



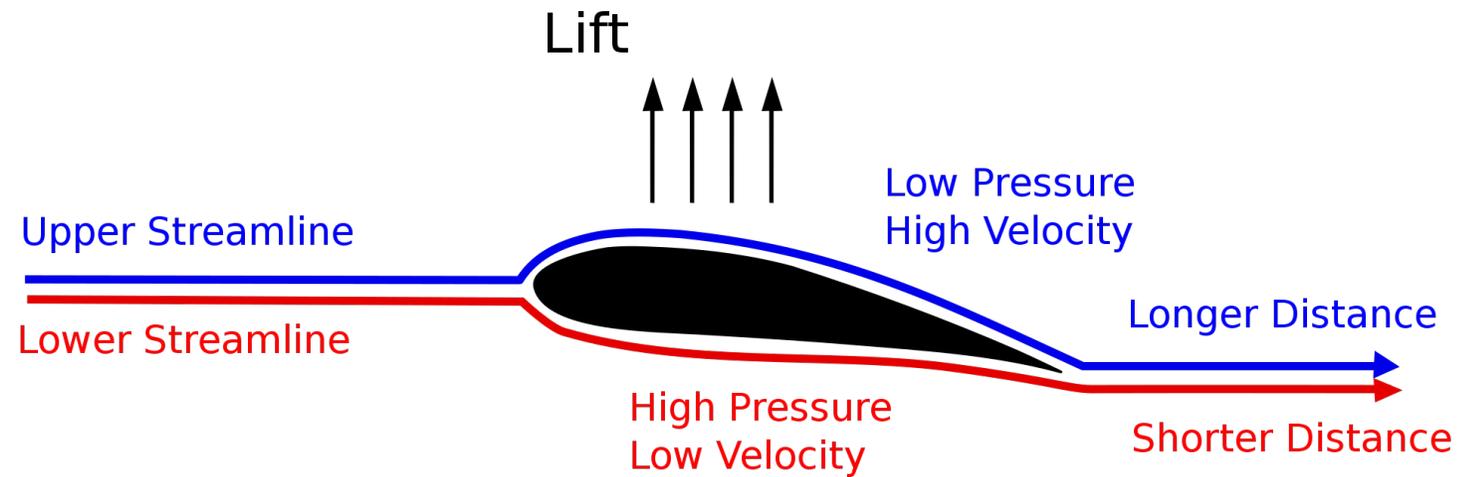
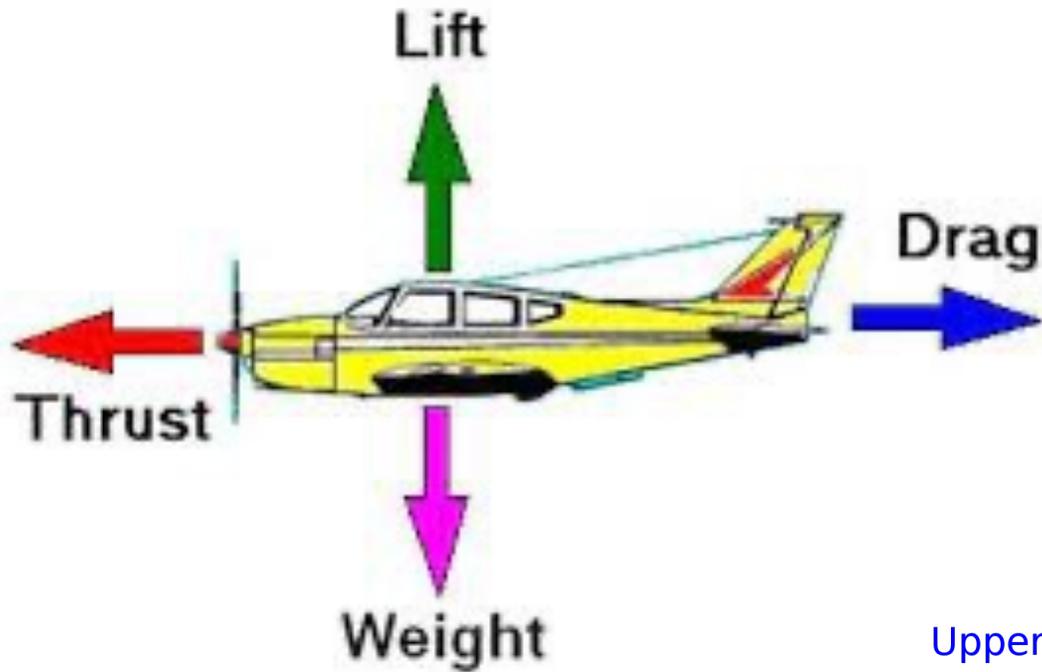
Island Retrofit

Retrofit Coordinator Course

Case Study presentation

Colm Watling

How Aeroplanes work



I think you'll find its more complicated than
that

$$\ddot{x}(t) + 2\zeta\omega_n\dot{x}(t) + \omega_n^2x(t) = g(t)$$

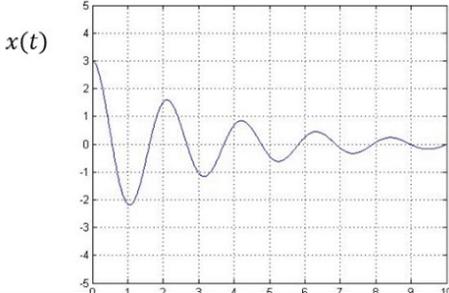
Boundary conditions: $x(0) = b, \dot{x}(0) = c$

$$\text{Lift} = 0.5 * C_l * \rho * V^2 * A$$

Stable solution for $0 < \zeta < 1$.
(assume $\omega_n > 0$)

