

Energy Efficiency in Government Operations

Andrew Smith

Department of Finance and Deregulation

Introduction

- The Australian Government's policies have helped to reduce greenhouse gas emissions from owned and occupied buildings
- The new 2006 Energy Efficiency in Government Operations (EEGO) policy aims to reduce emissions by a further 20 to 25% by improving efficiency of buildings

Previous Policy

- Greenhouse Challenge – voluntary participation and voluntary targets – but good results
- 1997 Portfolio targets and Whole of Government Reporting of Energy use
- Overall energy consumption rose by just 2.7% from 1997 to 2006 despite public service growing 32%

New Targets Required

- The 1997 targets became too easy to achieve as technology improved efficiencies of buildings and awareness of the importance of reducing greenhouse gas emissions increased.
- The Howard Government introduced the EEGO policy in 2006 to move Government Operations to the next level
- The Government lost the election in late 2007 but the policy remains in place and continues to challenge building owners and operators

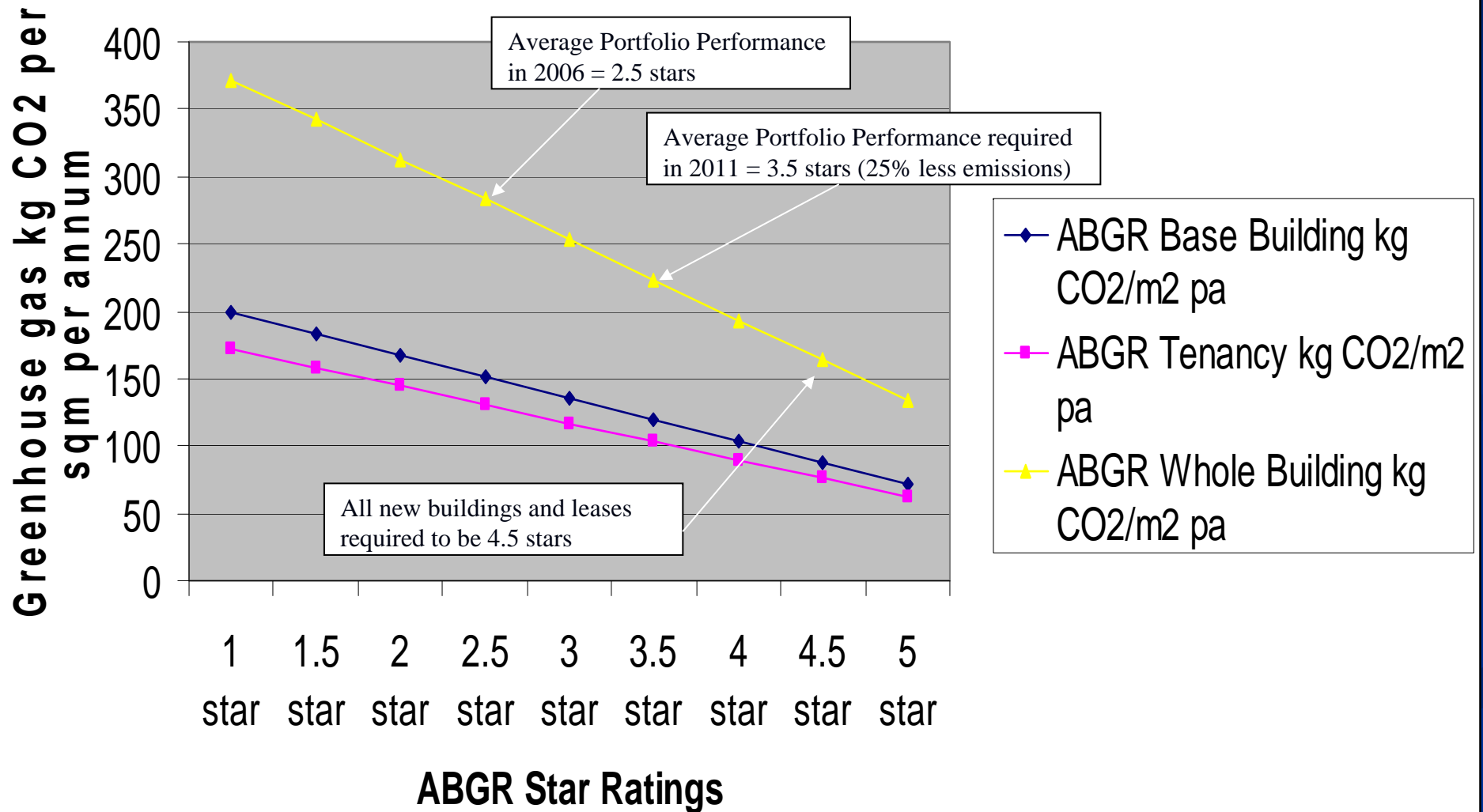
The EEGO Policy

- Administered by the Department of Environment, Water, Heritage and the Arts
- EEGO requires Agencies to report annually on their energy performance via the Australian Government's online energy database.
- EEGO establishes best practice energy targets for Government office buildings:
 - the target for tenant light & power is a 25% reduction on the 1997 target;
 - the target for central services is a 20% reduction on the 1997 target.

The EEGO Policy (cont)

- Uses the Australian Building Greenhouse Rating tool (ABGR) to measure performance annually
- Requires new building to achieve 4.5 star ABGR
- Requires new leases to be for 4.5 star ABGR buildings
- Requires portfolio average energy intensity levels to be achieved by 2011

Australian Building Greenhouse Rating (ACT)





Australian Building Greenhouse Rating scheme What the stars mean...



Green Leases

- The EEGO policy requires standard form Green Leases to be used for all new leases
- Green leases require an Energy Management Plan (EMP)
- Green Leases require a Building Management Committee (BMC) to meet at least quarterly to monitor performance against targets and implement the EMP

Adoption of EEGO Policy

- Policy adoption has been slow due to extremely low vacancy rates of 0.5% in most major capitals despite a building boom
- Most new buildings are aiming for 4.5 star ABGR levels to ensure potential of leasing to government
- Green leases are rolling out
- State governments and many major businesses are adopting part or all of the policy (an unintended benefit)

