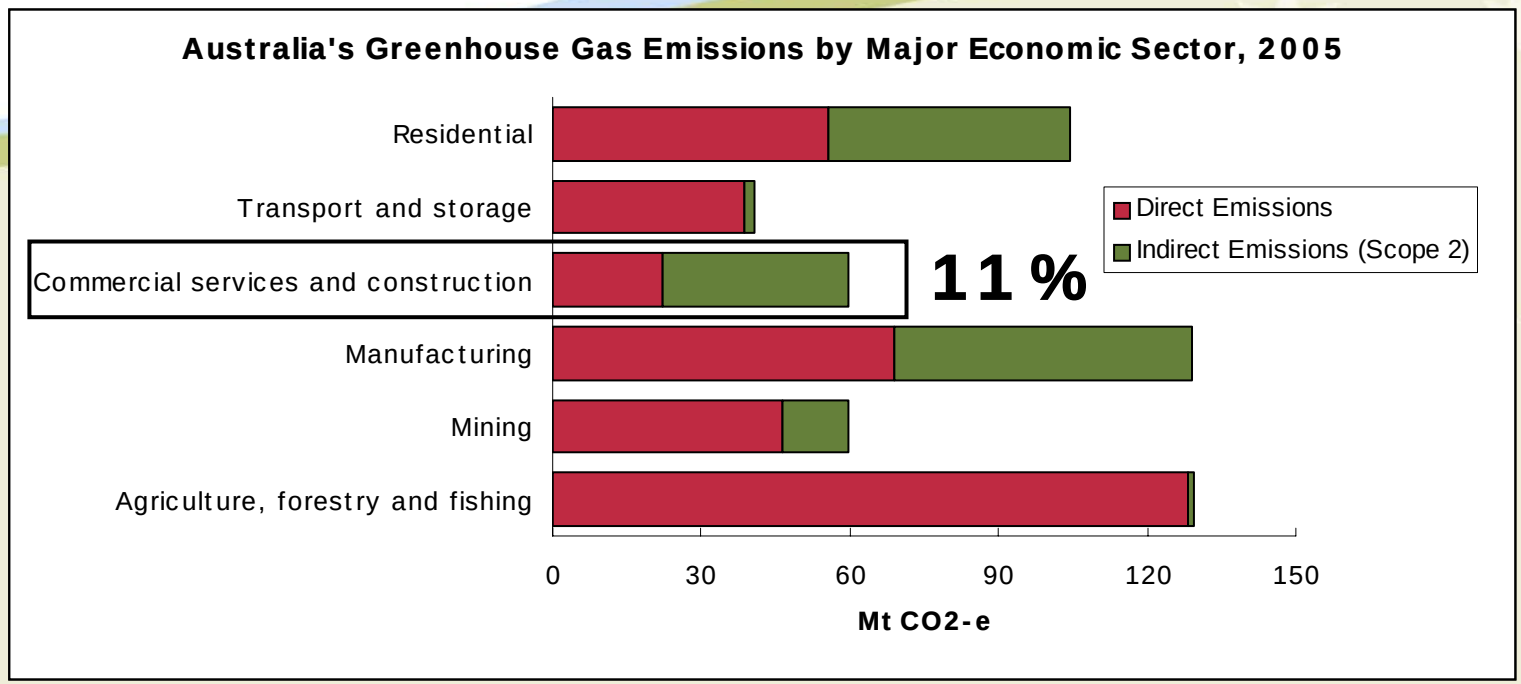
National Greenhouse emissions - 2005



Source – *Australia's National Greenhouse Accounts 2005*
Department of Climate Change (Aust Govt) 2007 www.climatechange.gov.au

