

Commercial Opportunities in the Emerging Building Retrofit Market

05 October 2010

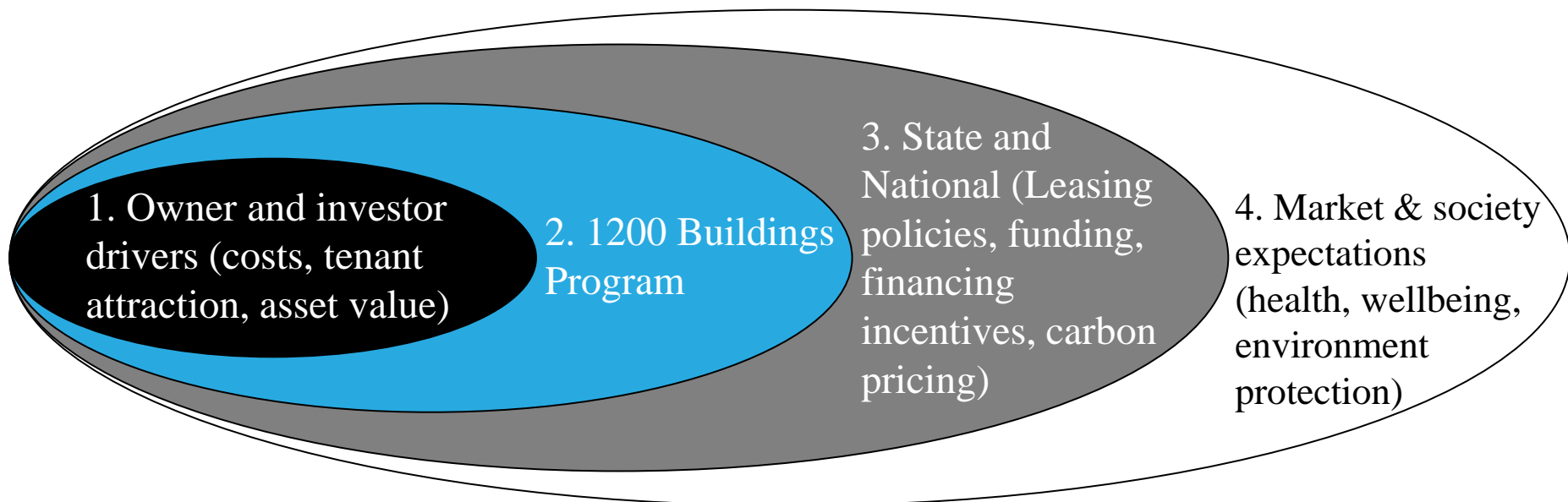
Australian Institute for Commercialisation, WIIN Clean Energy Opportunities
Workshop

Presentation Overview

1. Introduction
2. Drivers creating opportunity in retrofit market – 1200 Buildings
3. Manufactured products opportunity study (DIIRD/VIMC)
4. Retrofit product opportunities
5. Industry capability audit findings

Multiple forces driving building retrofit

- Reduce risk of rising utility costs
- Continue to attract tenants (tenant requirements)
- Growing demand for ‘green’ buildings and products
- Legislative change (mandatory disclosure)
- State and local government policy and politics



1200 Buildings Program



- Major Local Government initiative, with growing State government support
- *1200 Buildings* is program running over the period 2010-2020
- Initiative championed by Melbourne City Council, guided by government, industry, academic steering committee
- Aimed at influencing the retrofit of 1200 privately owned existing commercial buildings across the municipality of the City of Melbourne by 2020
- Target carbon emissions reductions of 38% on average or 384kt CO₂ equivalents in total per year by end of program
- First leadership group of building launched on 31st March

Future Job Opportunities for Victorian Manufacturers from the 1200 Buildings Program



Objectives of the study

- Research materials and services required to retrofit buildings
- Audit existing Victorian manufacturing capabilities
- Assess potential for locally manufacturing retrofit products
- Investigate export opportunities