Example: $\ddot{x}(t) + 2(0.1)(3)\dot{x}(t) + 3^2x(t) = 0$
 $x(0) = 3, \dot{x}(0) = 0$

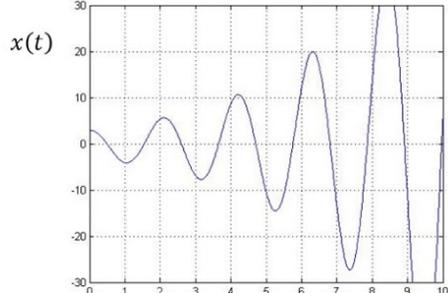
Solution: $x(t) = 3.015e^{-0.3t} \sin(2.985t + 1.470)$



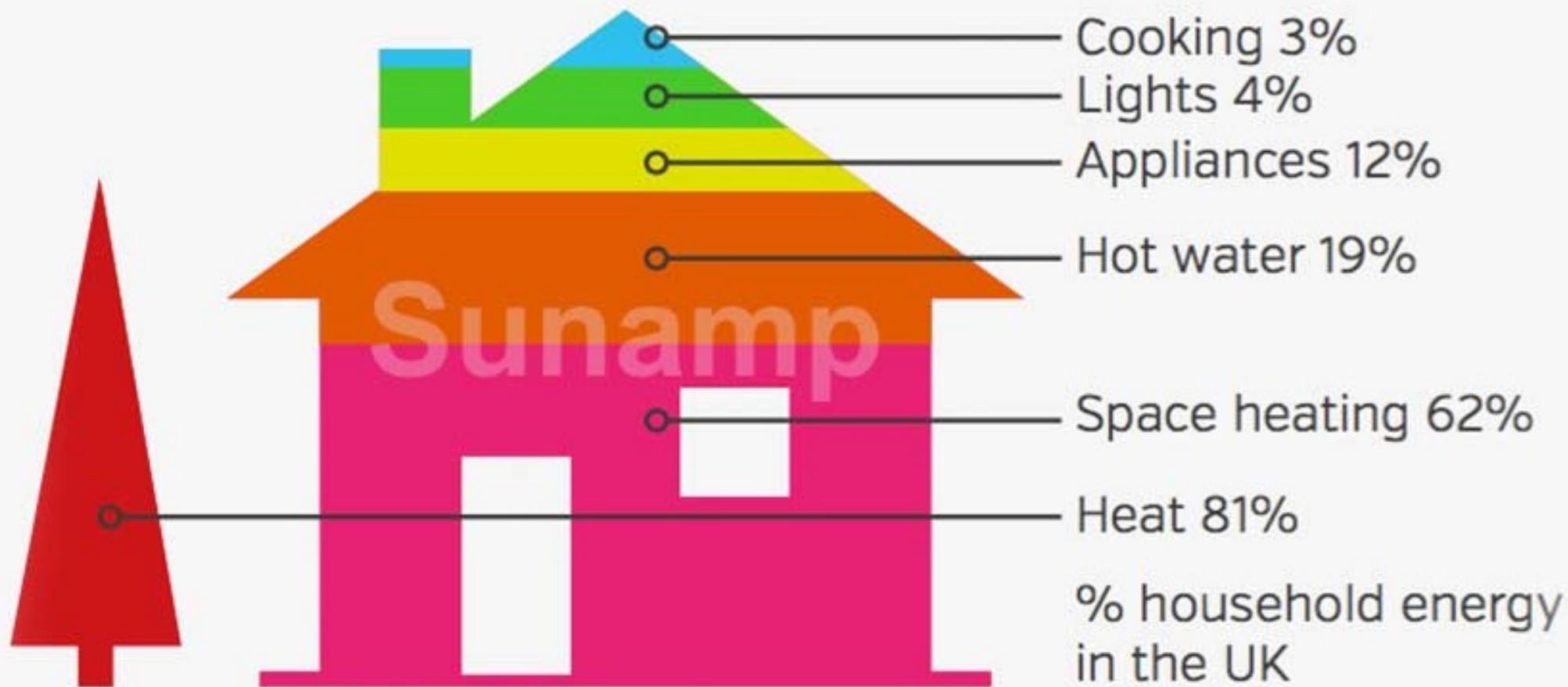
Unstable solution for $\zeta < 0$.
(assume $\omega_n > 0$)

Example: $\ddot{x}(t) + 2(-0.1)(3)\dot{x}(t) + 3^2x(t) = 0$
 $x(0) = 3, \dot{x}(0) = 0$