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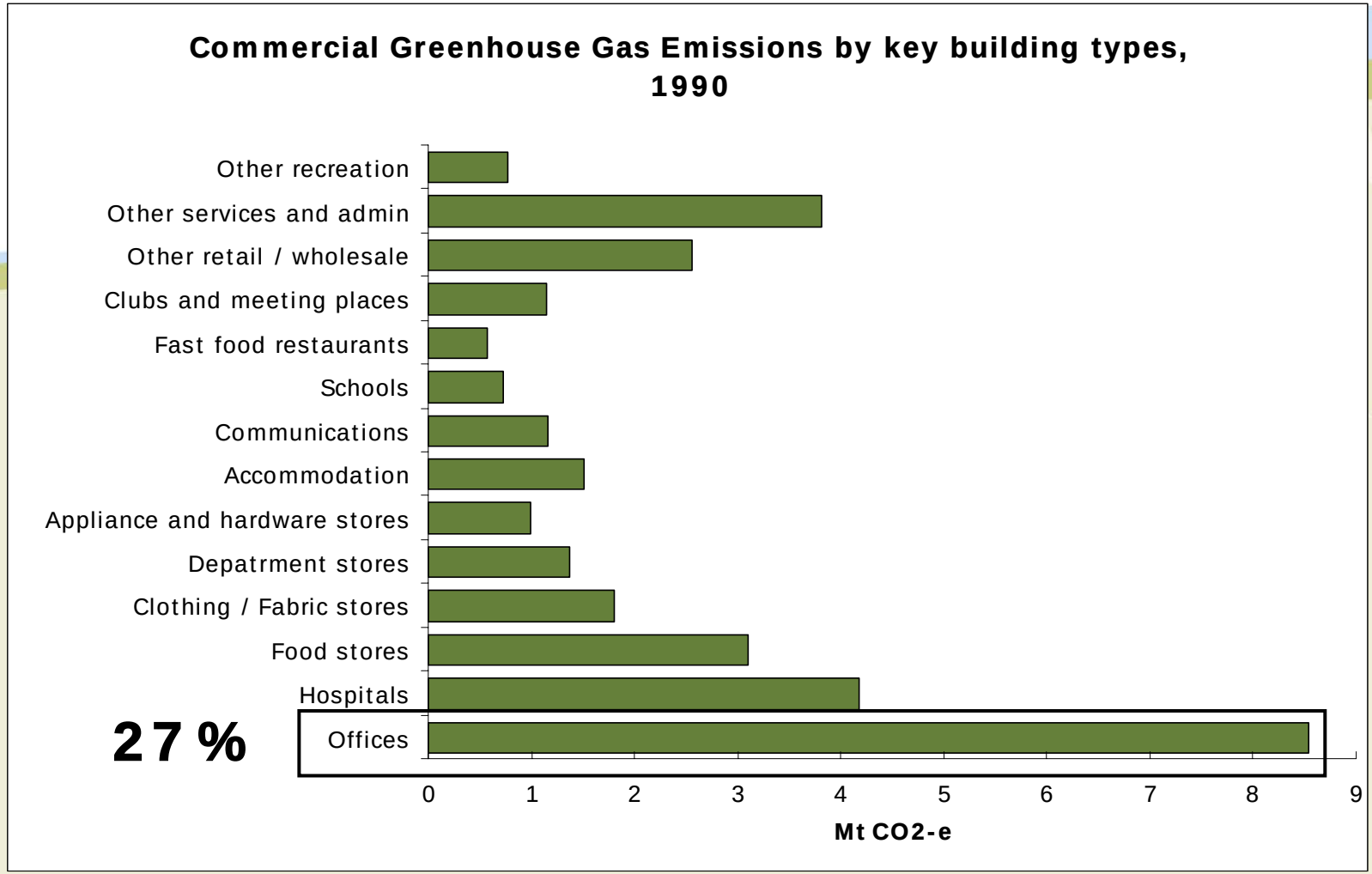
Commercial sector emissions - 1990



Source – *Australian Commercial Building Sector Greenhouse Gas Emissions 1990–2010* Department of Environment, Water, Heritage and the Arts (Aust Govt) 1999
www.environment.gov.au

