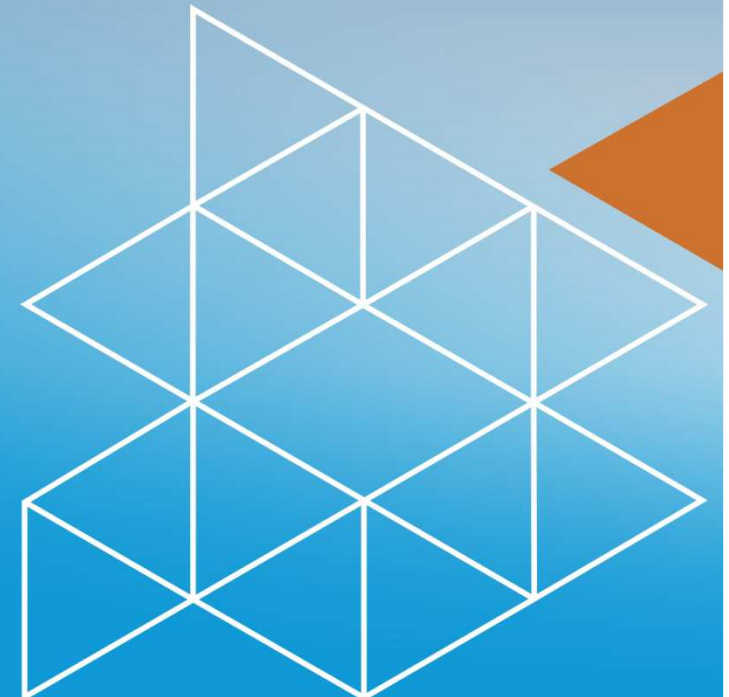




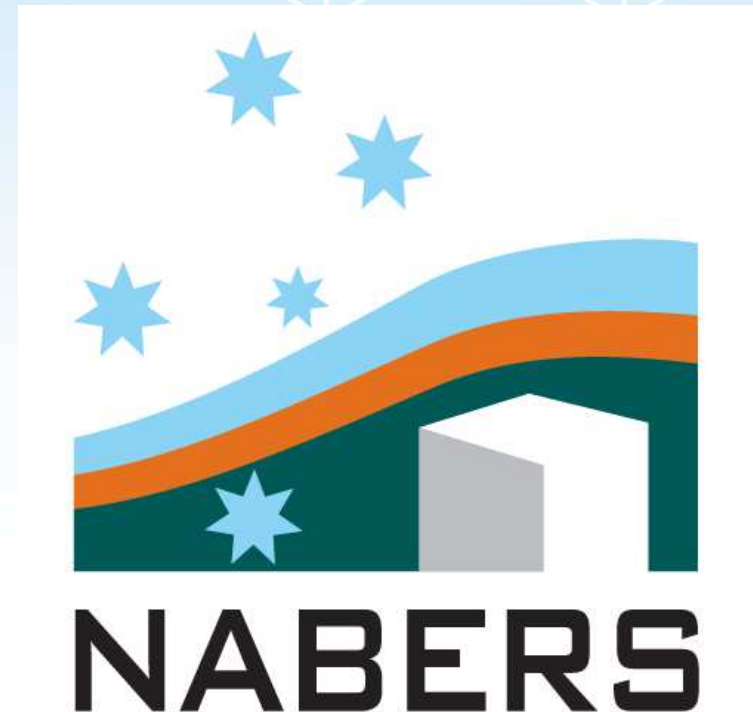
National Australian Built Environment Rating System – Australian Experience with market based performance ratings