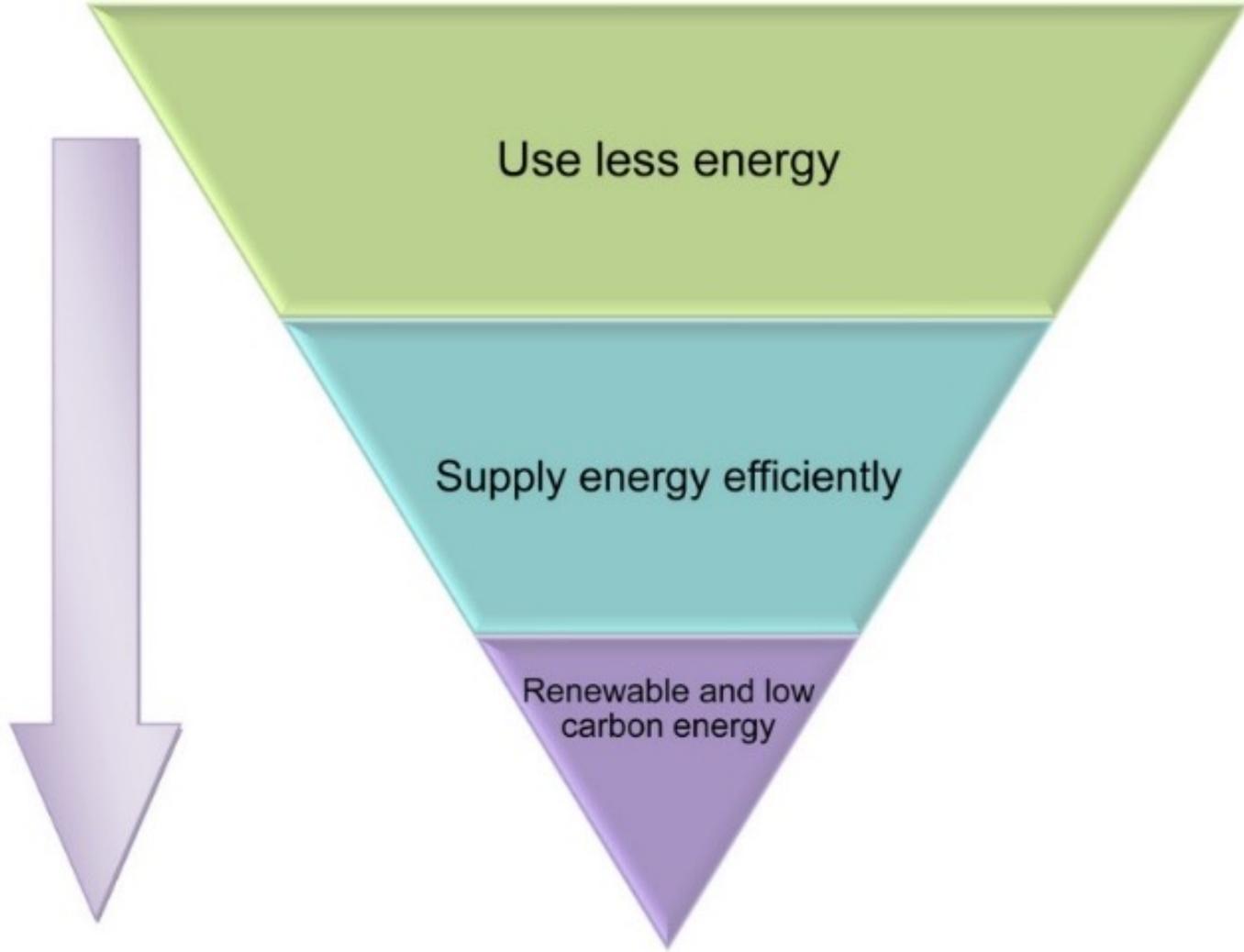
Solution: $x(t) = 3.015e^{0.3t} \sin(2.985t + 1.470)$