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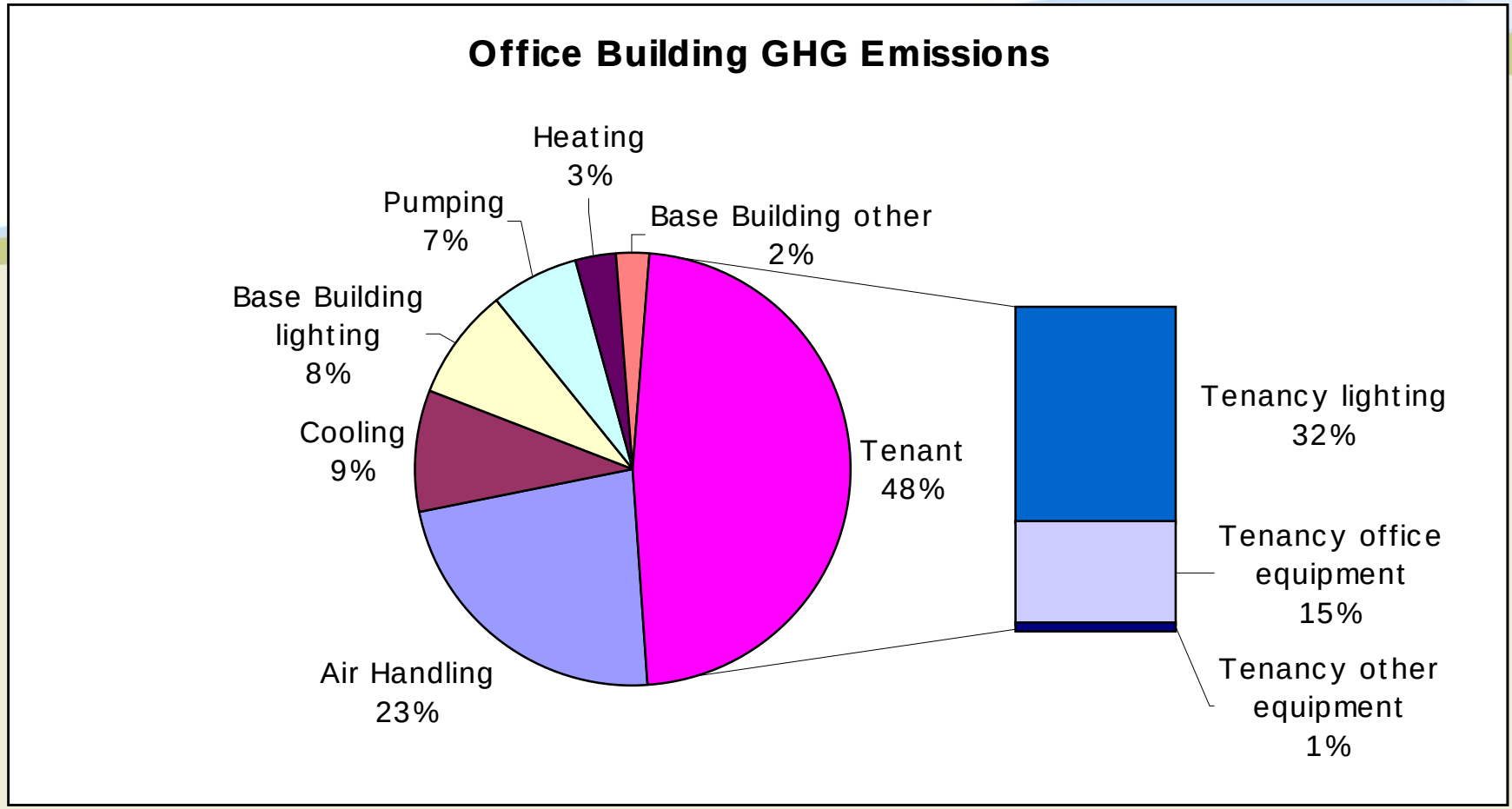
Office building emissions



Source – *Baseline study of Greenhouse Gas emissions from the Commercial Buildings Sector with projections to year 2010*
Department of Environment, Water, Heritage and the Arts (Aust Govt) 1999
www.environment.gov.au

