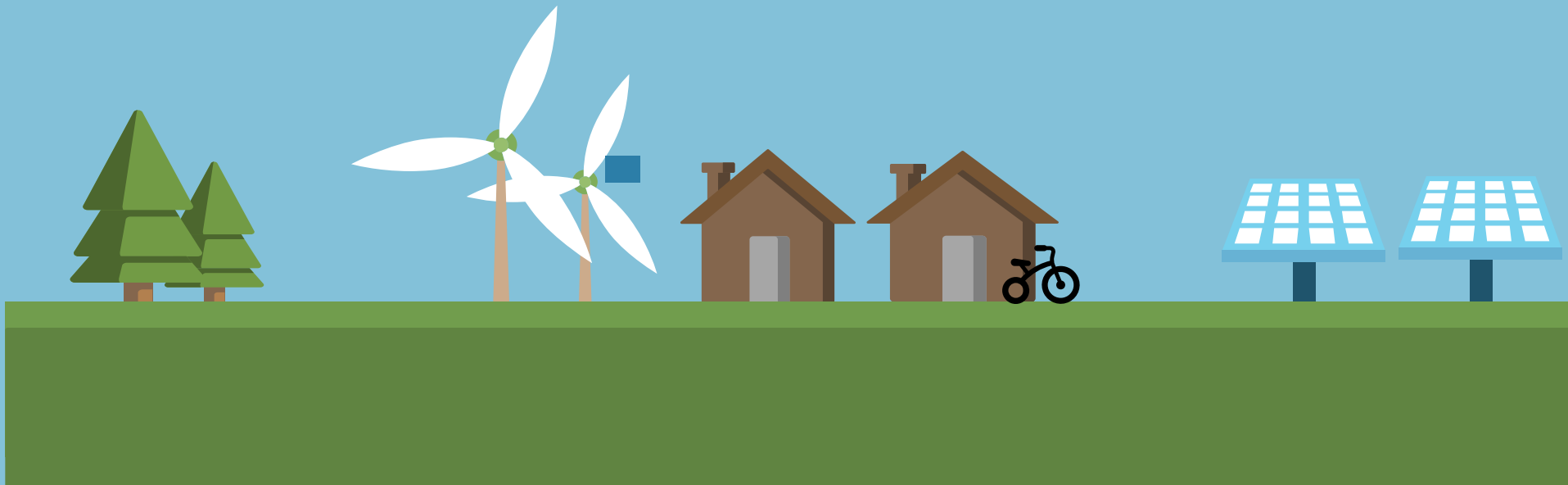


Retrofit

Essex Climate Action Commission (ECAC)
16 November 2022

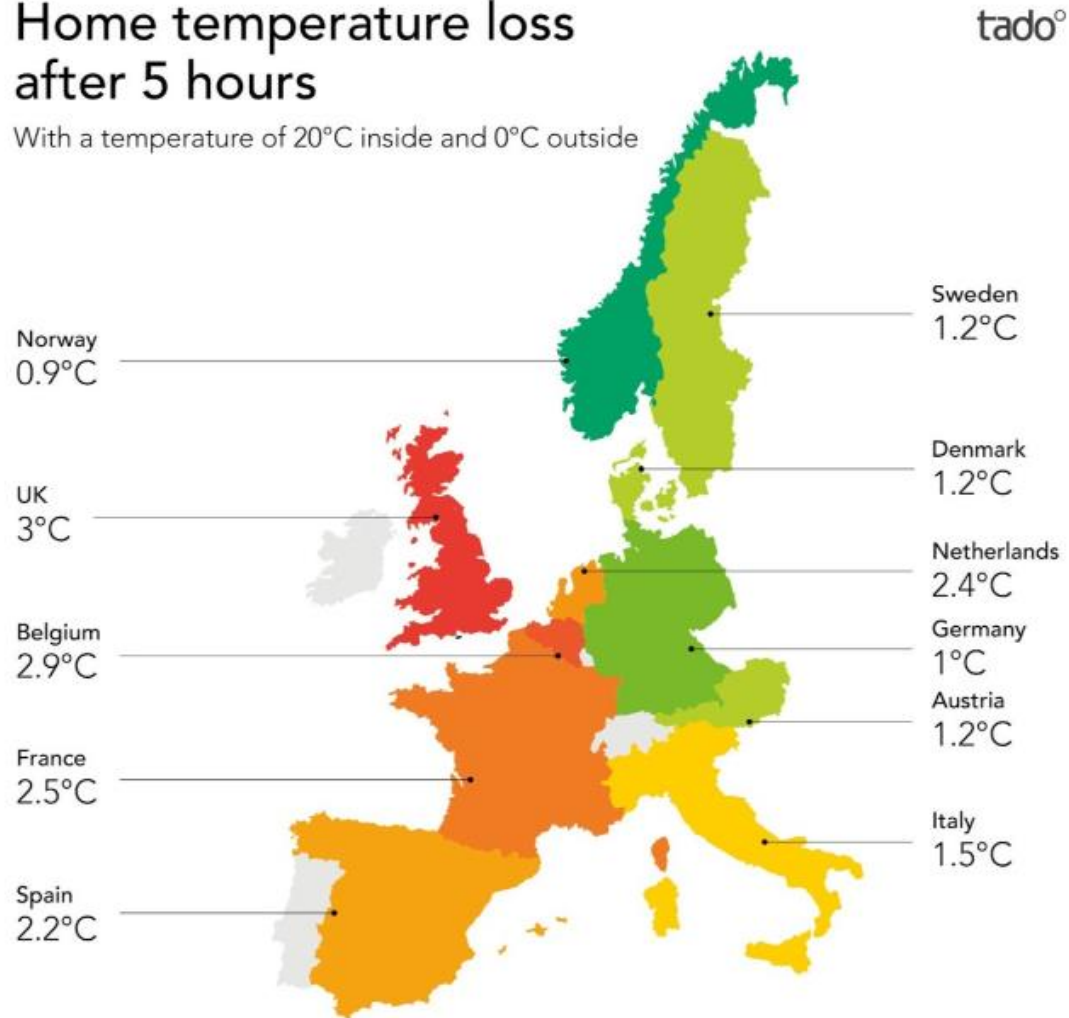




The UK has the least energy efficient housing stock in Europe

Home temperature loss after 5 hours

With a temperature of 20°C inside and 0°C outside



Based on a sample of over 80,000 European homes

Challenge:

- Approximately 20% of homes constructed pre-1919
- Approximately 75% built before building regulations require insulation
- >98% of homes will require some form of retrofit pre2050
- 630,000 homes in Essex; approx. 60% have an EPC of D or below

Opportunity

- Key growth sector: 455,076 jobs UK wide, 12,800 jobs in Essex; economic opportunity est. £10.8bn - £13.8bn.
- Just transition – significant social value return
- Climate action

Essex Climate Action Commission
Powering positive change





ECAC Retrofit recommendations

- Two-thirds of all dwellings to be retrofitted as far as possible to net zero carbon standards by 2030 and all by 2040 with incentives introduced to accelerate the shift to low carbon heating solutions
- Existing homes – carbon emissions reduction of 50 percent by 2030 and carbon zero by 2040.
- 100 per cent of fuel poor homes to be retrofitted and supplied with affordable energy by 2030.
- All retrofit schemes should include water efficiency alongside energy efficiency.