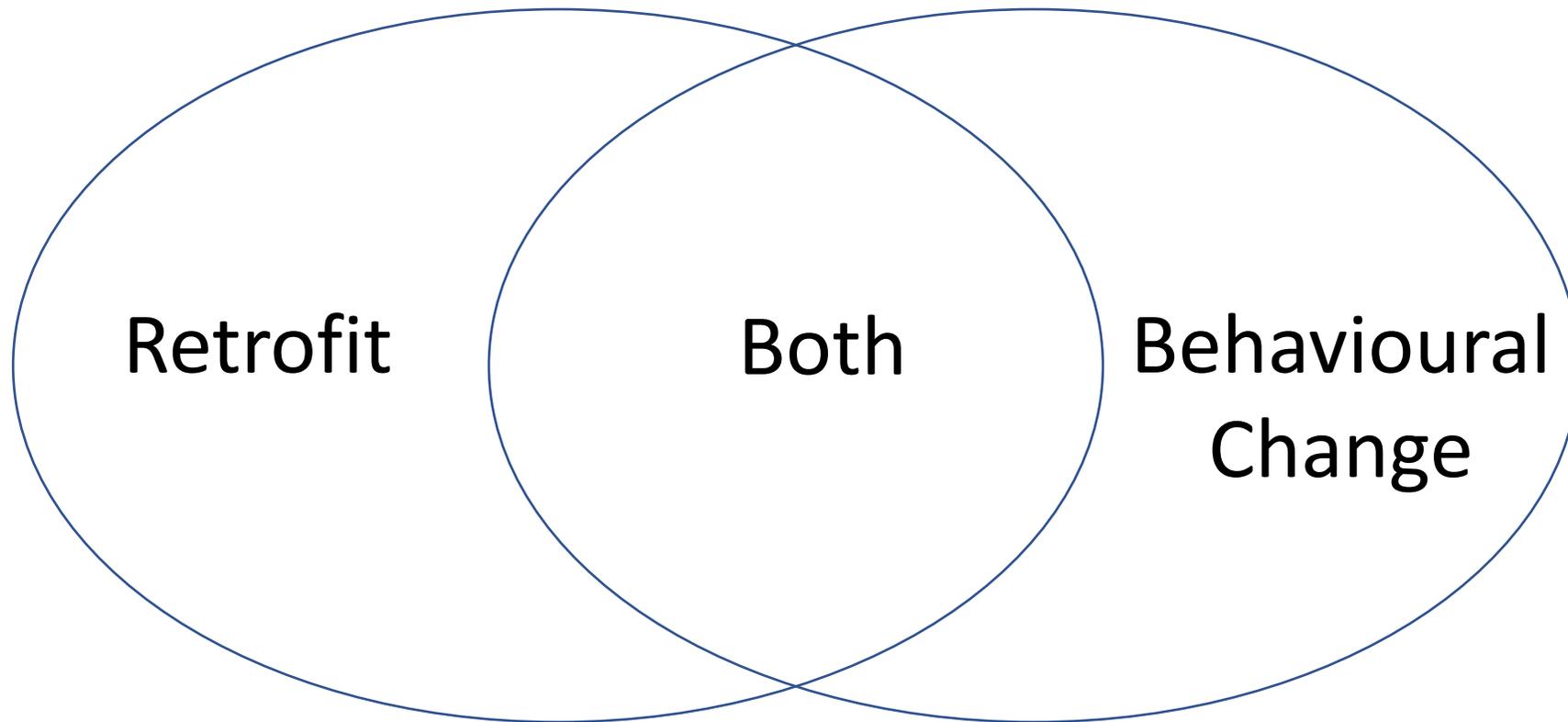


Household Energy Consumption



*Source: United Kingdom housing energy fact file 2012



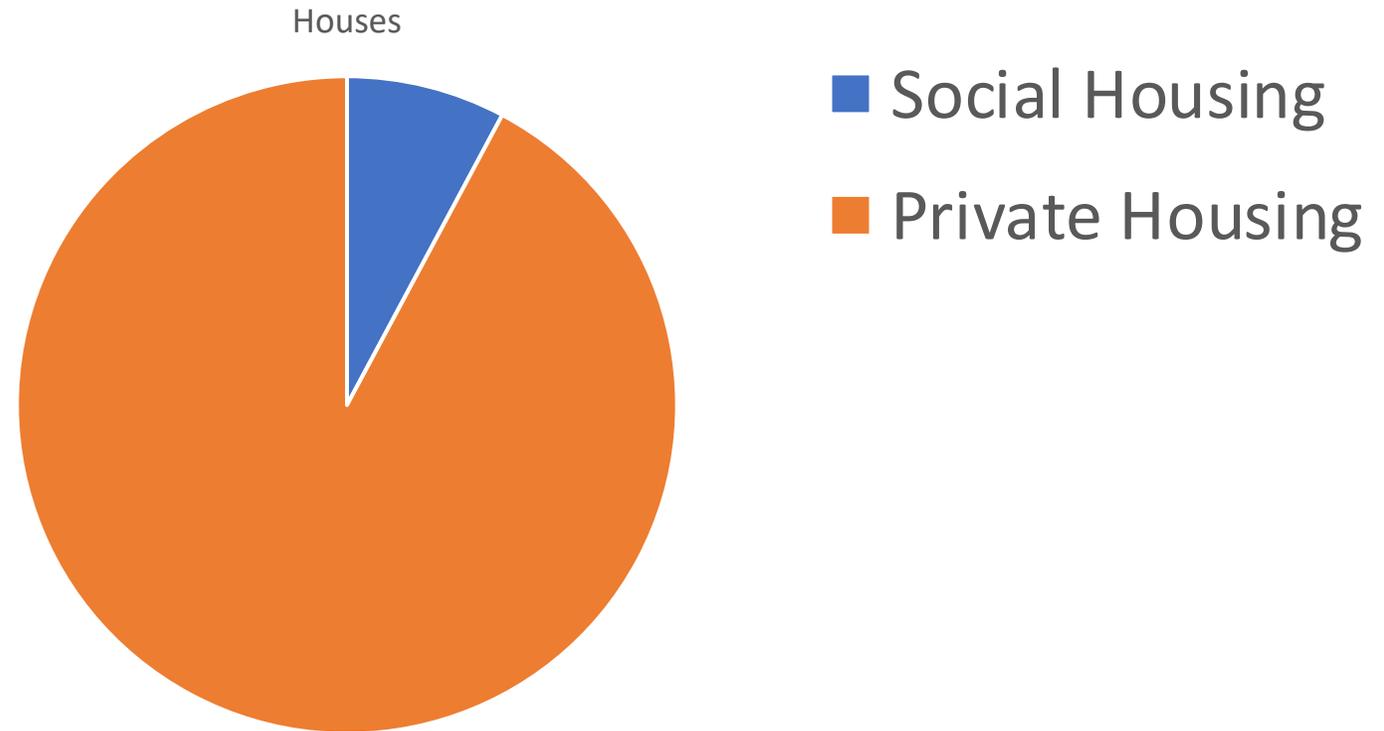


Retrofit

Both

**Behavioural
Change**

Island Housing Stock



Select  your businesses and submit to chat

[Back](#)

Amend search

Advanced search

Download search results

Results

Exclude national companies

50 results for 'External solid wall insulation' & 'Internal solid wall insulation' & 'Floor Insulation - Solid [P]' & 'Floor Insulation - Suspended [P]' & 'Under-floor insulation: Solid floor' & 'Under-floor insulation' & 'Internal Wall Insulation' & 'Internal Wall Insulation [P]' & 'Loft insulation' & 'Loft Insulation [P]' & 'Loft Insulation Installers' close to 'Newport PO30, UK'