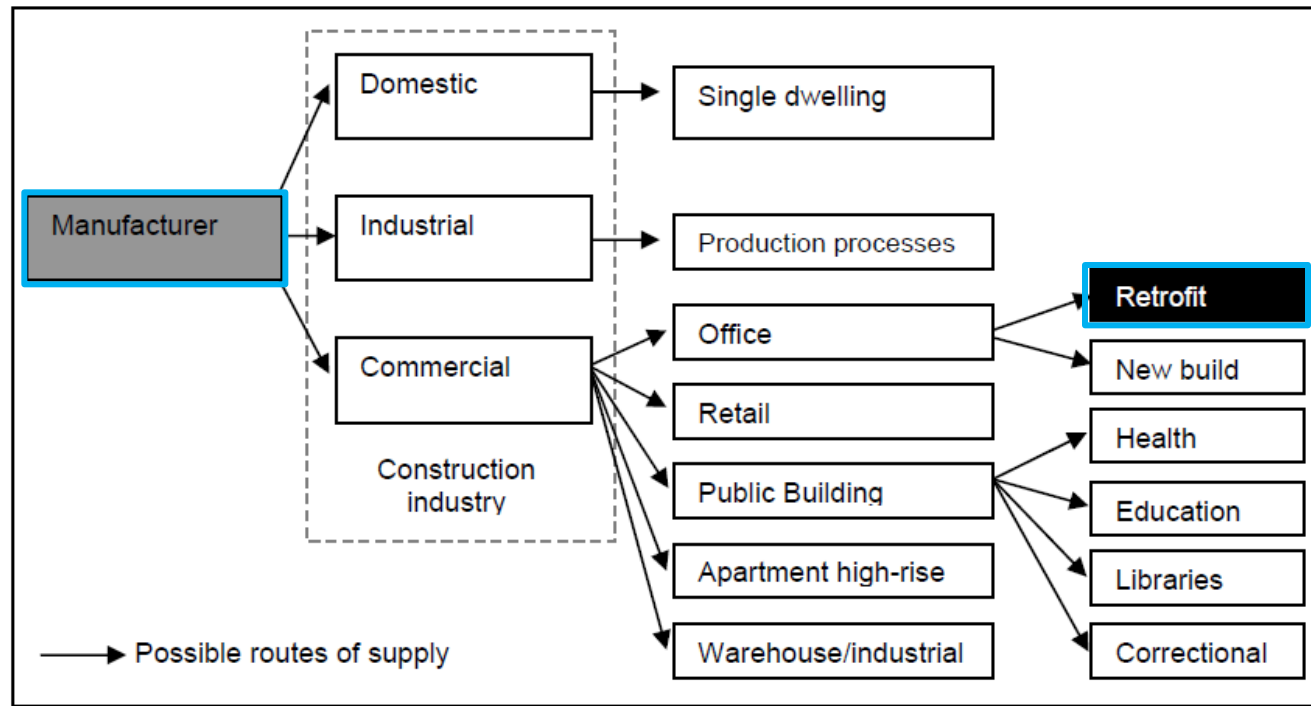
Funded by: Dept. of Innovation, Industry and Regional Development through the Victorian Industry Manufacturing Council (VIMC)

Economic benefits of *1200 Buildings Program*

Economic Study by Deloitte indicated program could:

- Drive around **\$1.3 billion** in additional retrofitting construction expenditure (in range of \$0.8b to \$1.7b)
- Generate up to **12,796 FTE years of employment** in the construction industry
- Equates to average **annual direct employment of around 800 fulltime positions** in the building industry and its **supply chain** over the over the 11 year life of the program (within a range of around 500 to over 1000 positions)