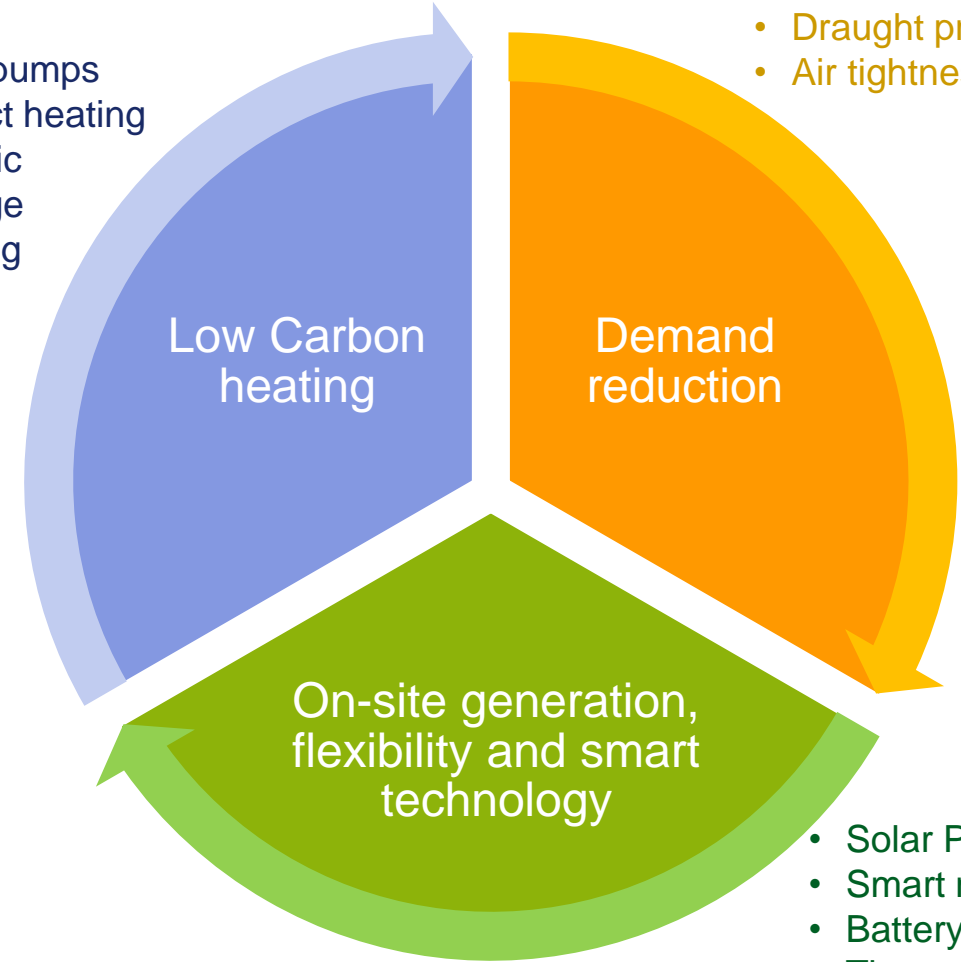


Green Building retrofit solutions

Three key priorities identified by UK Climate Change Committee:

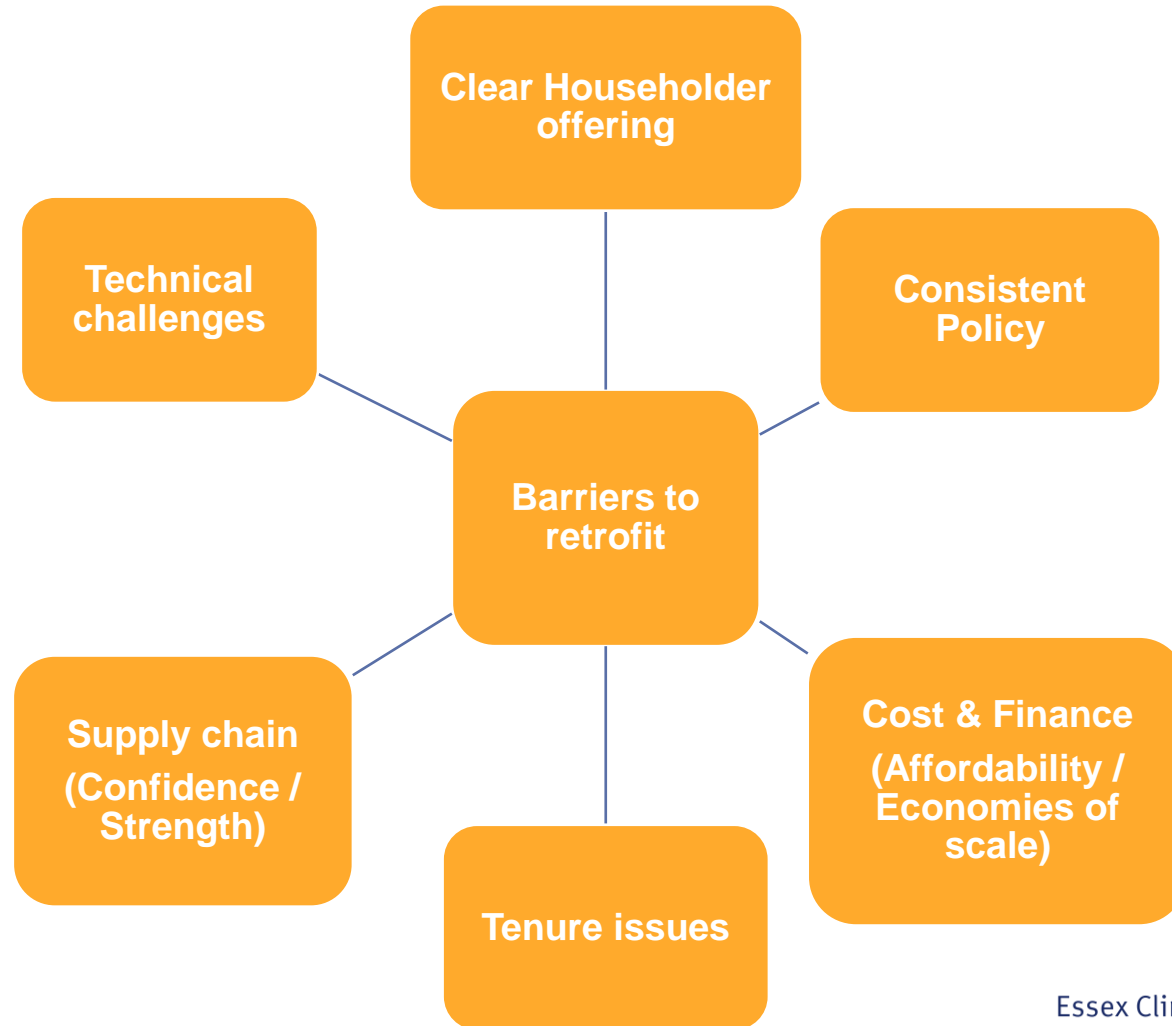
- Reducing demand
- Electrifying heat
- Behaviour change including greater flexibility

- Heat pumps
- District heating
- Electric storage heating





Barriers to retrofit





What are we currently doing?