Existing Building Challenges

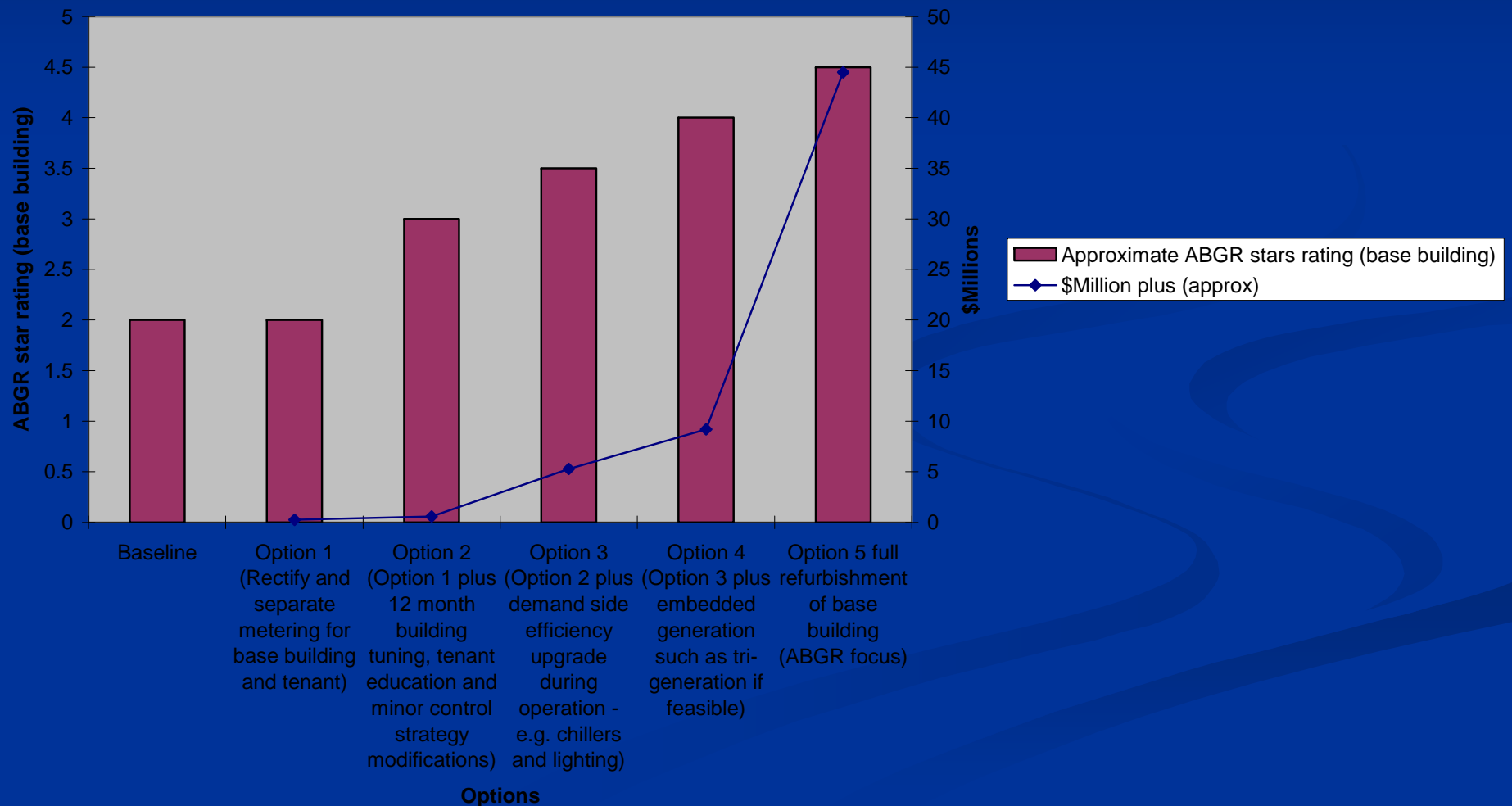
- The vast majority of the buildings government owns or operates are existing buildings
- Performance varies but average 2.5 stars
- Significant costs to upgrade
- Cost effective solutions being sought

Case Study # 1

- Treasury Building is 1960s Building
- Heritage listed
- 25,000 m² NLA
- Last refurbished in late 1990s
- 3 Tenants including Finance Department
- Currently operates as a 2 Star ABGR building
- Can easily be made 3 Stars but cost escalates as targets increase beyond that

TREASURY BUILDING CASE STUDY

Approximate costing for ABGR improvements (Treasury Building)



Case Study #2

- Major Agency with over 450 leases
- Only 60 leases are big enough to fit ABGR criteria (over 2000 m² NLA)
- Difficult to get green leases in place due to
 - Landlords not understanding how they work
 - Landlords control the market due to low vacancy rates
 - Landlords not willing to spend money upgrading buildings or participating in BMCs
 - Agency needs to be in specific places and there are few options available

Case Study #2 (continued)

- Agency has focused on increasing tenancy energy efficiencies
- To date, in 3 years for minimum expense they have increased portfolio from an average 2.7 stars to 3.2 stars
- Upgraded sites are now averaging 3.7 stars.
- Next phase is a focus on smaller sites and an improved facility management contract focusing on energy efficiencies

Conclusion

- Australia has achieved good progress on improving energy efficiency in buildings
- EEGO policy aims to reduce energy consumption by a further 25% by 2011
- Green Leases are a major element to achieve this target
- Case studies point way to large improvements in the next few years

References

Australian Building Greenhouse Rating Tools

- www.abgr.com.au

Energy Efficiency in Government Operations

- www.environment.gov.au/settlements/government/eego