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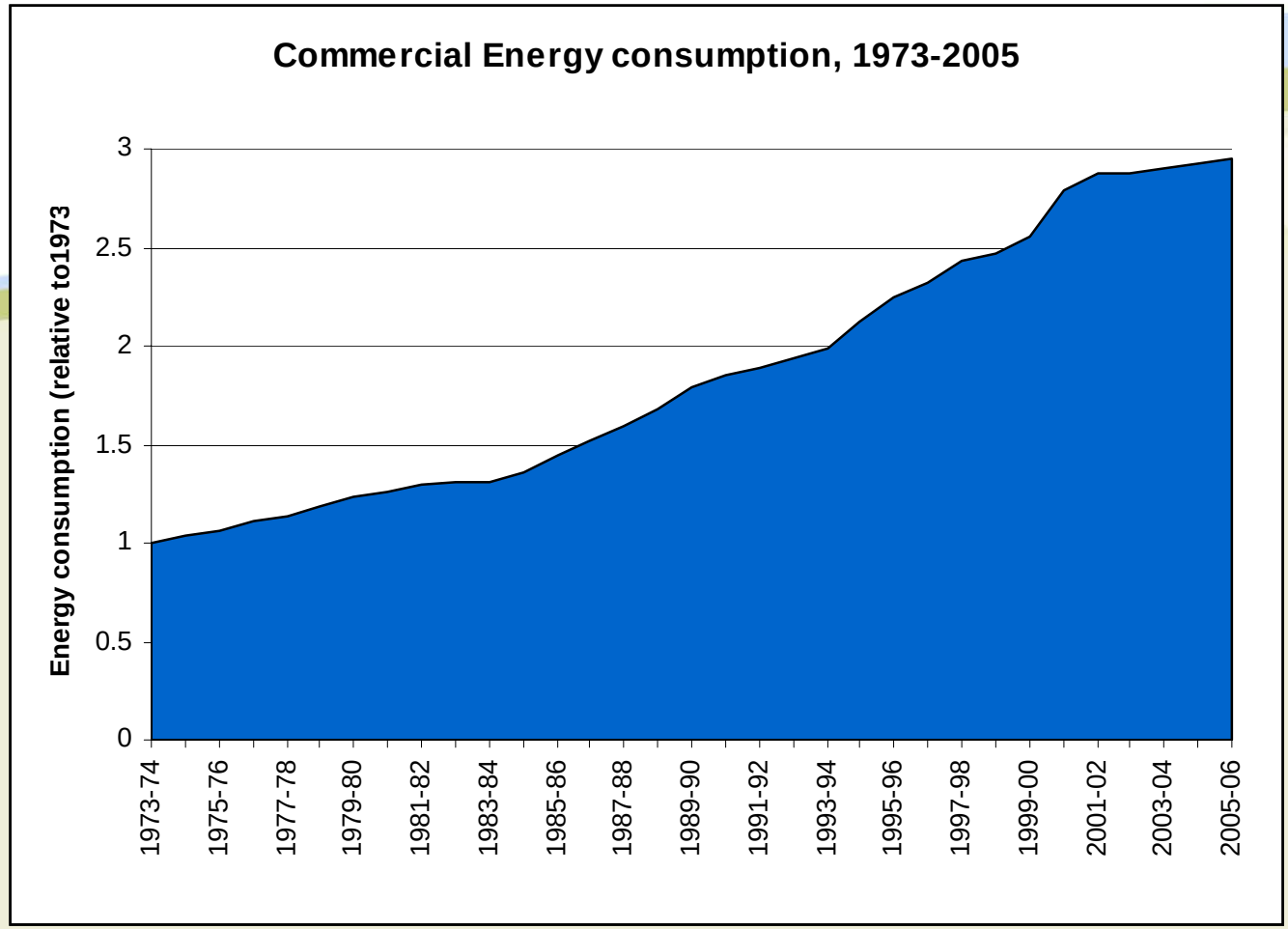
Commercial sector energy use history



Source – *Energy Update 2007, table B*
ABARE (Aust Govt) 2007 www.abareeconomics.com

