NABERSNZ

Benchmarking building performance across Auckland

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- 2. What it means to Auckland Council
- 3. The potential for wider Auckland







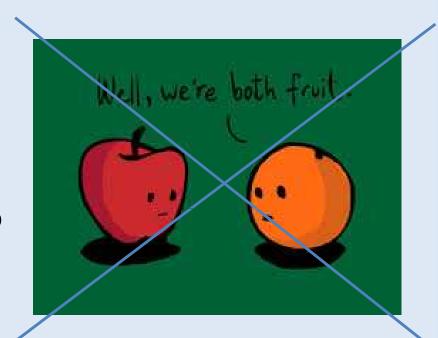
Not just another green building rating tool

NABERSNZ measures Real Performance in the real world



The NABERSNZ Philosophy

- to compare apples with apples
- make allowances for core service delivery functions
- provide a rating from 1 to 6 stars
 - 2.5 to 3 stars is the market average in New Zealand





Real world data

The rating takes into consideration:

- Energy use + fuel source (e.g. gas, electricity)
- Climate in which the building operates
- Hours the building is used
- Size of the building
- Number of occupants



Backed by central government

- Launched in June by Hon Simon Bridges to drive building efficiency
- IP licensed to EECA from the NSW government
- Rating scheme adapted to NZ conditions from the Australian NABERS scheme











An Australian success story

1998 - Launched by NSW gov 1998

2000 - Adopted nationally by all states

2010 — Commercial building disclosure scheme introduced using NABERS to disclose energy efficiency



TODAY — 72% of Australia's office buildings now rated



Ratings options

1) Self assessment

- Free, online (www.nabersnz.govt.nz)
- Informal, no status
- Rough estimate of performance

2) Certified Rating

- Undertaken only by Accredited Assessors
- Compliant with NABERSNZ Rules
- Audited
- Can be used for marketing and promotion







A commitment to operational efficiency

- Council energy bill = \$11.3 million/yr +
- A vision to deliver a financially astute world class property function to our ratepayer
 - Whole of Life Value approach
 - Better benchmarking
 - Clear sustainability framework
- NABERSNZ will help track our progress



Solving our benchmarking challenge

- Invested in detailed real-time energy monitoring on 60 large council buildings
- No two public office buildings are the same
- Benchmarking via NLA/kWh isn't hitting the mark
- NABERSNZ provides us with strict definitions
- NABERSNZ submetering methodology





NABERSNZ gets our ducks in a row

Case study: Graham Street Offices

- NZ's first 'whole building' office rating
- Not such a good benchmark this time round but identified attention areas
- Major overhaul of HVAC system required which may result in improved rating





More effective building management



Options for energy efficiency improvement

Typical buildings in Australia

Building Properties	3.5 Stars	4.5 Stars	5.5 Stars
Facade	Fully glazed all orientations	Glazing + spandrel panels	Orientation – sensitive window to wall ration
Glazing	Single, tinted	Single, tinted	Double tinted
External shading	No external shading	Fixed external shading	Fixed/active external shading
Lighting	T8 fluorescents 15 to 20 W/m2 Zoning by floor	T5 fluorescents 10 to 15 W/m2 Zoned lighting control	T5 + LEDs 5 to 10 W/m2 Zoning: core, perimeters, presence detection



3. The potential for wider Auckland





The potential for Auckland

A huge savings opportunity

- Commercial buildings use 21% NZ's electricity
- \$800m spent on electricity/yr
- 20-25% savings achievable
- NABERSNZ both an asset management and marketing incentive to raise the bar for commercial sector
- Rental premiums





The potential for Auckland

A more energy resilient Auckland

- Targets to reduce Auckland's GHGe 40% by 2040
- Greater resilience to electricity price hikes
- NABERSNZ rewards onsite renewables generation
- Addressing Auckland's 3 million m2 of office space a great place to start





The potential for Auckland

NABERSNZ - the future

- The wider suite of NABERS tools?
 - Water
 - Indoor environment
 - Waste
 - Hotels, Shopping Centres, Data Centres
- Mandatory?
- Rating and disclosure policies?









Conclusion

- Auckland Council
 - An important benchmark
 - A measure of operational efficiency
 - Track progress on sustainability targets and deliverables
- Commercial Property Industry
 - Early adopters will be those whose investors demand more investment for long term gain



Questions

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For further information on NABERSNZ visit:

www.nabersnz.govt.nz