Five key pillars:

1. Gather data to target retrofit programmes
2. Secure government funding to support low-income households
3. Promote retrofit in the amongst self-funded households
4. Boost skills and support local SMEs
5. Adopt a people and community led approach

- Essex Housing stock analysis with Parity projects

- Grant funded programmes for low income households- Help to Heat schemes (Sust Warmth, Social Housing Decarbonisation Fund, ECO)
- Warm Homes Essex website and funding for Warm Homes advisory service CAB
- Application to Ofgem Strategic Innovation Fund – Project SHIELD

- Application to MCS Charitable Foundation: Retrofit Business Plan – self funded sector
- Solar Together

- Business support programmes and retrofit professional skills training in Harlow and Tendring
- Retrofit Public Estate through Govt grant funding & DPS for Energy efficiency and Renewables

- Application to Innovate UK Net Zero Living: Pioneer Places
- South East New Energy: community led solar + storage





Retrofit and Fuel poor households

- Next phase of Green Homes Grant – now “Sustainable Warmth / Home Upgrade Grant” – will be targeting E, F and G households about to launch
- Social Housing Decarbonisation Fund - £2.6m – in delivery
- Detailed analysis of housing stock and pathways to net zero complete
- Retrofit Academy – training up a workforce & support local suppliers – seeking funding to roll out
- Bid to MCS Charitable Foundation to develop business plan for retrofit for self funded sector
- Looking at options for energy efficiency advice and support to small and medium sized enterprises
- Bid submitted to Ofgem Strategic Innovation Fund to support access to cheap renewable energy using smart technology for low-income households

Poor UK households may have to spend half their income on energy, says charity

Joseph Rowntree Foundation calls on the government to help vulnerable people facing 'heat or eat' decisions



Retrofit Funding - details



RETROFIT PROGRAMMES		Description	Budget	Impact
<u>Warm Homes Essex</u>	2019 - 2022	ECC led project with Citizens Advice Essex providing energy and financial wellbeing advice to fuel poor residents	£859k (100% grant funded, free to resident support) FUNDING ENDS JUNE 2021	2,500 households supported Additional resident income of £4 million
<u>Green Homes Grant Local Authority Delivery (GHG LAD) Phase 1a</u>	Oct 2020 - Sep 21	ECC led project with consortium of 7 Essex LA. Retrofitting low income, EPC E, F and G properties with £10k average grant	£813,000 (100% grant funded, free to resident support) COMPLETED & CLOSED	82 homes successfully retrofitted
GHG LAD Phase 1b	Feb 21- Mar 22	Tendring DC and Castle Point BC won individual bids on park home sites	£975k & £2.3m (100% grant funded, free to resident support) ONGOING	100 and 250 park homes respectively
GHG LAD Phase 2	Apr 21 – Mar 22	Greater South East Energy Hub led project to retrofit low income, EPC D, E, F or G properties	£5.2m allocated (100% grant funded, free to resident support) ONGOING	Capacity for circa 520 homes retrofitted – <i>in delivery</i>
Sustainable Warmth	Jan 22 – Mar 23	As above, extension of the funding with an extra focus and increased funding for off gas properties	£17.2m* awarded (100% grant funded, free to resident support) ONGOING	Capacity for circa 1690 homes retrofitted – <i>none yet delivered, future programme</i>
Community Renewal Fund	Oct 21 – Mar 23	Retrofit supply chain research, support and training in Tendring and Harlow working with Retrofit Academy – sector leader in retrofit skills development	£700k allocated to ECC and Retrofit Academy to deliver training and research. FUNDING ENDS 2023	50 retrofit assessors, 50 retrofit coordinators, 30 retrofit advisors, 2 Retrofit Academy approved training centres
Social Housing Decarbonisation Fund (SHDF) Wave 1	Feb 22-May 23	ECC awaiting outcome of bid submitted with Sanctuary Housing and Eastlight Community Homes to retrofit low EPC social homes in Essex	£2.6m applied for the Essex region (free to resident support, net nil cost to ECC) GRANT TBC	769 homes retrofitted, average household bill saving £118/year – <i>in delivery</i>



* Allocation being revised downwards by BEIS as part of national delivery challenges for the programme. May reduce allocation to Essex by 50%. Work underway to engage with BEIS to secure longer term funding commitment