Opportunity is larger than scope assessed

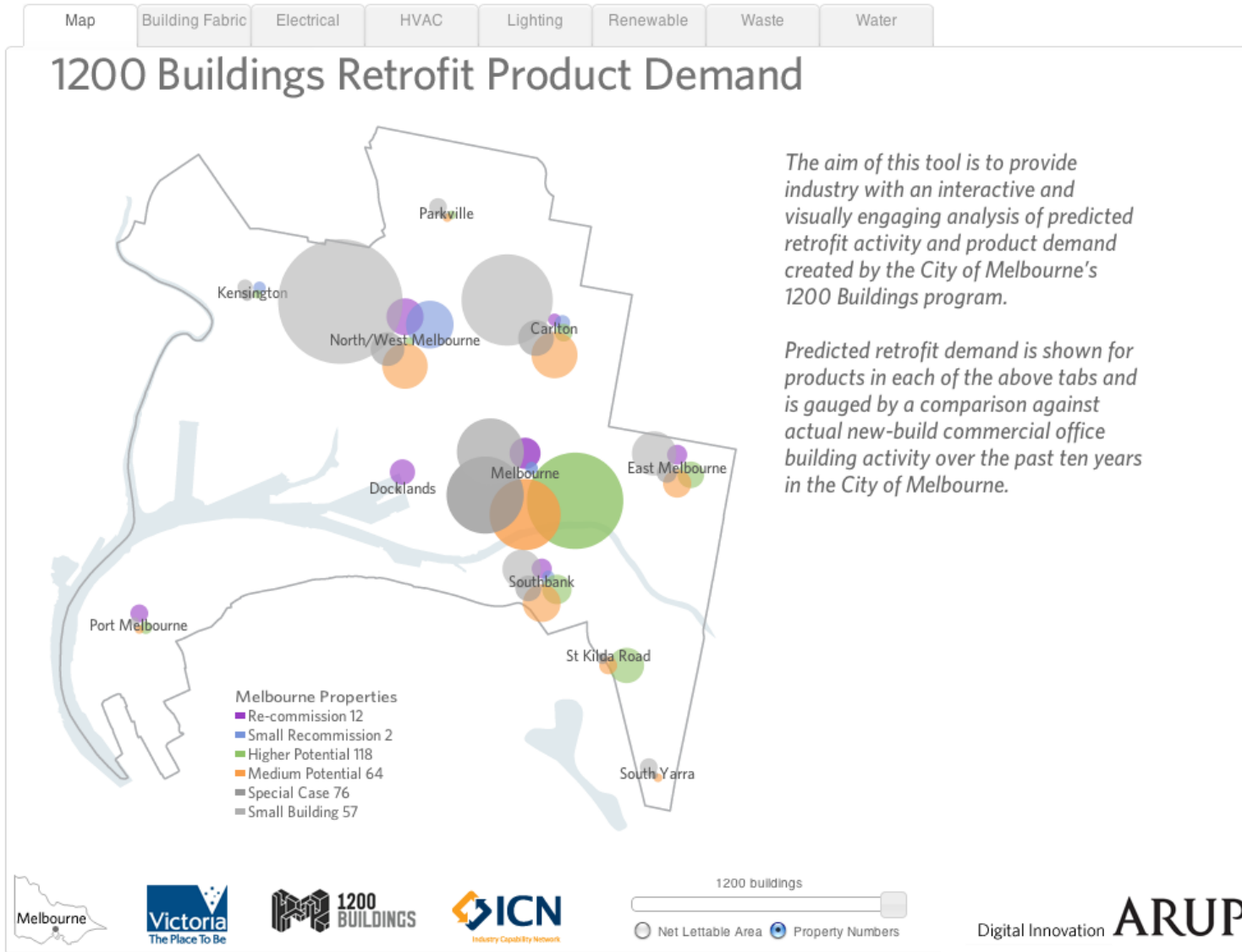


Scope 1: 1200 Buildings - with office space in the municipality of the City of Melbourne

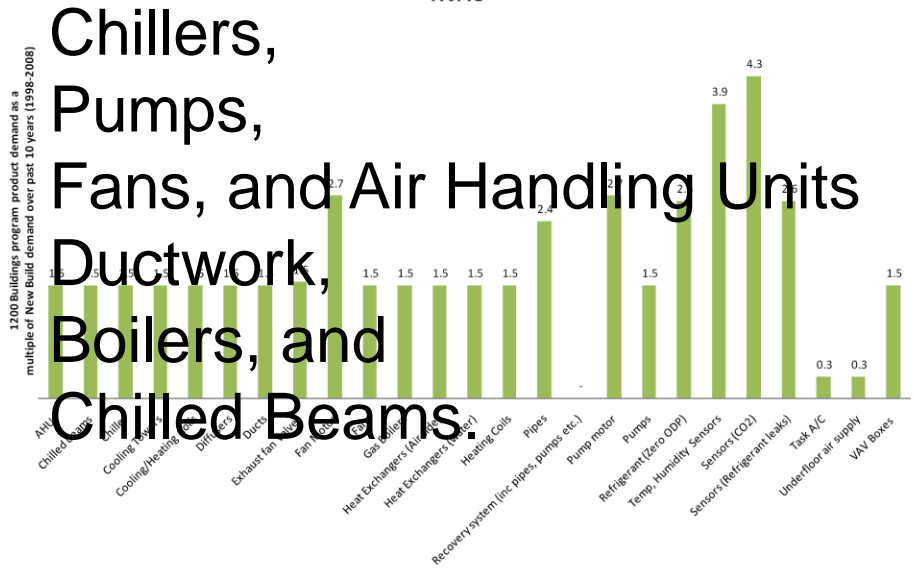
Scope 2: Extended demand – buildings not currently targeted by the 1200 Buildings Program