Chris Bloomfield – 20 January 2016

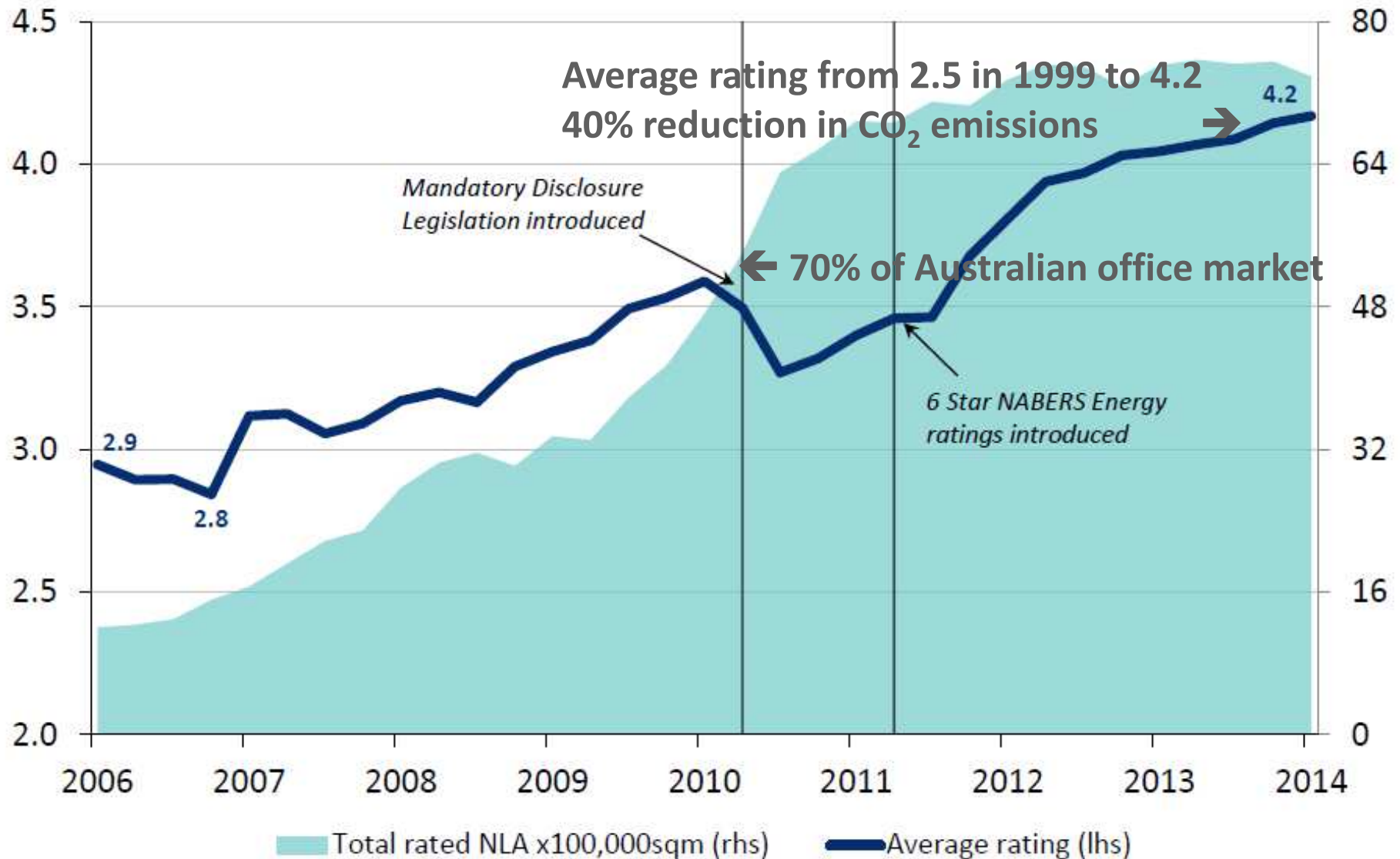


NABERS

- > National Australian Built Environment Rating Scheme
- > Introduced in 1999
- > Performance (measurement based)
- > Separate assessments for energy (emissions), water, waste, indoor environment
- > Operated by government with industry consultation
- > Applied to offices, shopping centres, hotels, data centres, hospitals



Has it worked? – office buildings (base build)



Source – NABERS 2014 annual report (www.nabers.com.au)

