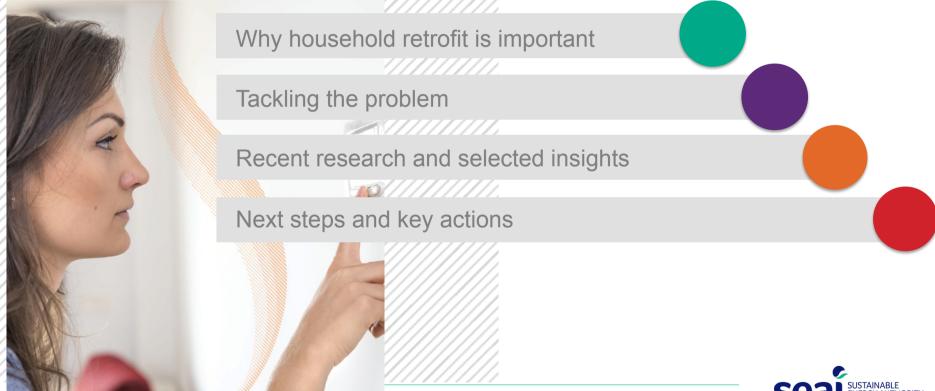


Behaviour and decision making...
Driving home retrofit

www.seai.ie

Overview

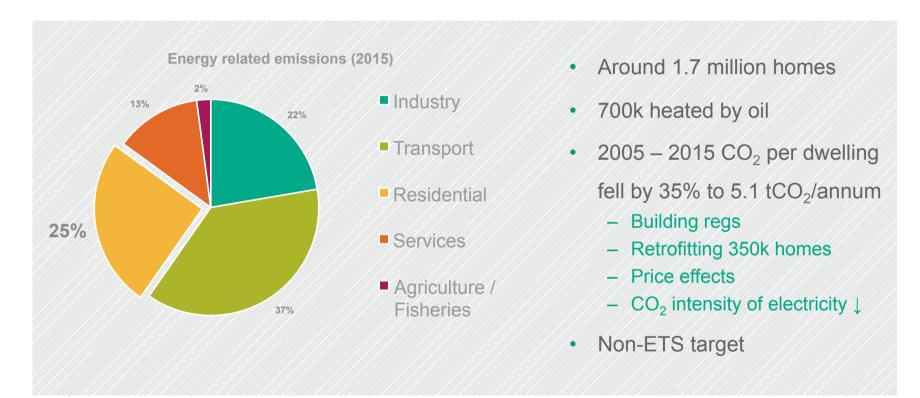
Behavioural insights on energy efficiency in the residential sector