Wall Coatings Ltd

No Reviews

Select 



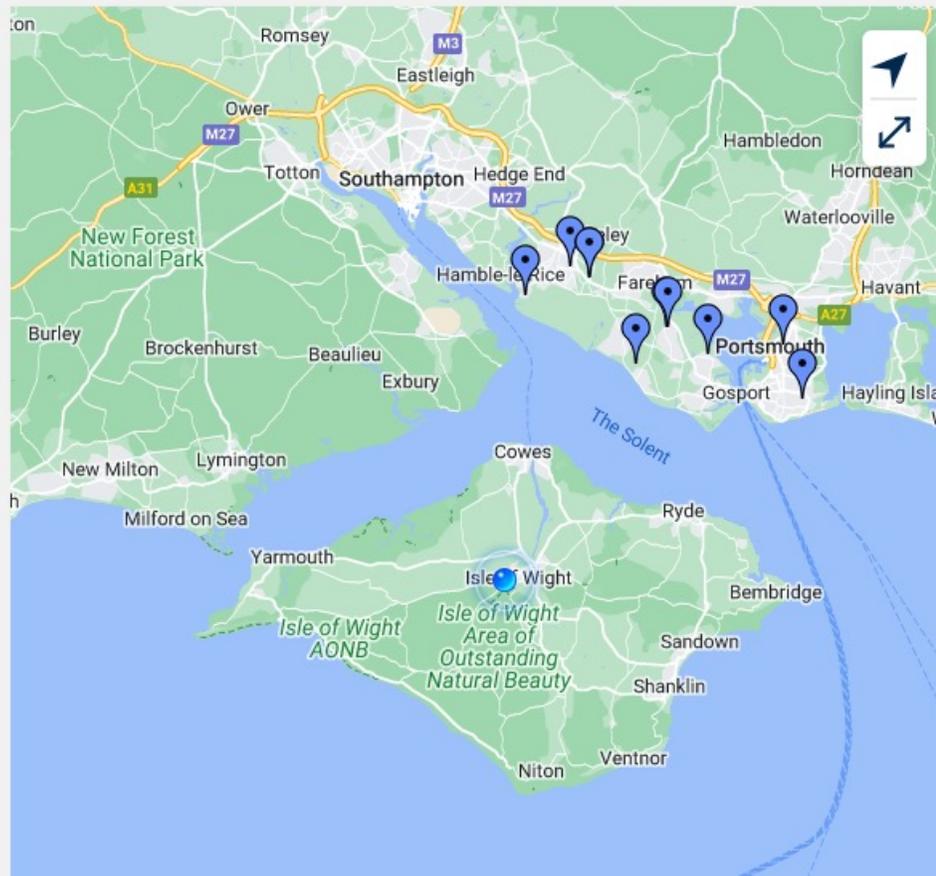
 9.6 miles Gosport, Hampshire

This business offers these trades:

External Wall Insulation [B4 - 2019]

Consumers know that the TrustMark logo signifies this business has made a commitment to customer service and good trading practices, and that they have had the technical competence of their work inspe...

[Learn more](#)



Why isn't retrofit happening on the Island?

Landlords

Too expensive

Alternative routes to escape

Home owners

Awareness/Advice

Supply chain

Incentive (esp ATP)

Installers

Pipeline

Continuity

Skills

Accreditation

PAS2030/2035

Grant Funded Retrofit

Local Workforce

Mainland targets

Local Government

Budget

Resource

Training providers

Demand/Employer engagement

Funding

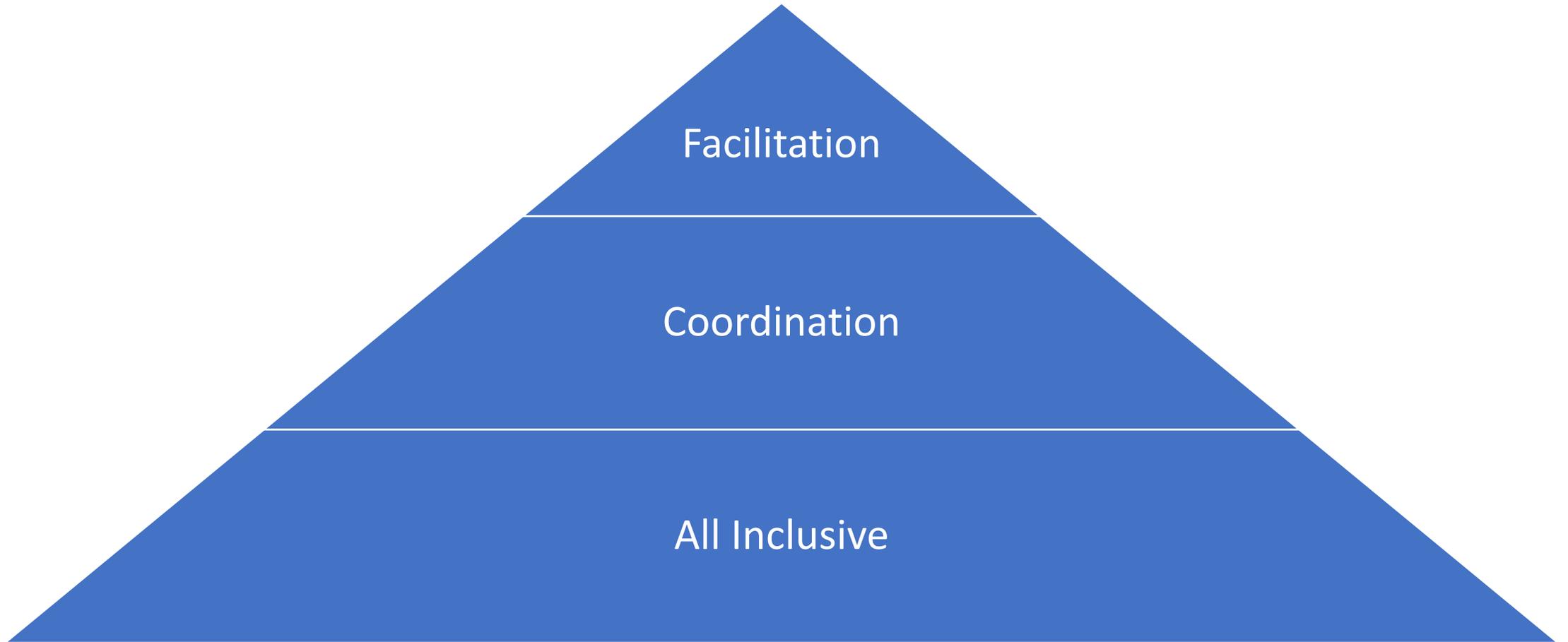


Awareness

Demand
Aggregation

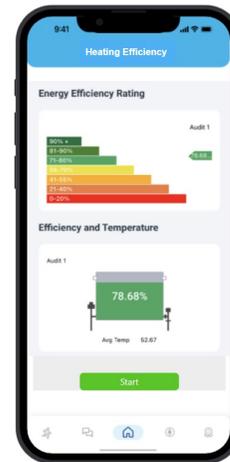
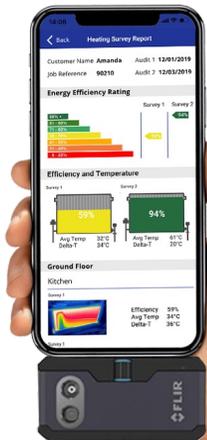
Trades and
Training