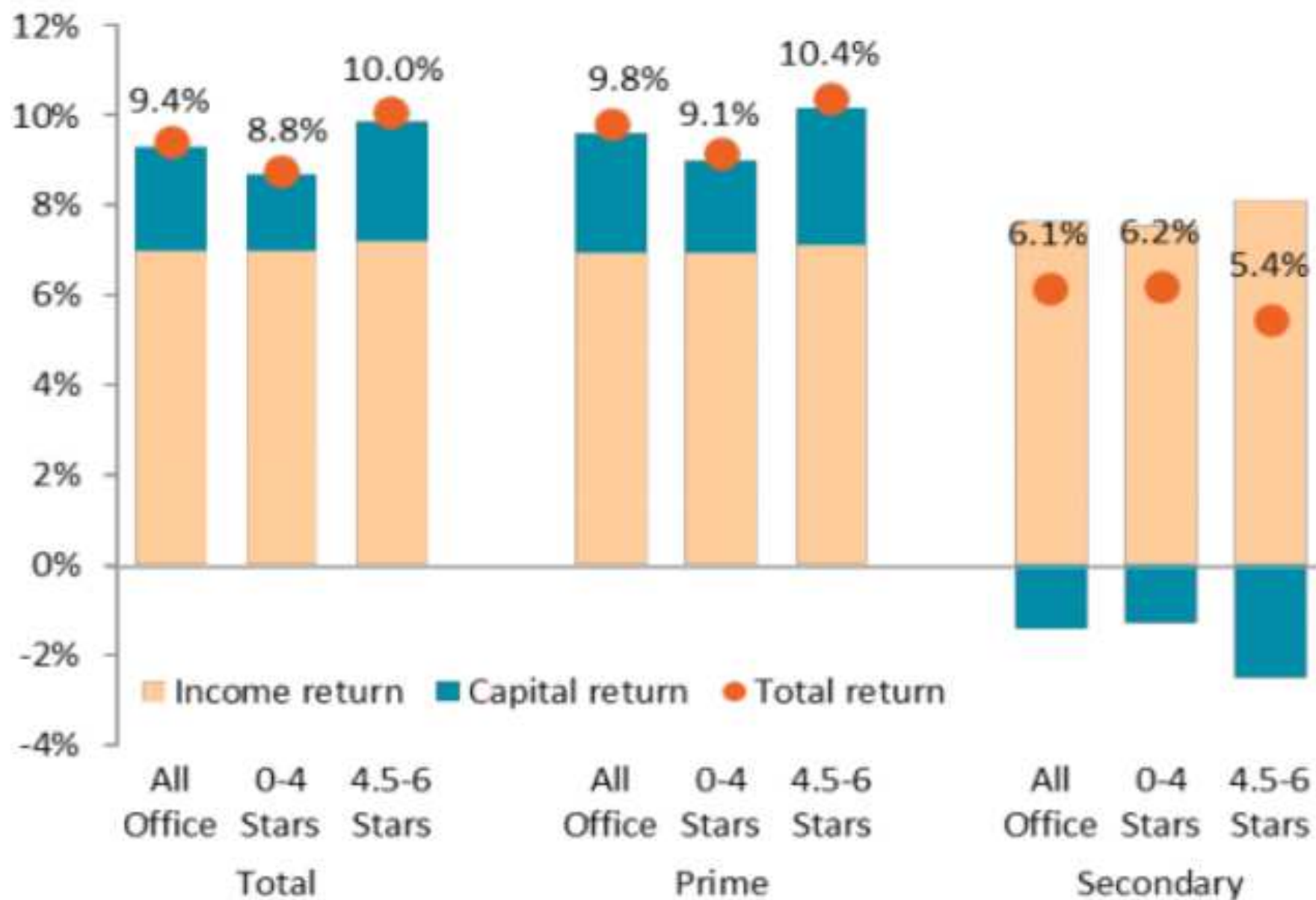
NABERS – key features

- > Managed by government with industry consultation
- > Aligned to procurement boundaries – tenant and landlord assessed separately
- > Electricity metering well split between tenant and landlord
- > Simple metric – 0-6 stars in 0.5 stars
- > Financial grade audit and support of rating data
- > Assessed on measurement – technology agnostic
- > Market based

Rating structure

- > Based on 12 months data, valid for 12 months
- > Essentially a productivity index – consumption per unit of output
- > For office energy ratings,
- >
$$KPI = f \frac{\sum Energy\ use \times Emissions\ factor}{Occupied\ area \times Hours\ of\ service \times Climate\ factor}$$
- > KPI benchmarked against real building data, 2.5 stars = market median, 7 stars = carbon neutral