Why household retrofit is important

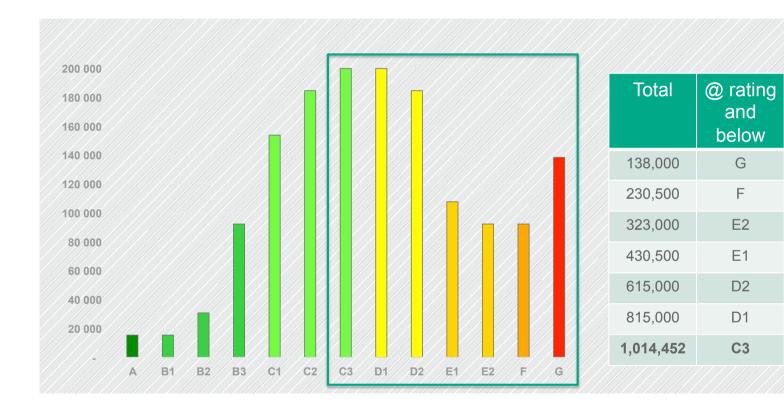


Residential sector energy use and emissions





National BER data





tCO₂ / dwelling

11 – 17

9 - 13.5

7.5 - 11.5

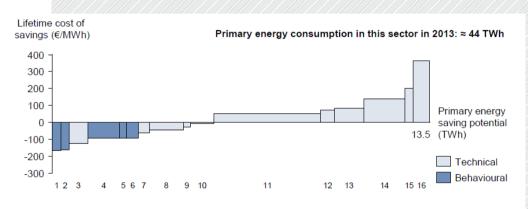
6.5 - 10

6 - 9

5 - 7.5

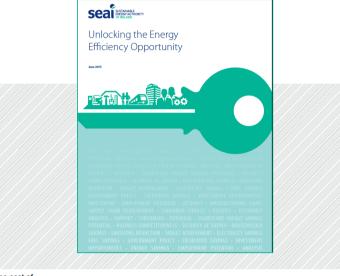
4 - 6.5

Untapped savings potential



Measure	PE saving (TWh)	Measure	PE saving (TWh)
Total technical measures	11.05	15. Heat pump	0.30
3. Energy efficient appliances -"Cold" and "Electrical cooking"	0.67	16. Energy efficient glazing	0.57
7. Draught proofing	0.38		
8. Roof insulation	1.21	Total behavioural measures	2.41
9. Energy efficient lighting	0.26	Air dry instead of tumble dry	0.32
10. Cavity wall insulation	0.84	2. Turn off lights when not in use	0.29
11. More efficient boiler with heating control	3.81	4. Reduce room temperature by 1C	1.14
12. Energy efficient appliances - "Wet" and "Consumer electronics"	0.48	5. Turn off heating in unused rooms	0.25
13. Floor insulation	1.05	6. Use efficient shower head	0.42
14. Solid wall insulation	1.47	Total	13.46

Figure 2-7: Energy efficiency cost curve for the Residential buildings sector



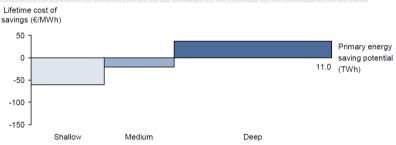


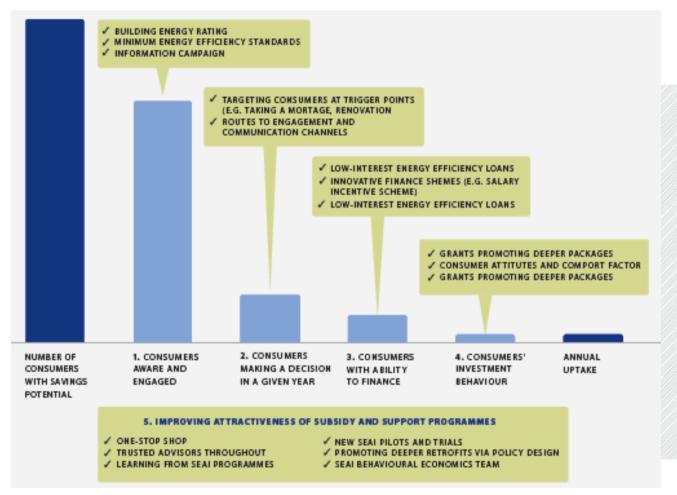
Figure 2-8: Energy efficiency cost curve for the Residential sector (packages)



Tackling the problem

- conceptual framework





- Consumer surveys
- Focus groups
- Design thinking exercises
- Pilots and trials
- Funded research studies
- Data analysis
- SEAI programme delivery experience

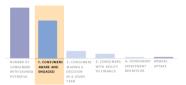


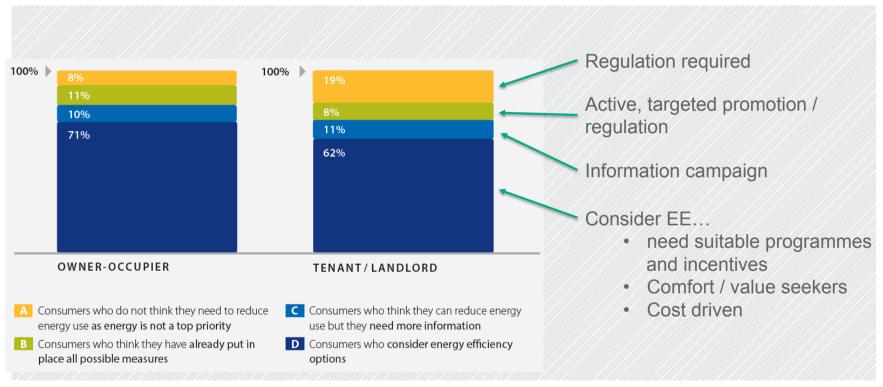
Recent research and selected insights

- 1. Consumer awareness and engagement
- Decision making frequency and trigger points
- 3. Availability of finance
- 4. Understanding consumers' investment behavior
- 5. Improving the attractiveness of subsidy and support programmes