One Stop Shop Models

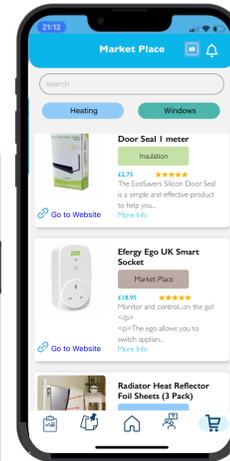
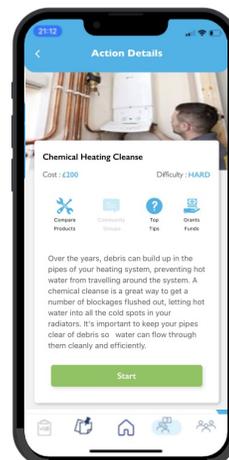
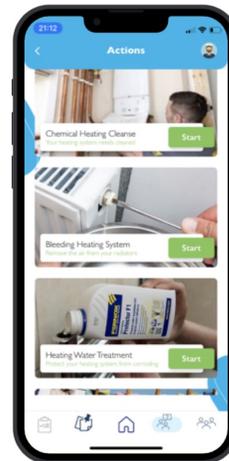


	Facilitation	Coordination	All inclusive
Awareness	√	√	√
Advice	√	√	√
Assessment		√	√
Aggregation		√	√
Brokerage		√	√
Coordination		√	√
Trades			√
Education	√	√	√
Finance	√	√	√

