

Greater Manchester Energy Innovation Agency

Presentation to the
Green City Region Partnership
Thursday 3rd of April 2025



**ENERGY
INNOVATION**
AGENCY

Item 7

#NetZeroForGM

CHARGED WITH ACCELERATING
INNOVATION TO ACHIEVE
DECARBONISATION

ENERGYINNOVATIONAGENCY.CO.UK

Who are we?



Organisation:

- Public private partnership organisation created in 2021
- To accelerate the low-carbon energy transition towards a carbon-neutral economy in GM and beyond, to speed-up the reduction of carbon emissions.

Objectives:

- ✓ Connecting innovators and innovative products to businesses AND organisations in the public sector
- ✓ Utilising the world class research support of three leading Universities
- ✓ Creating a real-world testbed in the commercial environment
- ✓ Accessing business support to enable products to reach market in the best way



What do we do?

Services:

1. **Innovator Validation and Scale-up Service**
2. **Energy Challenge Events**
3. **Meet-the-Innovator / Buyer Events / Site Visits**
4. **Grants and Innovation Programmes**
5. **Consultancy Support for Spin-Outs**

Focus Areas:

- ✓ **The Decarbonisation of Heat** - building decarbonisation, retrofit and smart energy projects
- ✓ **Energy generation and storage** – renewable energy and energy storage solutions
- ✓ **Energy diversity and flexibility** – smart software / digital solutions for better energy efficiency and management
- ✓ **Low-carbon transport** – Infrastructure solutions to support the energy transition in transport

Agency Customer Journey



Innovators

Technology Readiness Level



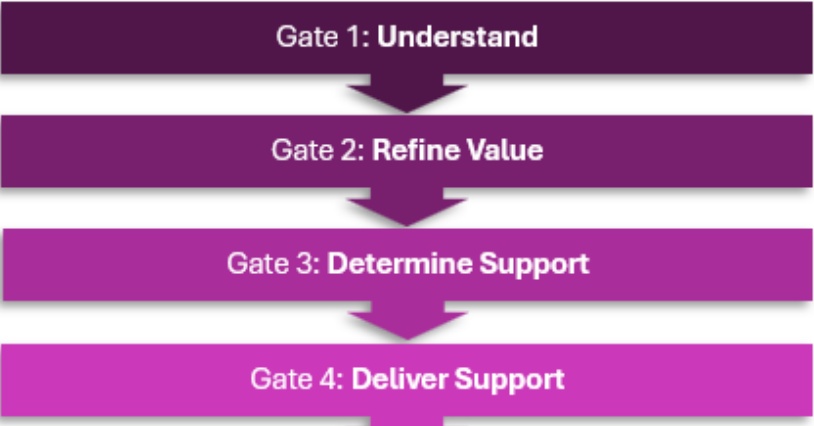
- Innovation Assessment
- Market Opportunity
- Technical Validation

- Commercial Model
- Value Proposition
- Partner Alignment

- Market Approach
- Project Scoping
- Commercial Terms

- Project Definition
- Business Model Deployment
- Commercialisation Plan

Validation and Scale-up Service



Supported by EIA Services

End Users



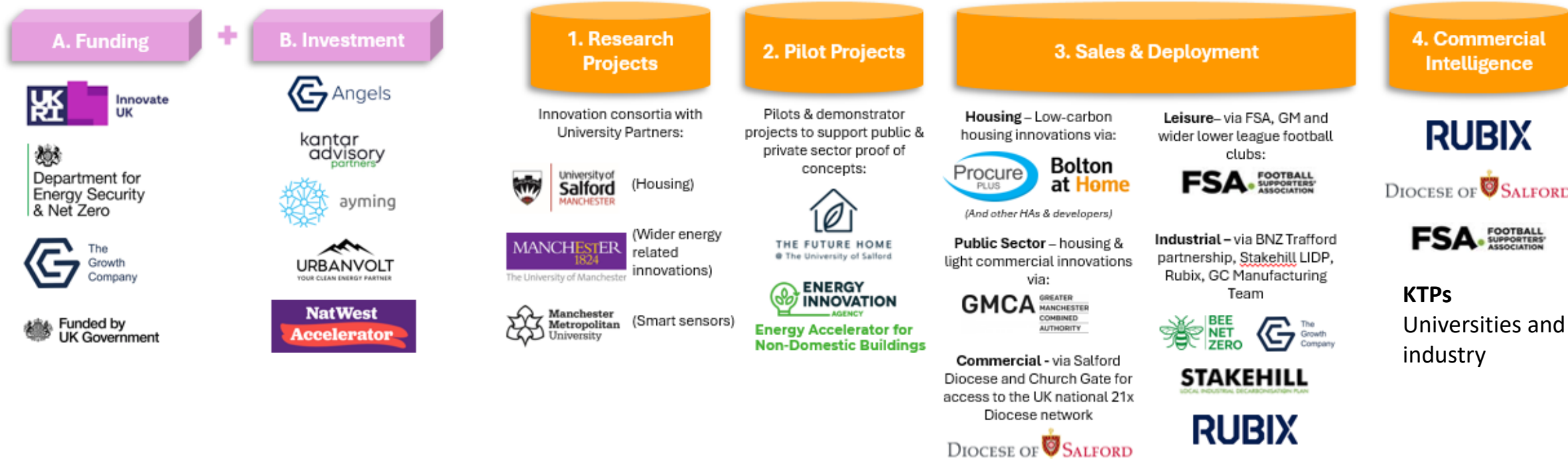
- Technical Requirements
- Business Case
- Resource Commitment

