



Sustainable Construction at Thames Freeport

2026 / 27

An introduction to our retrofit and new build programmes, what we have built so far, and how to work with us.

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For partners, providers and researchers



**Barking &
Dagenham**



Who we are



Thames Freeport is one of eight English freeports designated in 2021. We span Barking & Dagenham, Havering and Thurrock, and our anchor partners are DP World London Gateway, Forth Ports Tilbury and Ford Dagenham.

8

English freeports, designated 2021

3

local authorities, one programme

18m

consumers within reach

£4.5bn

investment targeted

21,000

jobs targeted

OUR PURPOSE

We exist to turn a time-limited set of tax and customs reliefs into lasting economic change along 38 km of the Thames. Those reliefs expire on 30 September 2031. Innovation is how we show the difference we have made, and how we leave capability behind that outlasts them.

OUR THREE FOUNDING OBJECTIVES



Trade and investment

National hubs for trade and investment, anchored by three major industrial sites.



Regeneration and jobs

High quality job creation and regeneration across all three local authority areas.



Hotbeds of innovation

New markets made here, with net zero running through all three objectives.

OUR ANCHOR PARTNERS



FORTH PORTS



DP WORLD



Barking &
Dagenham



THURROCK
COUNCIL



Havering

Why sustainable construction



Construction is the sector where all three of the freeport's founding objectives land at once, and where the region's need is greatest. It is also where a pound of public money moves the most private capital.

WHAT IT DELIVERS FOR THE REGION



INVESTMENT

£200m

of private capital targeted for retrofit

- A further £150m manufacturing pipeline to be validated by March 2027.
- Institutional capital rather than short grant tranches.
- Feeds the freeport's wider £4.5bn investment target.



JOBS

1,400+

new skilled green jobs as retrofit scales

- Hundreds more manufacturing, digital and engineering roles by 2029.
- Training commissioned through local colleges, cohorts from September.
- All of it tied to our Good Work Charter.



SUPPLY CHAIN

+15%

domestic materials share by 2030

- Anchor manufacturing in CLT, modular systems and low-carbon cement.
- Aggregated demand lifts factory utilisation by 20 to 30 per cent.
- A vetted Green Product Catalogue that local suppliers can join.



HOMES AND COMMUNITY

£86.8m

of social value over 35 years

- Around £730 a year off the energy bill of every home retrofitted.
- Roughly two tonnes of CO2e saved per home, per year.
- Fuel poverty is 15.3% in Barking & Dagenham, against 11% nationally.

AND WHY IT TAKES A FREEPORT

Manufacturers will not build factory capacity without a stable pipeline, and investors will not underwrite long-term finance without standardised, aggregated demand. Three authorities acting together can create both. No one of them can do it alone.

DELIVERS AGAINST

Trade and investment · Regeneration and jobs
Hotbeds of innovation · Net zero throughout

What we have done so far

Two programmes, both with a signed business case and a demonstrator behind them. The point of the last two years was to prove the economics before asking anyone else to back them.



RETROFIT

45

homes retrofitted

4,378

homes assessed

1.51

benefit-cost ratio

- Full Business Case signed, with £86.8m of net present social value over 35 years.
- The first neighbourhood-scale retrofit demonstrator in the region, using a tested technology stack rather than house-by-house improvisation.
- Homes assessed across Barking & Dagenham and Havering by drone survey and data analysis, and a Retrofit CIC approved as the regional aggregation vehicle.