Our Product and Service



Individual reports with personalised actions



Supplier and Installers



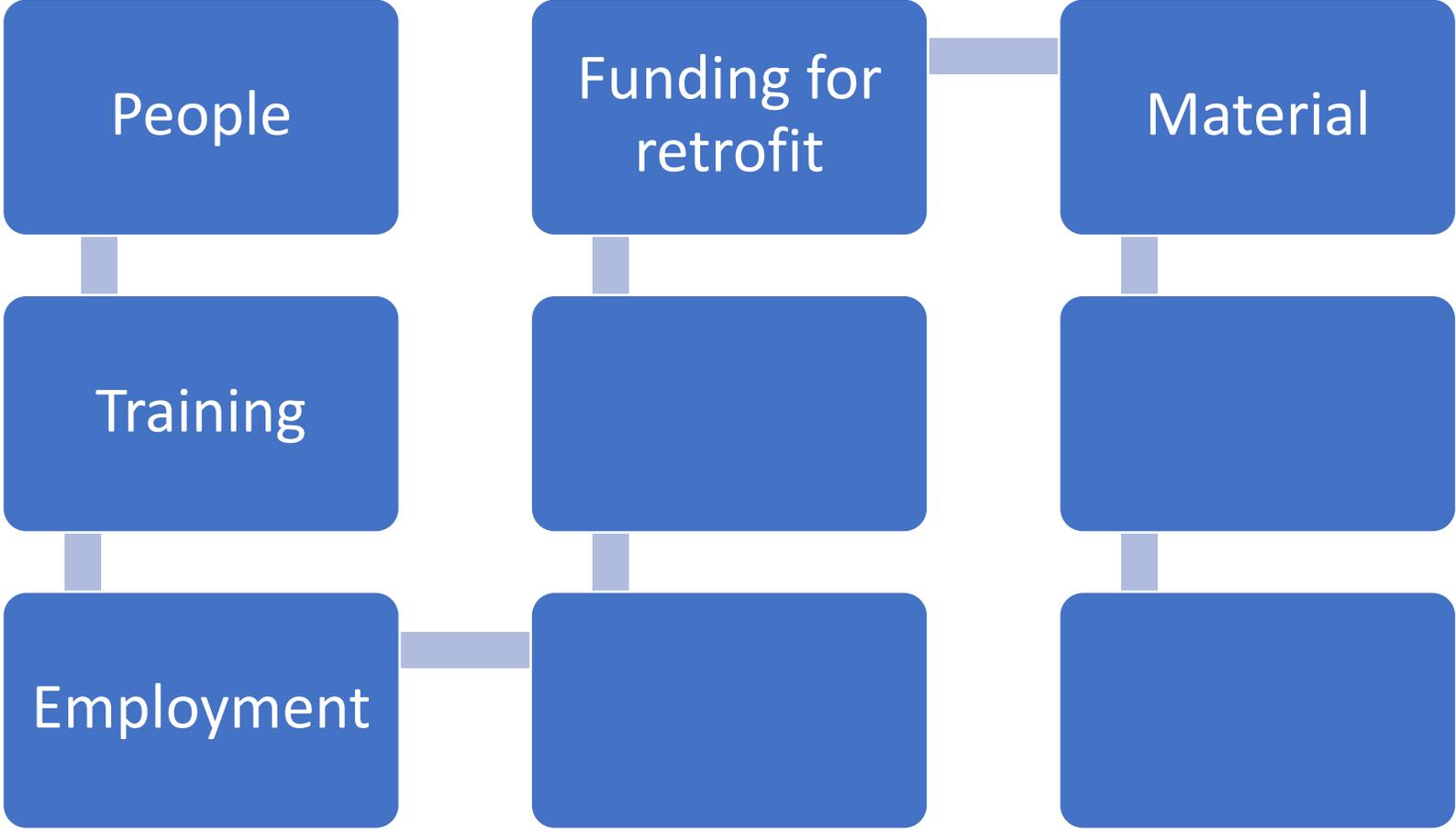
Product Offerings



Green Loans and Mortgages



Grants and Funding



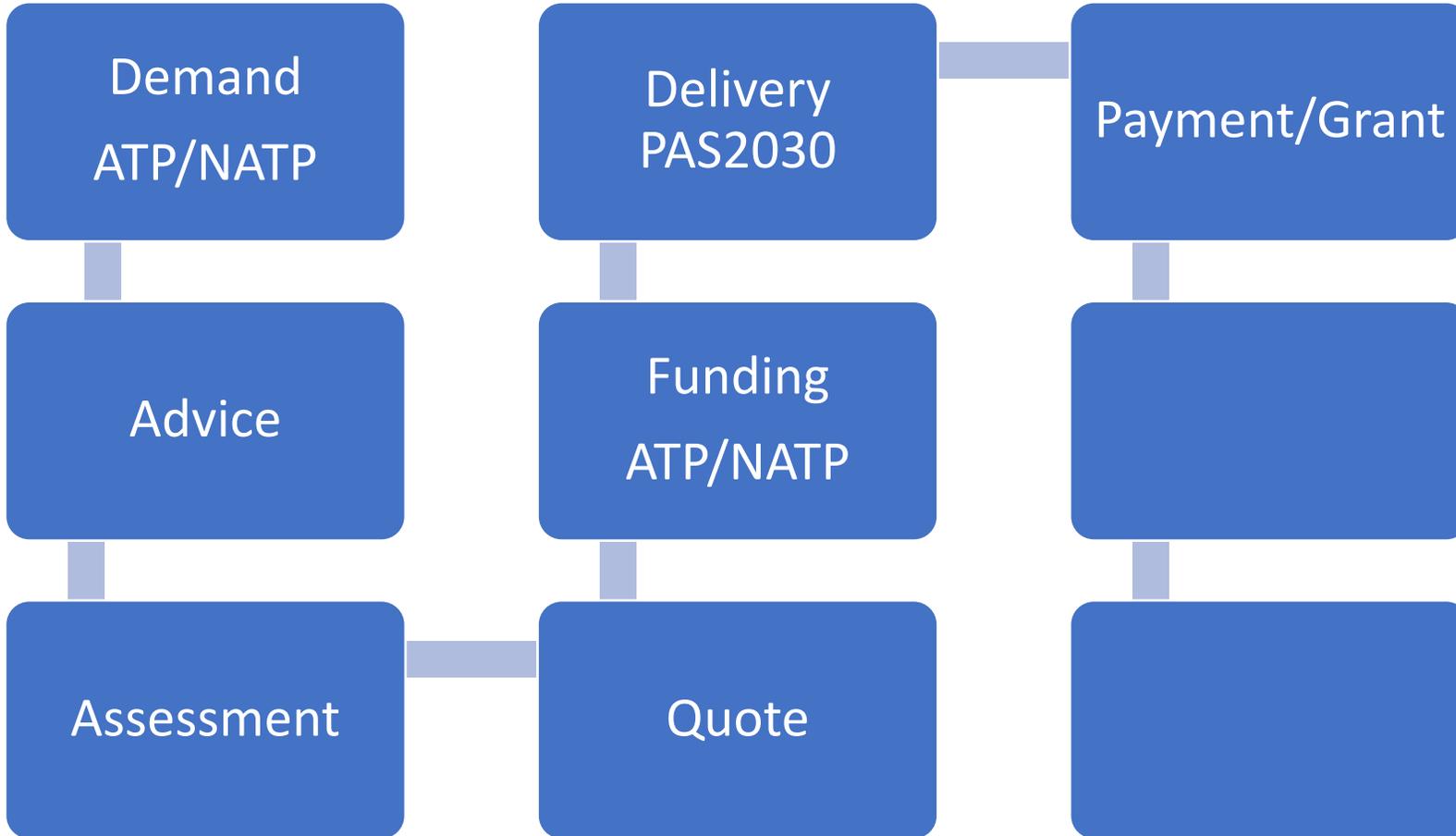
People

Funding

Material

Structure





Awareness