Driven by market value



Driving the market

- > Green leases – state and federal government require 4.5 stars for new leases (~15% of market)
- > Leadership from government owned property portfolios
- > Lease outgoings (gross/net lease becoming irrelevant)
- > Grants (generation of carbon trading, direct funding)
- > Cost of debt (green bonds)
- > Name and shame (mandatory disclosure)



Case study – driving building upgrades. Garema Court

- > 1997 construction, 11,400m².
2010 performance 2.5 stars,
Lease expiring. Value
AUD\$31M
- > Efficiency upgrades 2011-12,
\$1.2M project
- > 2013 rating 4.5 stars (45%
reduction in emissions),
enabled new 15 year
government lease
- > 2013 valuation \$56.5M



Engagement with tenants vs landlords

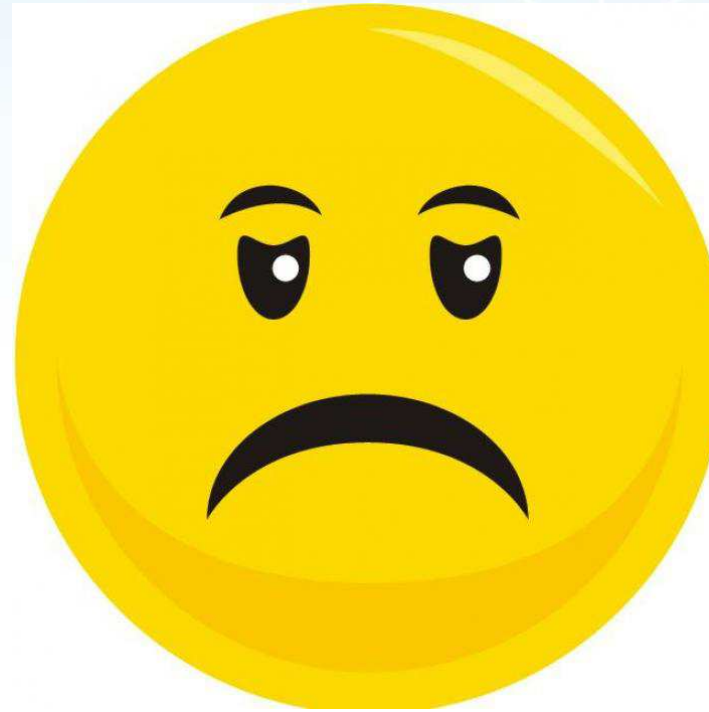
Base building office ratings

- 90%+ of floor area rated annually



Tenancies

- ~10% of floor area rated annually



Tenant drivers - softer

- > Energy is a smaller driver for tenants - \$50 vs \$500/m² compared to rents, \$50 vs \$7000/m² compared to wages
- > Main energy usage:
 - IT equipment
 - Lighting
- > Different drivers to landlords – less aligned to core business.

What seems to work?

Green leases

- > Green leases common for “premium” and “A” grade properties, usually driven by tenant
- > Tenant seeking to procure (and pay for) lower emissions building
- > Measurement every year results in same quality of maintenance through lease term
- > Correlation between energy efficiency and indoor environment quality → wage productivity
- > Some green leases reciprocal (places performance requirement on tenants)

Disclosure of lighting system at lease

- > Common in AU market for lighting fitout to be provided by landlord at start of lease
- > Mandatory disclosure of lighting power density
- > Allows tenants to evaluate cost of occupancy of prospective tenancies
- > Has resulted in a lot of lighting efficiency upgrades at end of leases



**COMMERCIAL
BUILDING DISCLOSURE**

A National Energy Efficiency Program



Engagement

- > Development of NABERS Data Centres – engage with IT
- > Recognition and awards – CitySwitch
- > Staff engagement and retention



Questions?

Chris Bloomfield

Energy Action (Australia)

Chris.Bloomfield@energyaction.com.au

www.energyaction.com.au

+61 2 6257 7066