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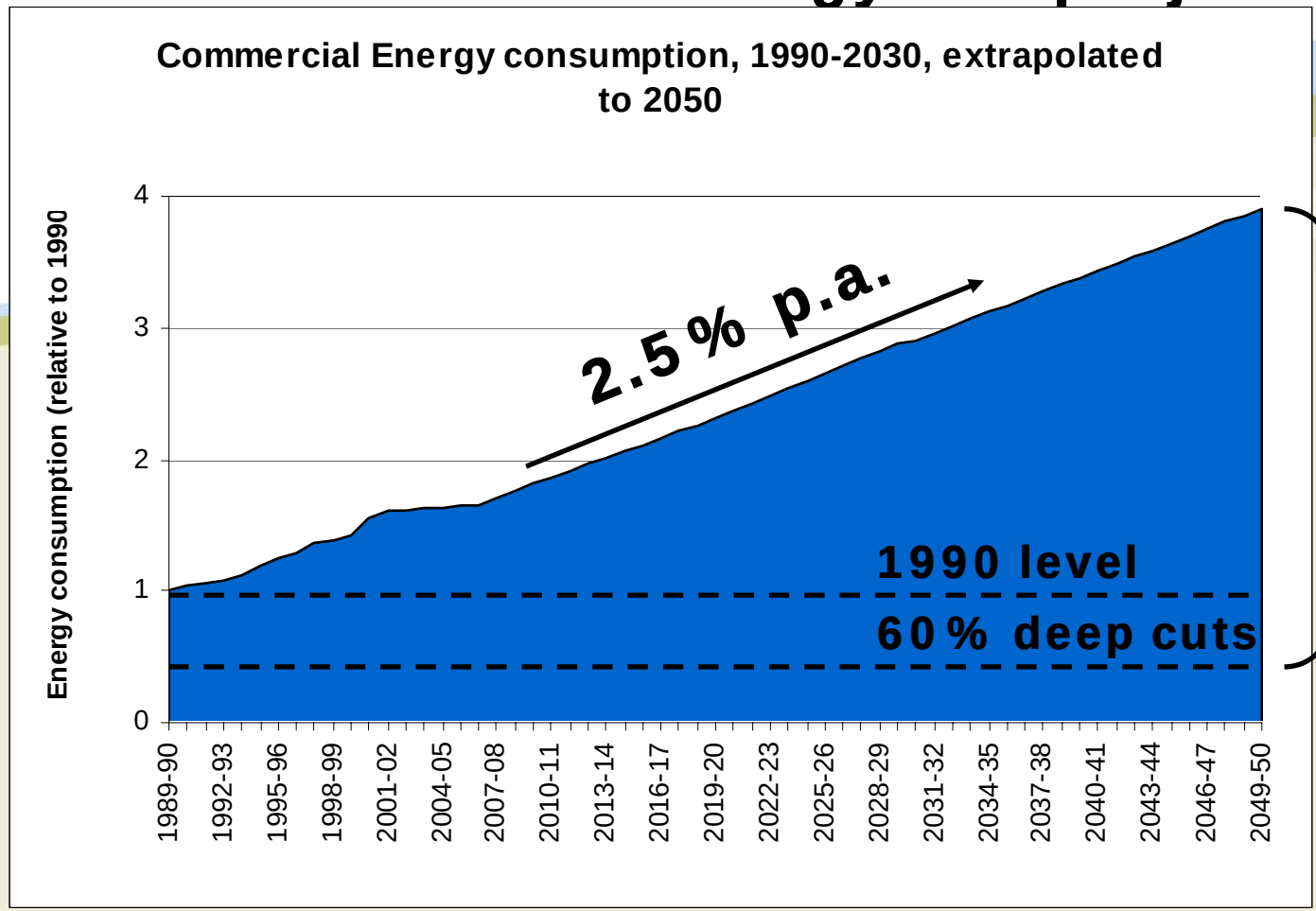
Commercial sector energy use projections



Source – *Australian Energy Projections 2007, table B (extrapolated from 2030 by MC)* ABARE (Aust Govt) 2007 www.abareeconomics.com