Training



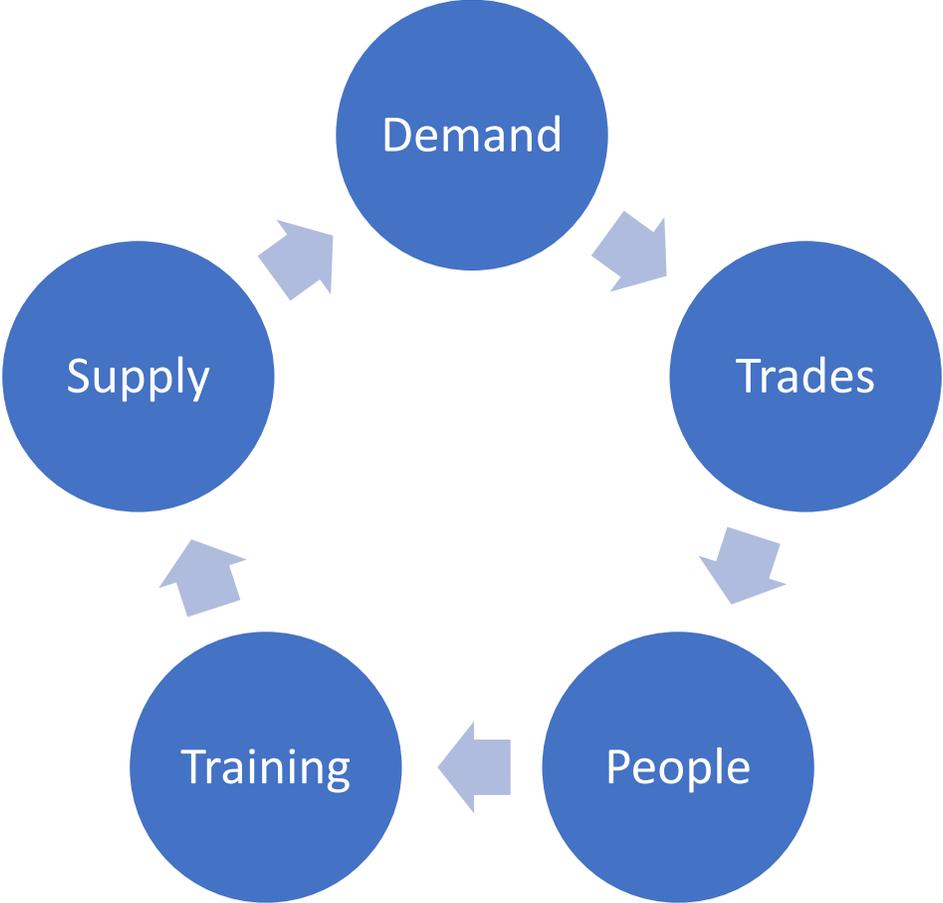
Employers

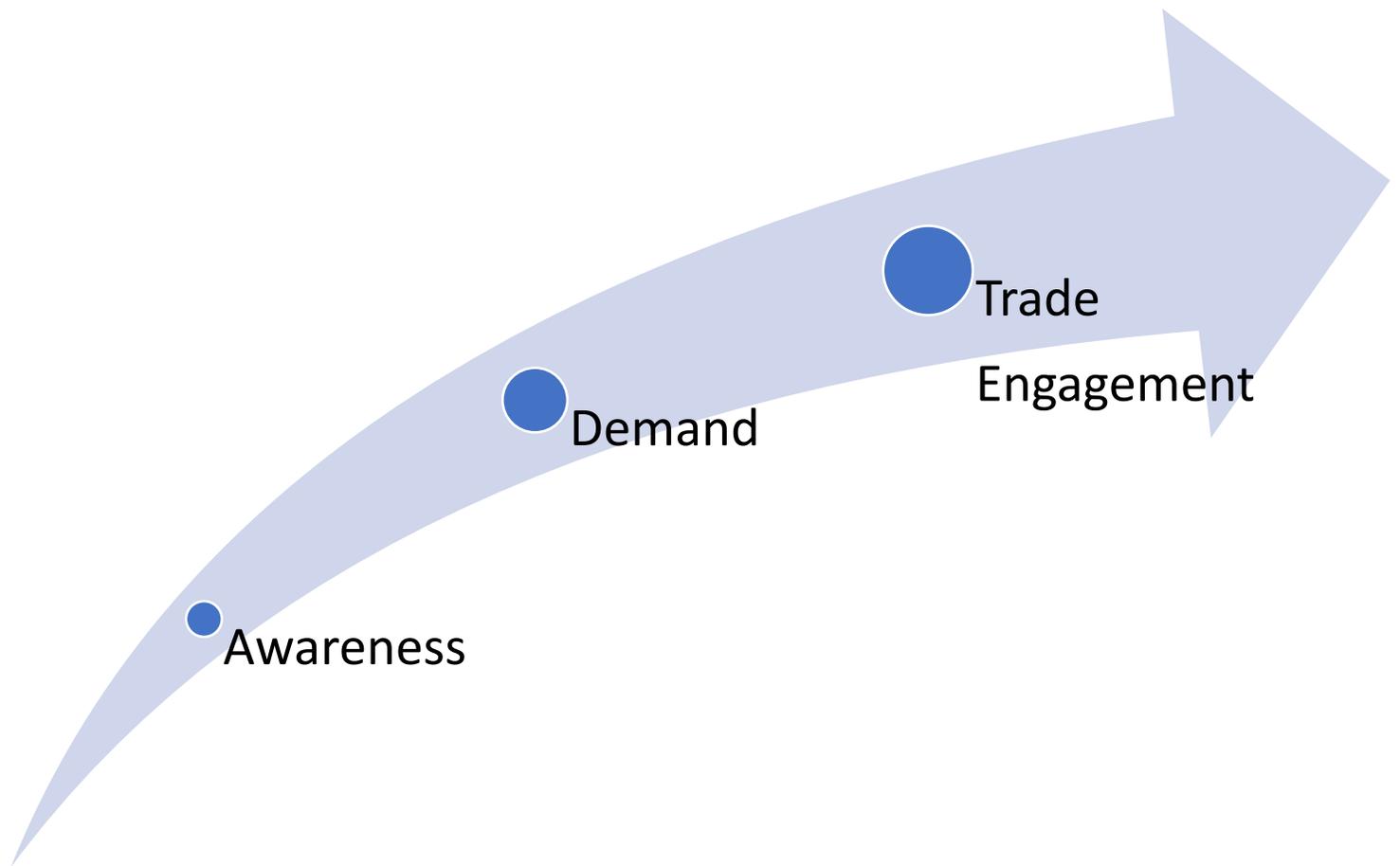


Funding
for retrofit



Retrofit





Awareness

Demand

Trade
Engagement

	NATP	ATP
Owned	Some Grant availability	Fewer grants
Rented	Social Housing (Housing Associations) Private Landlords	Private Landlords