Scope 3: Extended demand – Buildings across metropolitan Melbourne, Victoria and Australia

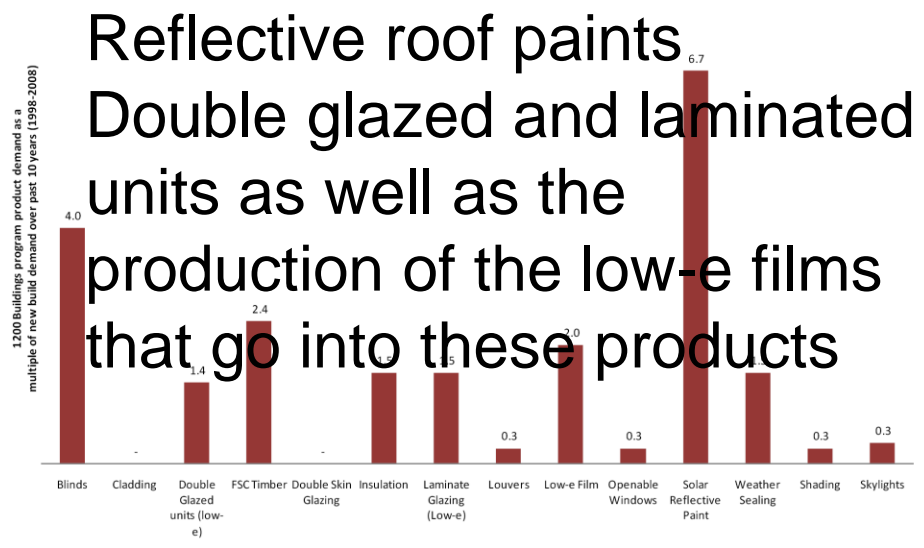
Interactive retrofit product demand tool