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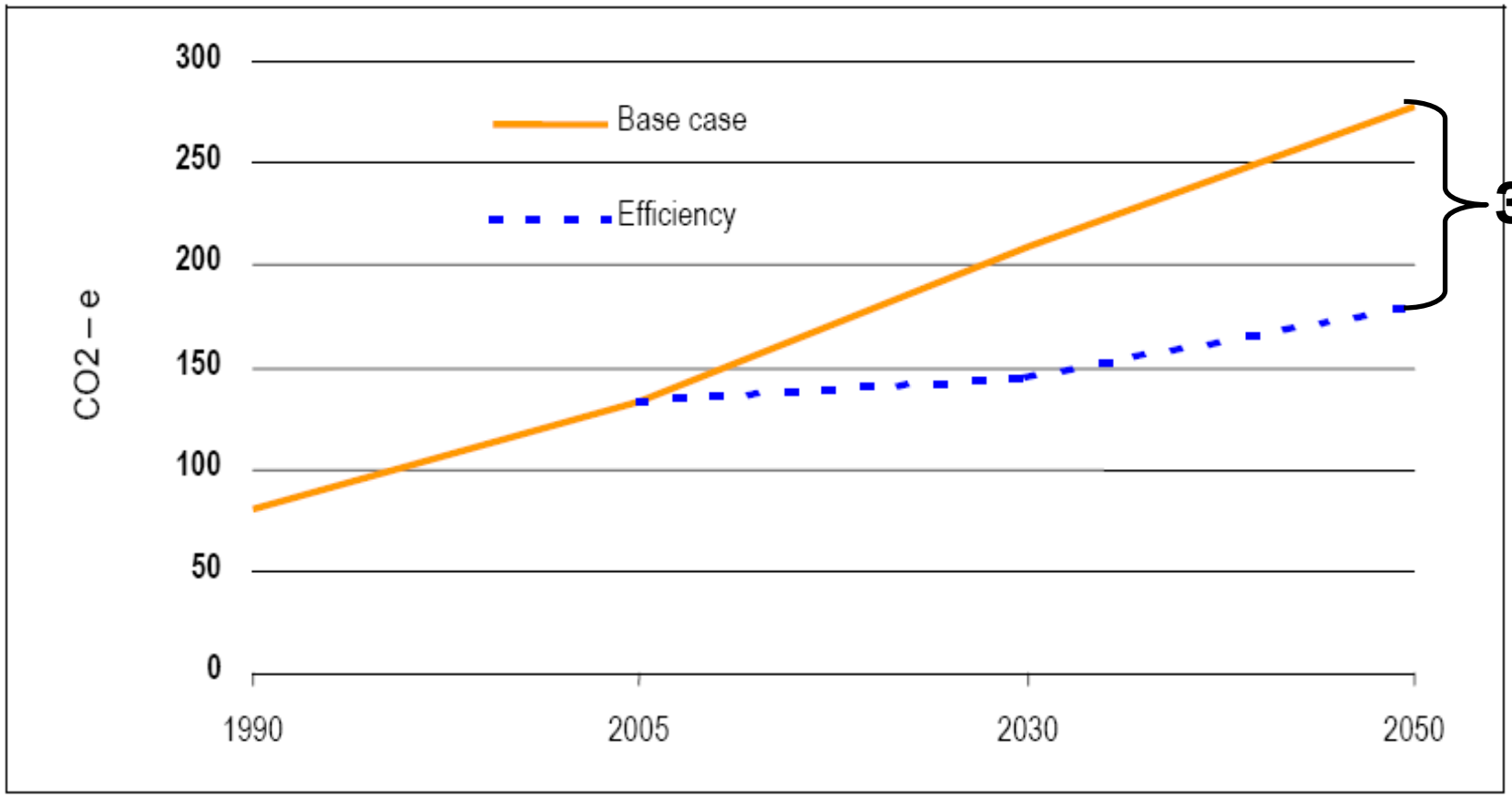
Meeting the challenge – ASBEC model



Source – *Capitalising on the building sector's potential to lessen the costs of a broad based GHG emissions cut*
CIE for ASBEC 2007 www.asbec.asn.au

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Notes on ASBEC model

- 35% savings against BAU using today's technology – eg efficient equipment, upgrading building shell
- Net cost savings in medium to long term – positive financial payback rather than cost per tonne abated
- Did not seem to consider "waste" in current buildings – actual savings potential higher??