DELIVERED WITH

RAINMAKING

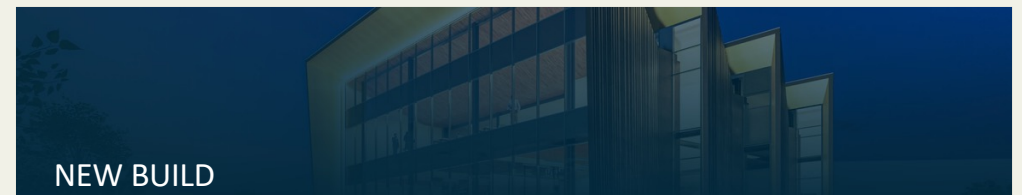
RAMBOLL

BE-ST Domestic Construction Scotland Innovation Centre

e-on

tallarna

energie sprong uk



NEW BUILD

£1.2m

three-year programme

100k+

homes in the pipeline

10-20%

target time saving

- Full Business Case approved for a three-year programme running to March 2029.
- We made the case for change, then mapped the route to a manufacturing-led model and completed an Innovation Construction Centre business case.
- A Construction Lab pilot with all three authorities on standardised designs, modular construction and AI in planning, aiming at a 60% cut in time through planning.

DELIVERED WITH

RAINMAKING

BE-ST Domestic Construction Scotland Innovation Centre

THURROCK COUNCIL

FORTH PORTS

NTU Nottingham Trent University

What we are doing now



This year turns two business cases into working machinery: a delivery vehicle that private capital can back, and an industrialised construction system with a validated investment pipeline behind it.

01

RETROFIT AT SCALE

£300,000 · FY26/27

- Incorporating one regional delivery vehicle, expected to be a Community Interest Company, across all three authorities.
- Securing the investment pathway, targeting around £200m of institutional capital so the work is not grant-dependent.
- Building a Green Product Catalogue of accredited sustainable suppliers, products and materials.
- Using AI-enabled pipeline identification to find and prioritise the homes that need it most first.
- Setting a five-year scaling profile from FY27/28, matched to supply-chain capacity.

02

INDUSTRIALISED NEW BUILD

£390,000 · to March 2027

- Digitising the Thurrock Local Plan into a reusable planning intelligence framework, then testing up to ten candidate sites against it.
- Shortlisting pattern books for Thurrock, mapping their route to planning approval and adding three manufacturers to the catalogue.
- Evaluating the end-to-end system for speed, whole-life cost and investability.
- Producing a manufacturing cluster prospectus with Thurrock Council and the Port of Tilbury, and validating a £150m investment pipeline by March 2027.

03

RESEARCH AND PEOPLE

With Nottingham Trent University

- A nine-month applied research programme with Nottingham Trent University on modern methods of construction, anchored on Barking Riverside.
- Led by Prof Patricia Tzortzopoulos, with NTU co-investing and hosting a European housing innovation event in London this September.
- A complementary pattern book viability review with BE-ST, testing whether Barking Riverside homes could be manufactured in the region.
- Sustainable construction and MMC training commissioned through local colleges, with cohorts from September 2026.

WHAT WE ARE AIMING AT
by the end of this phase

£200m
retrofit capital

£150m
manufacturing pipeline

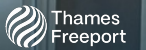
60%
faster through planning

5-10%
less embodied carbon

1,400+
green jobs

How to engage with us

Five ways in, whether you build, fund, plan or research. Start with one piece of work and build from there. We bring the sites, the partners and the match funding.



RESEARCH & EVIDENCE

Join the research programme, co-design the interventions, or use our delivery system as a live case study.



SUPPLY CHAIN & PRODUCTS

Get accredited onto the Green Product Catalogue, and bring MMC systems, low-carbon materials or energy technology.



MANUFACTURING & CAPITAL

Anchor a facility in the cluster, or back the retrofit vehicle and the inward investment pipeline.



PLANNING & DEMAND

Adopt pattern books, put sites into the aggregated pipeline, and use the planning intelligence framework.



PEOPLE & SKILLS

Shape the curriculum, sponsor a cohort, offer placements or guarantee interviews for the people we train.

ANCHOR PARTNERS



PORTH PORTS



DP WORLD



Barking &
Dagenham



THURROCK
COUNCIL



HAVERING

DELIVERED WITH

RAINMAKING



Nottingham Trent
University

BE-ST

energie
sprong
uk

RAMBOLL

e-on



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