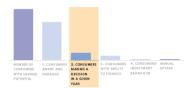
1. Consumers awareness and engagement



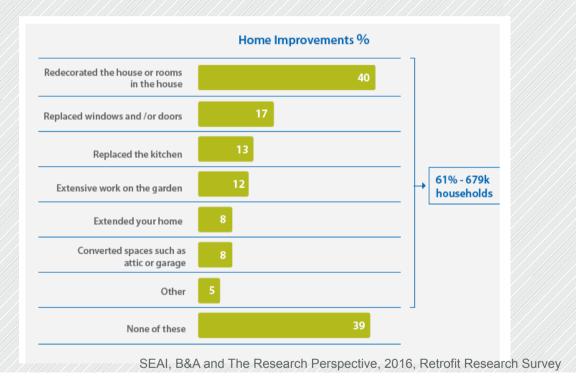




2. Decision making frequency and trigger points

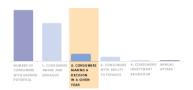


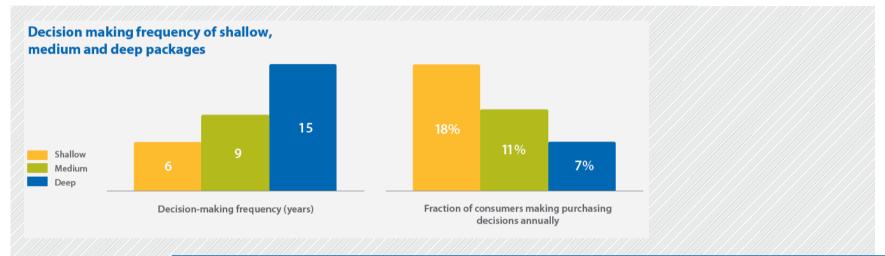
Potential trigger points for energy efficiency investment (home improvements carried out in the last 3 years)





2. Decision making frequency and trigger points



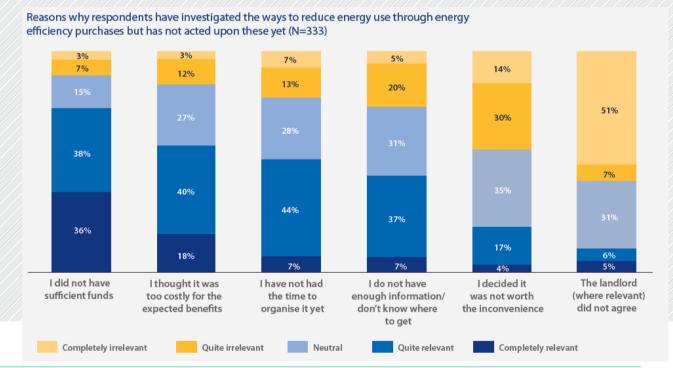


Trigger point	Channel of communication
Anticipated home improvement	Architect, supply chain, contractors, banks, energy suppliers
Buying a new house	Mortgage broker, BER assessor, estate agent
Retirement	Pension provider, employer
Extending family or Illness	Community-based services or Doctors/Hospitals
Community Initiative	Sustainable Energy Communities

3. Availability of finance



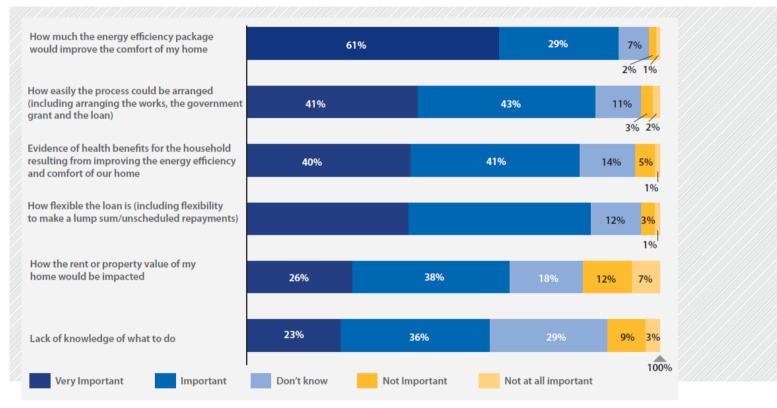
- Surveys indicate availability of finance is not the only barrier, but it's a significant one
- Grants are good ...but what about those who can't raise the remaining balance?





4. Understanding investment behaviour

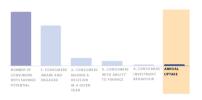








5. Improving attractiveness of subsidy and support programmes



- Get the right information to decision makers at trigger points, through intermediaries
- Target people who are already engaged in energy efficiency
- Design and commissioning is an integral requirement for deeper retrofit
- Supply side constraints need to be addressed deep retrofit requires a sufficiently skilled supply market
- Cost and lack of funds is still a big barrier, so availability of finance is essential





Next steps and key actions



Current initiatives

- Exploring behavioural economics approaches
- Learning by listening
- Piloting new ideas
- Exploring potential new support mechanisms
- Enhancing tailored information



