- Innovation Review
- Risk Assessment
- Stakeholder Buy-in

- Implementation Planning
- Commercial Terms (MOU)
- Success Metrics

- Project Delivery
- Impact Measurement
- Benefits Realisation

Agency Customer Journey: Key Stakeholders & Partners



Services:

[Business Services | Energy Innovation Agency](#)
[Innovator Services | Energy Innovation Agency](#)

- Validation and Scale-up service
- Energy Challenge Events for businesses (sector specific)
- Meet the Buyer Events
- Innovator Pitch Day
- Consultancy support – for spinouts

Support for Challenges

Key challenges:

1. The Spark Gap
2. The Decarbonisation of Heat
 - Homes
 - Commercial buildings
 - Industrial clusters
3. The Decarbonisation of Transport
4. The Energy Quadrilemma
5. BAU

Funding successes

Grant Funded Projects:

- **Innovation GM: Future Homes Project: £3.54M**
commercial acceleration of innovations for net-zero homes
- **Innovation GM: Energy Accelerator for Non-Domestic Buildings: £0.25M**
low-carbon innovation demonstrator projects for public and commercial buildings
- **Local Industrial Decarbonisation Plans: £0.6M**
Decarbonisation strategy as blueprint for industrial estates
- **Trafford Park BNZ Partnership:**
Consortia led decarbonisation partnership, led by Trafford Council to support decarbonisation of Trafford Park

Consultancy Support:

- **Spin-Out Battery Flow-Project: Euros 3M**
Business and product development support (consultancy) for long-duration battery storage technology spin-out

Impacts this year

Stats:

- engaged > 170 x innovators AND more than 90 businesses to date across multiple sectors
<https://energyinnovationagency.co.uk/media/f5xelvv1/innovator-library-pdf.pdf>
- secured funding > £3M (for low-carbon public funded programmes)
- Secured €3M euros product development funding for a battery spin-out
- collaborating with local Councils on industrial decarbonisation initiatives (at Stakehill AND BNZ Trafford Park)

Projects:

- ✓ 23 x SMEs supported through the FHP with University of Salford (testing, MTB, commercial support)
- ✓ boiler additive in up to 1.8M homes and across 135 housing associations – throughout 2025/26
- ✓ energy efficient vacuum glazing project in local school for a GM diocese (£130k install April 2025)
- ✓ smart HVAC project with the NHS in a local hospital (£12k – Q1 2025)
- ✓ Smart energy management software platform for offices in co-working space (£60K – Q1 2025)
- ✓ Smart heating management platform in large commercial office (£50k – Q1/Q2 2025)
- ✓ GM Football clubs – new PV business model ‘solar-as-a-service’ for GM football clubs (from Q2 2025)
- ✓ Rubix: various solar PV projects, with Solar-as-a-service with innovation (GM and UK based) – including access to NKA’s

Outcomes:

- Number of Innovator projects = 27
- Number of jobs created = 10
- Value of contracts created = £2,952,000
- Energy saved = + 15,000 kWh (additional projects expecting further energy savings of more than 272m kWh over next 12-months)
- Amount of CO2 saved = + 2 t (additional projects expecting further savings of up to 100,000 tonnes CO2e over next 12-months)

Key Messages

1. Achieving net-zero (NZ) or carbon neutrality is a real challenge – requires collaboration and innovation
2. Decarbonisation can occur relatively quickly when we do this - i.e.. . renewables in electricity market (systemic changes)
3. Critical Challenges: decarbonisation of heat and building retrofit, decarbonisation of transport, AND the green skills gap
4. Ultimately, NZ solutions MUST be more economically attractive than ‘high carbon’ BAU to stimulate widespread demand
5. NZ Targets will not be met without large-scale innovation deployment
6. To achieve this, we need to drive the innovation market top-down and bottom up to stimulate demand (Innovator & Business led)
7. The Agency partnership is a unique collaborative vehicle to support all of the above.

**Simplifying energy challenges through innovation
to make big impacts on business and sustainability goals.**

Recommendations

- Agency moving into fourth year (April 2025) with more focus on wider innovation deployment
- How can GCR partnership support us?

Q1: access wider and more specific energy challenges?

Q2: access buildings and test sites?

Q3: access / develop supportive procurement frameworks for innovation?

Q4: increase deployment of energy innovations in the GM city-region?

Thanks for your time!