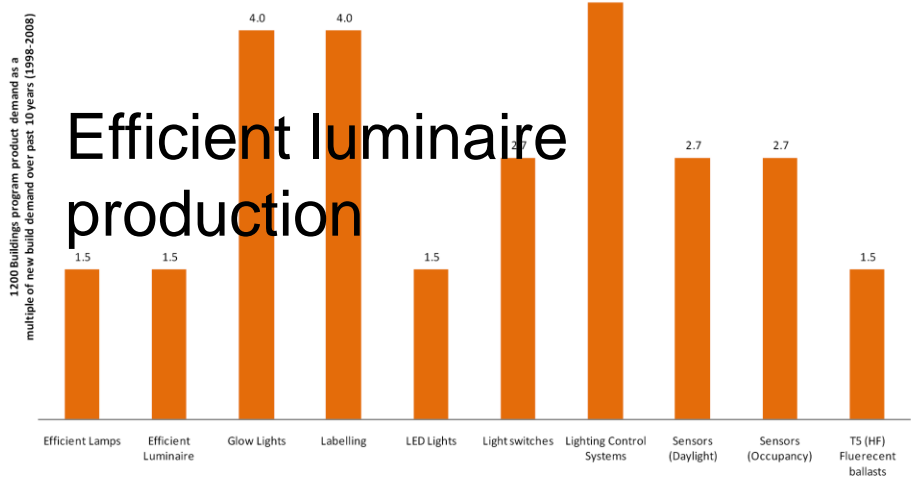
HVAC



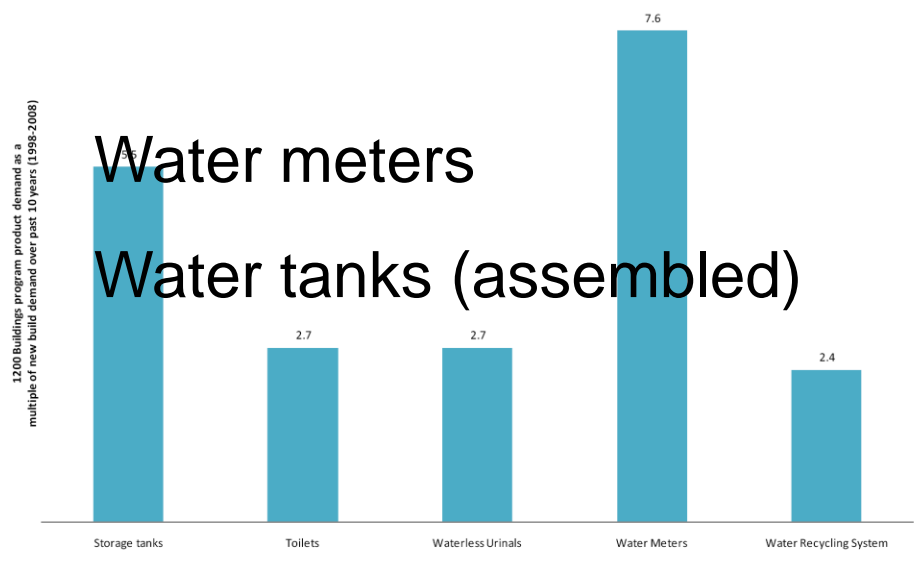
Building Fabric



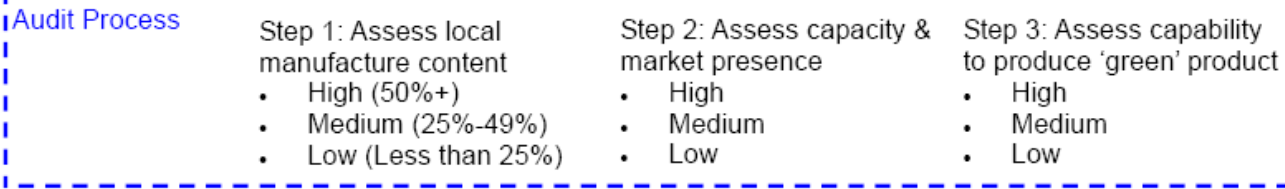
Lighting



Water



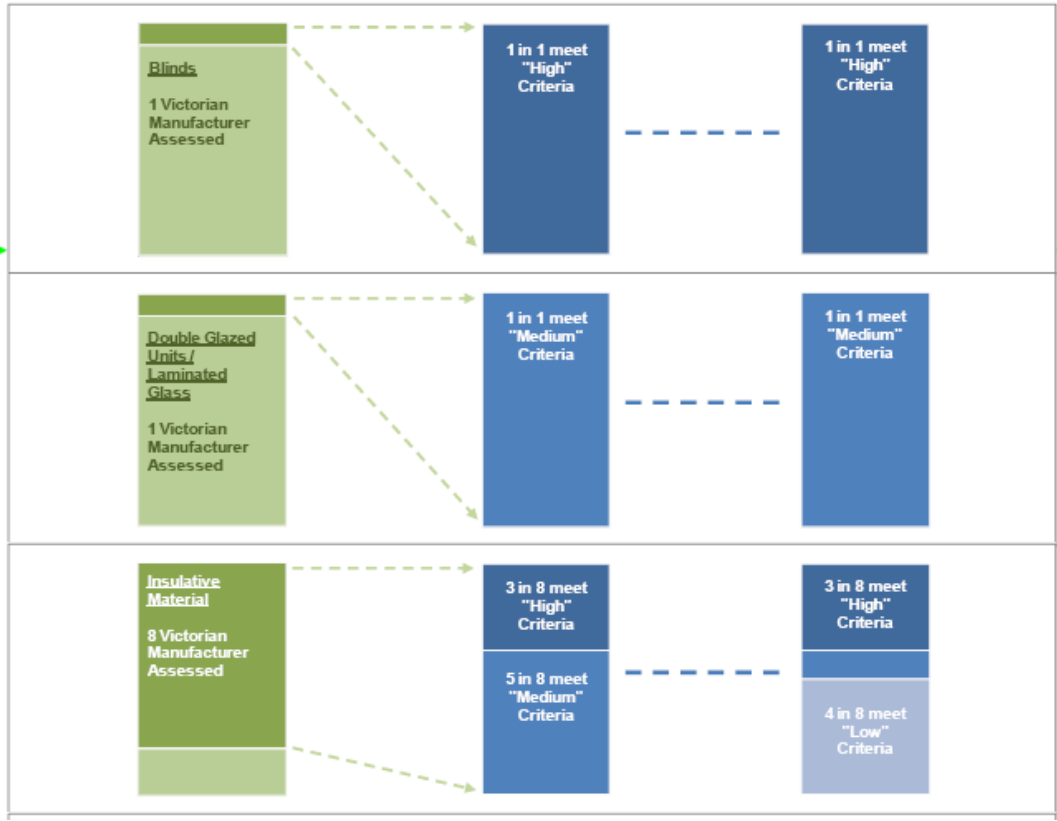
Audit – Presentation of results



Compilation of Victorian construction product manufacturer database (Approx. 700 companies, 457 Victorian manufacture content)



Industry Capability Network (ICN) review and input



Discrete opportunities streamed into categories. Strong product demand:

