



**SUSTAINABLE
MELBOURNE
FUND**

Comparison of environmental upgrade financing models: Australia and USA

Scott Bocskay, Chief Executive

An aerial photograph of the Melbourne city skyline at dusk or dawn. The image shows a dense cluster of skyscrapers and commercial buildings. The ANZ tower is prominent in the center, with its name visible on the top. To its right is a building with a red crown logo. The city extends far into the background, with a hazy horizon under a soft sky.

**53% of emissions in the City of Melbourne
municipality come from commercial buildings.**

cleanenergyfuture

w. sustainablemelbournefund.com.au / tw. @SMFAus



**SUSTAINABLE
MELBOURNE
FUND**



Sustainability investments have risen by 33% in Australia since 2010, faring better than the broader market.

[w. sustainablemelbournefund.com.au](http://w.sustainablemelbournefund.com.au) / tw. @SMFAus



**SUSTAINABLE
MELBOURNE
FUND**

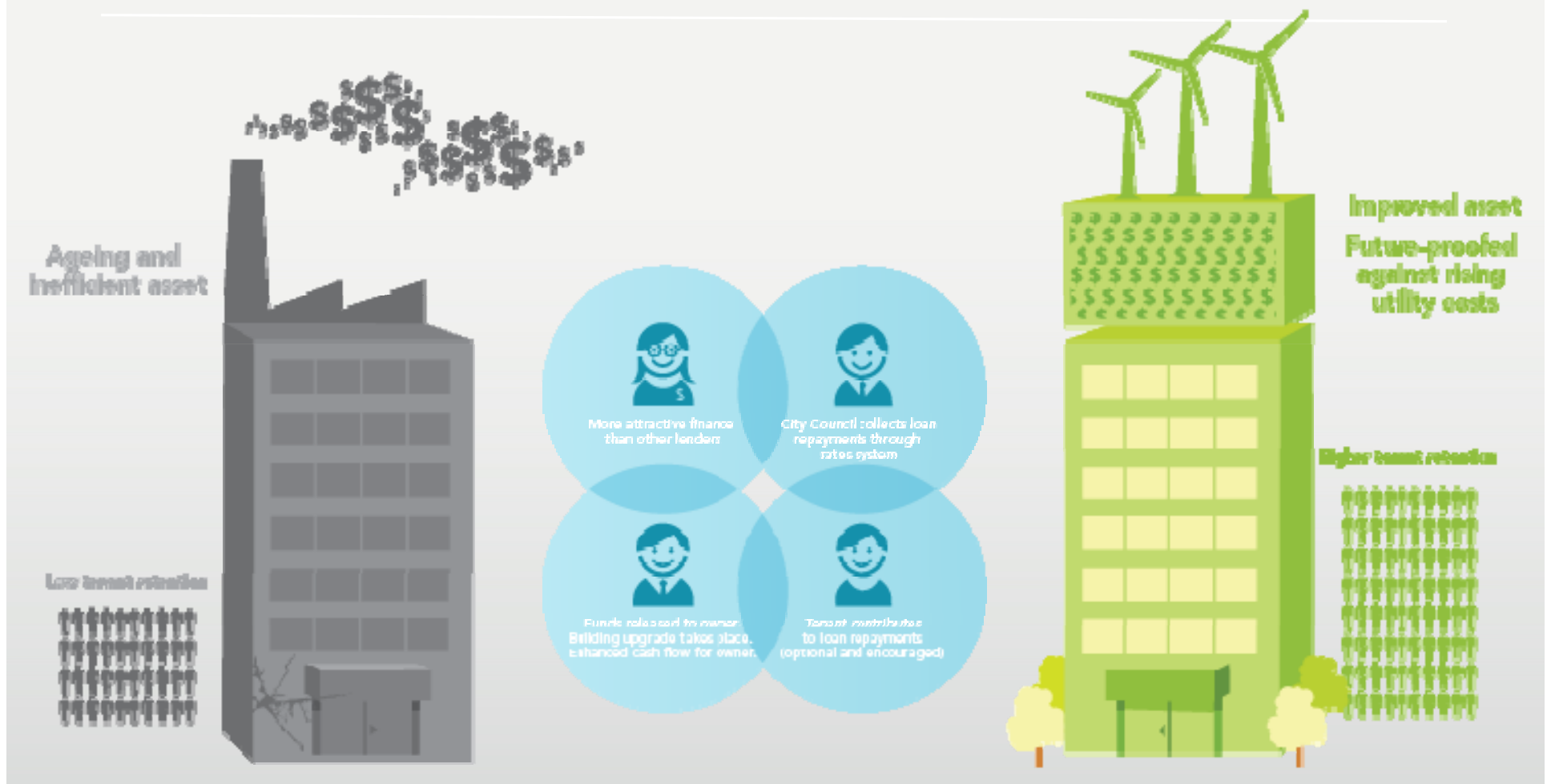
Australia and USA overview

- Australia and USA both have special finance models for retrofitting and they are similar.
 - Both focus on commercial buildings, recovery through retrofit.
 - Pain points in the finance models are similar, but influenced by differing economic variables.
- Economic context in USA differs to that of Australia.
- Australia has a carbon trading scheme, USA does not, politics similar.
- Both Australia and USA have bi-partisan support for EE.