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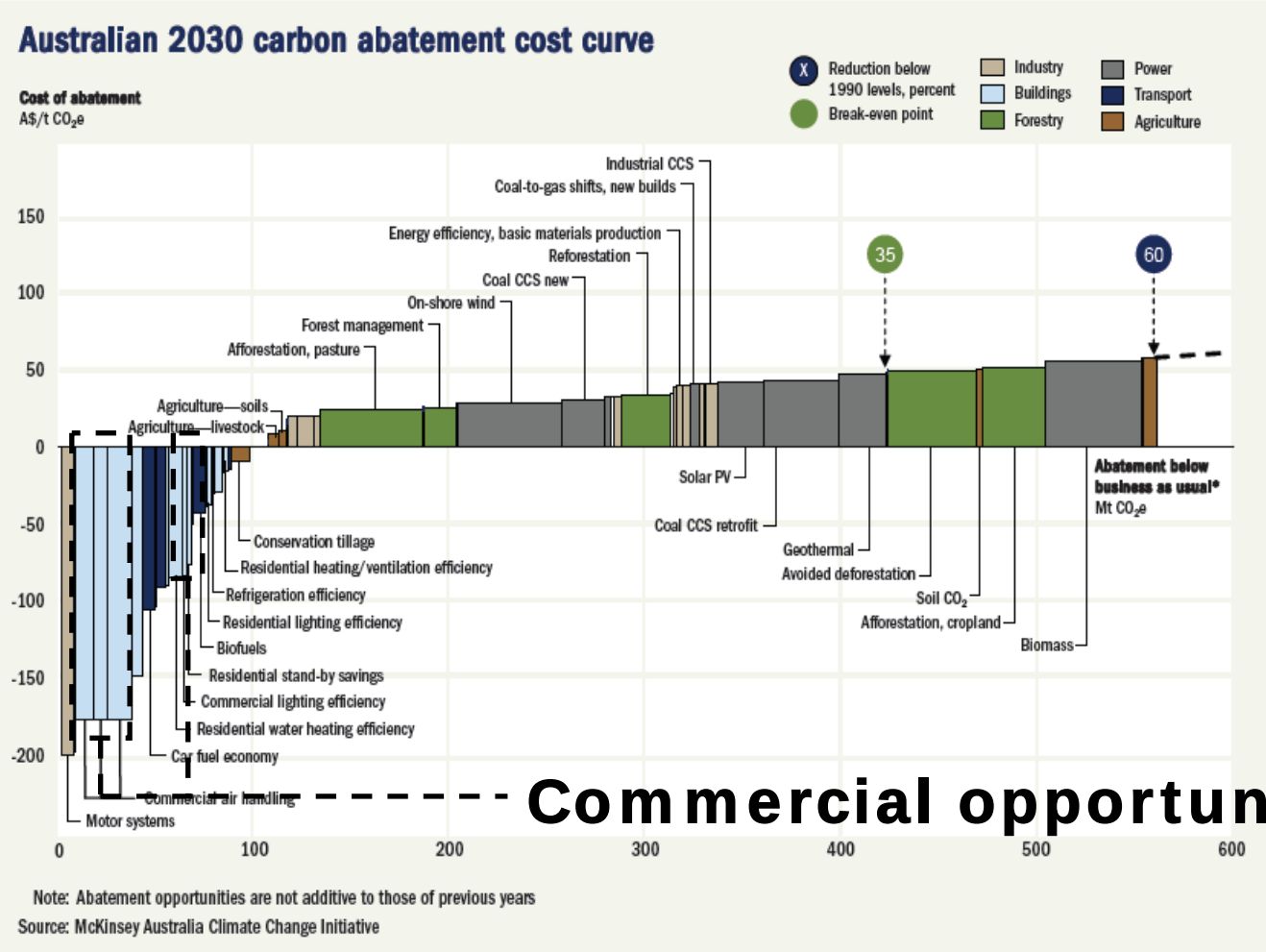
Meeting the challenge – McKinsey model



Commercial opportunities

Source – *An Australian Cost Curve for Greenhouse Gas Reduction*
McKinsey&Company www.mckinsey.com.au

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Notes on McKinsey model

- In 2030, the building sector has the lowest average cost opportunities at a net benefit of A$130 per tonne CO2e.
- Building sector (includes residential) has 60 Mt CO2-e abatement potential
- Many opportunities can be implemented today

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Implications

- Both ASBEC and McKinsey agree that action in building sector can reduce economy wide costs of emissions reduction
- Government, industry, community expectations and focus?
- What are you doing??

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Thanks

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Visit www.nabers.com.au – national conference series coming in May

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