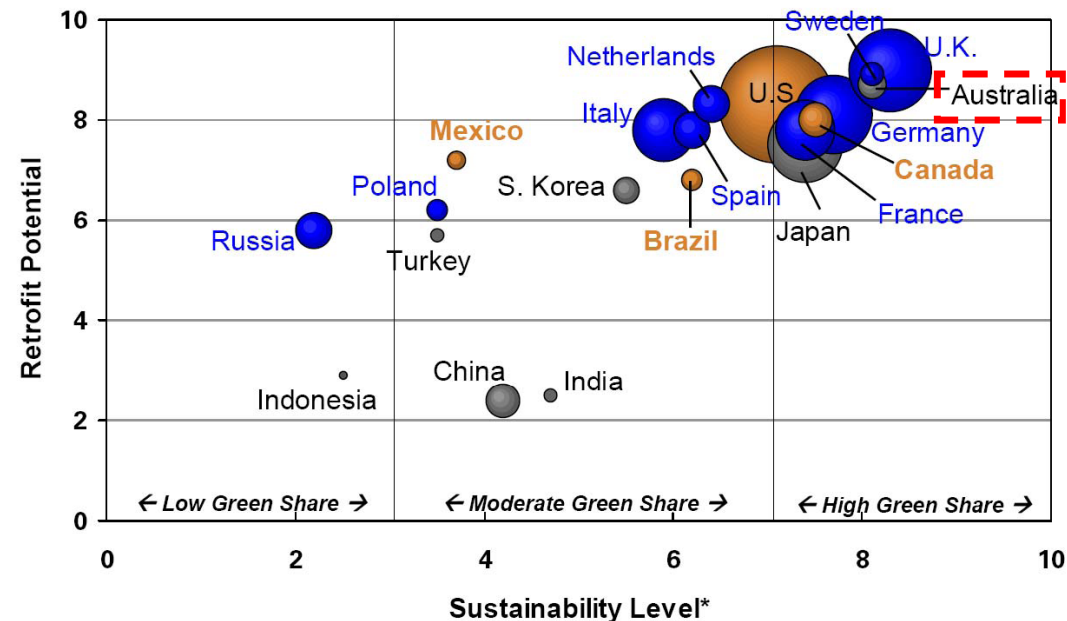
- No local manufacture
- Small local manufacture capacity
- Strong local manufacture

Key opportunities

- Potential for Local Manufacture of Items with Strong Demand that are Currently Only Produced Elsewhere
 - Photovoltaic (PV)
 - Building fabric products with integrated PV – windows, shading devices
- Products with Strong Demand but a Small Local Manufacturing Capacity
 - Blinds, Double-glazing units, Low-e laminate films
 - Lighting (ballasts, control systems, sensors, lamps, LEDs, luminaire)
 - Solar reflective paints.
- Products with Strong Demand and Strong Local Manufacturing Capacity
 - HVAC (Fans, air-handling units, Ductwork, Chillers)
 - Insulation

Export opportunities

- Export opportunities do exist for local manufacturers but a high quality and innovative product must be offered as a differentiator
- Main export products: chillers; air-cooled condensers and cooling towers; pumps and rainwater harvesting
- Main export markets
 - Europe: UK, Germany, France, Italy, Netherlands, Spain, Sweden
 - Asia: Japan
 - Americas: US, Canada, Brazil



Key findings

1. Global and local trends > retrofitting entering a phase of rapid growth
2. *1200 Buildings* program > major opportunity for manufacturers
3. Key manufacturing opportunities > retrofit product demand
4. New opportunities > for existing and new entrants
5. Export opportunities > regions and products
6. ‘Green’ product competitiveness > Position manufacturer to secure sales
7. Direct supply chain employment > up to 2998 FTEs (272 av. Annual FTE)
8. Systemic approach > fundamental to deliver effective industry response
9. *1200 Buildings* > opportunity to ‘close-the-loop’ & expand recycle industry

Disclaimer

- Product demand projections detailed in this study will vary depending on the amount of retrofit activity the *1200 Buildings* program stimulates and the extent of retrofit that is implemented in buildings. As there are inherent uncertainties in predicting demand from future activity the product demand projections and findings may not be accurate. Specific advice should be sought and further detailed analysis undertaken before acting or relying on the product demand projections.

Further information

Visit www.business.vic.gov.au (and search “1200 buildings”)

Contact:

Adam Leggett

adam.leggett@arup.com

9668 5474