Statutory secured finance – the models

- Australia: EUA finance
(Environmental Upgrade Agreement)
- USA: PACE finance
(Property Assessed Clean Energy)

What problem do both models solve?



[w. sustainablemelbournefund.com.au](http://w.sustainablemelbournefund.com.au) / tw. @SMFAus

EUA and PACE: the process

1

- State passes enabling legislation – both EUA and PACE

2

- Municipality designs local program, selects administrator - both EUA and PACE

3

- Municipality raises funding and/or forms agreement with private lenders - PACE
- Administrator forms agreement with private lenders - EUA

4

- Municipality markets program through pre-qualified service providers - both EUA and PACE

5

- Owner develops retrofit plan, applies for assessment and is approved - PACE
- Owner develops retrofit plan, applies for assessment and EUA is signed - EUA

6

- Work is completed, assessment payments collected on property tax bill – PACE
- Work is completed, assessment payments collected on council rates notice - EUA

Australia: EUA milestones

- 
- ▶ **March 2010** - State Government established 1200 buildings program.
 - ▶ **September 2010** - Victorian EUA legislation passed.
 - ▶ **December 2010** - SMF appointed as Administrator of EUA program.
 - ▶ **February 2011** - NSW EUA legislation passed.
 - ▶ **June 2011** - NAB established as a finance partner for EUA program
 - ▶ **September 2011** - 1st EUA signed in Victoria (**1st Globally**)
 - ▶ **December 2011** - 2nd EUA signed in Victoria
 - ▶ **December 2011** - 3rd EUA signed in Victoria
 - ▶ **August 2012** - 4th EUA signed in Victoria
 - ▶ **December 2012** – South Australia commenced business case
 - ▶ **December 2012** - 1st NSW EUA signed
 - ▶ **February 2013** – Bankmecu now a finance partner for EUA program
 - ▶ **September 2013** - Estimated South Australian Legislation passed



Australia: EUA interest gaining momentum

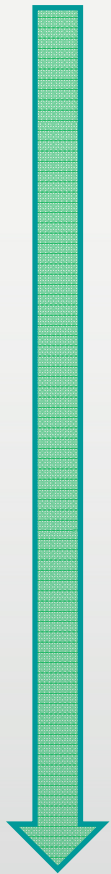
The map displays the following data points:

State	EUA legislation passed (Green dots)	Council Interest in EUA (Red dots)	Value of EUA retrofit project signed (\$) (Dollar signs)
SA	0	1	0
NSW	4	3	1
VIC	1	0	1

w. sustainablemelbournefund.com.au

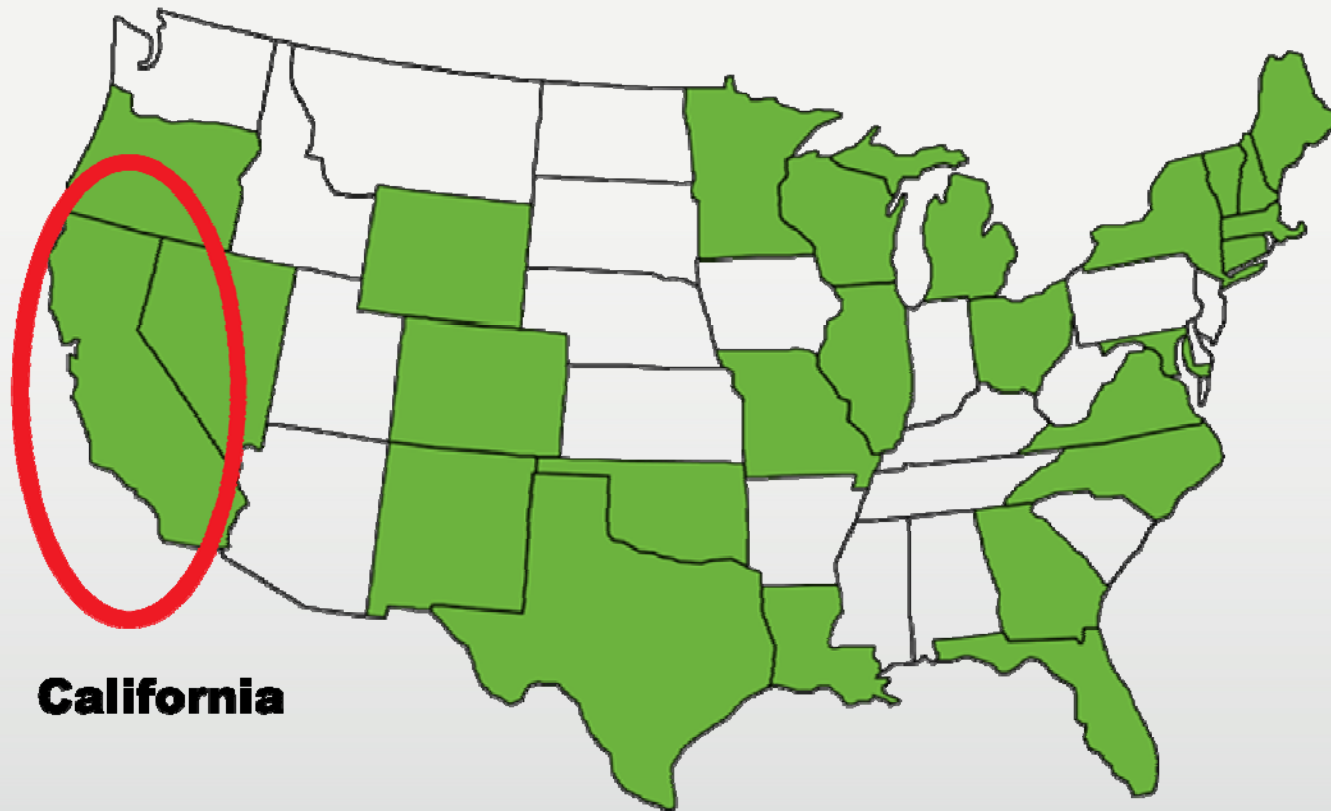


USA: PACE key milestones



- ▶ **2008:** Started in California by Mayor of Berkeley, now dozens of PACE led programs.
- ▶ **2008:** Credit crunch and residential housing market crash.
- ▶ **2010:** Fanny Mae and Freddy Mac caused major reduction in take-up of residential PACE.
- ▶ **2010-2013:** Owner-arranged and commercial PACE now growing, California leading.

USA: PACE growing in commercial property



California



Spread of PACE programs in USA – California largest market



Comparison of key characteristics

CHARACTERISTIC	EUA - AUSTRALIA	PACE - USA
Commercial property	✓	✓
Residential property	✗	✓
Provide building owners with access to capital	✓	✓
Offer a more attractive finance option than other lenders	✓	✓
Finance “stays with the property” upon sale	✓	✓
Ability to pass payment through to tenant (non-residential)	✓	✓
Reduces cost of building utilities	✓	✓

Comparison of key issues and variables

KEY ISSUES - AUSTRALIA	KEY ISSUES - USA
Current debate is tenancy consent required by council vs 'no worse off'	Current debate is mortgagee consent required by lenders
KEY VARIABLES – AUSTRALIA	KEY VARIABLES - USA
Commercial property only – growing but slower uptake than anticipated	Residential nearly defunct post-GFC, but commercial property growing
Lender funds retrofit project through a bank loan	Lender funds retrofit project through municipal bonds

EUA case study: 113-123 Queen Street, Melbourne

- 18,493 square metres commercial building in Melbourne's CBD
- 12 tenants including conference centre, hotel, hospitality, education and office
- Project value: AUD\$1.3 million
- Annual Savings achieved:
 - \$180,000 in energy costs
 - 2,500 tonnes CO₂-e
- NABERS rating lifted from 2 to 4 stars
- EUA signed between CoM, NAB, building owner and Low Carbon Australia



PACE case study: Pier 1, San Francisco, CA

- 151,000 square feet of commercial office space.
- 5 tenants, including Port of San Francisco administrative offices.
- Project value: USD\$1.4 million
- PACE bonds issued: Oct, 2012
- Annual Savings [projected only]:
 - USD\$98,003 in lighting, re-commissioning and solar costs
 - 34% projected savings in energy consumption
 - 32% project savings in in gas consumption.





Between 7,000 and 13,000 jobs are created through every \$1 billion invested in energy efficiency.



[w. sustainablemelbournefund.com.au](http://w.sustainablemelbournefund.com.au) / tw. @SMFAus



**SUSTAINABLE
MELBOURNE
FUND**



**SUSTAINABLE
MELBOURNE
FUND**

Scott Bocskay, Chief Executive

scott.bocskay@sustainablemelbournefund.com.au

www.sustainablemelbournefund.com.au

+61 3 9658 8666

Facebook: [sustainablemelbournefund](https://www.facebook.com/sustainablemelbournefund)

Twitter: [@SMFAus](https://twitter.com/SMFAus)