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Bridging the sustainability investment gap

GMCA

BOLTON
BURY

MANCHESTER
OLDHAM

ROCHDALE
SALFORD

STOCKPORT
TAMESIDE

TRAFFORD
WIGAN

Environmental challenges – 5 Year Environment Plan

5 environmental threats and challenges to Greater Manchester

Climate change – mitigation

More radical local and national action to accelerate CO₂ emissions reductions

Air Quality

Health impacts of particulates and nitrogen dioxide – NO₂ levels in breach of legal limits

Production and consumption of resources

Throwaway society, linear waste models and particular issues with plastic and food waste

Natural Environment

Reducing biodiversity and environmental quality – lack of other sources of investment

Climate change – resilience and adaptation

Increasing risk of extreme weather events – particularly flood risk but also heat stress

3 opportunities in tackling them

People

Improve health and quality of life, increase productivity and reduce inequality

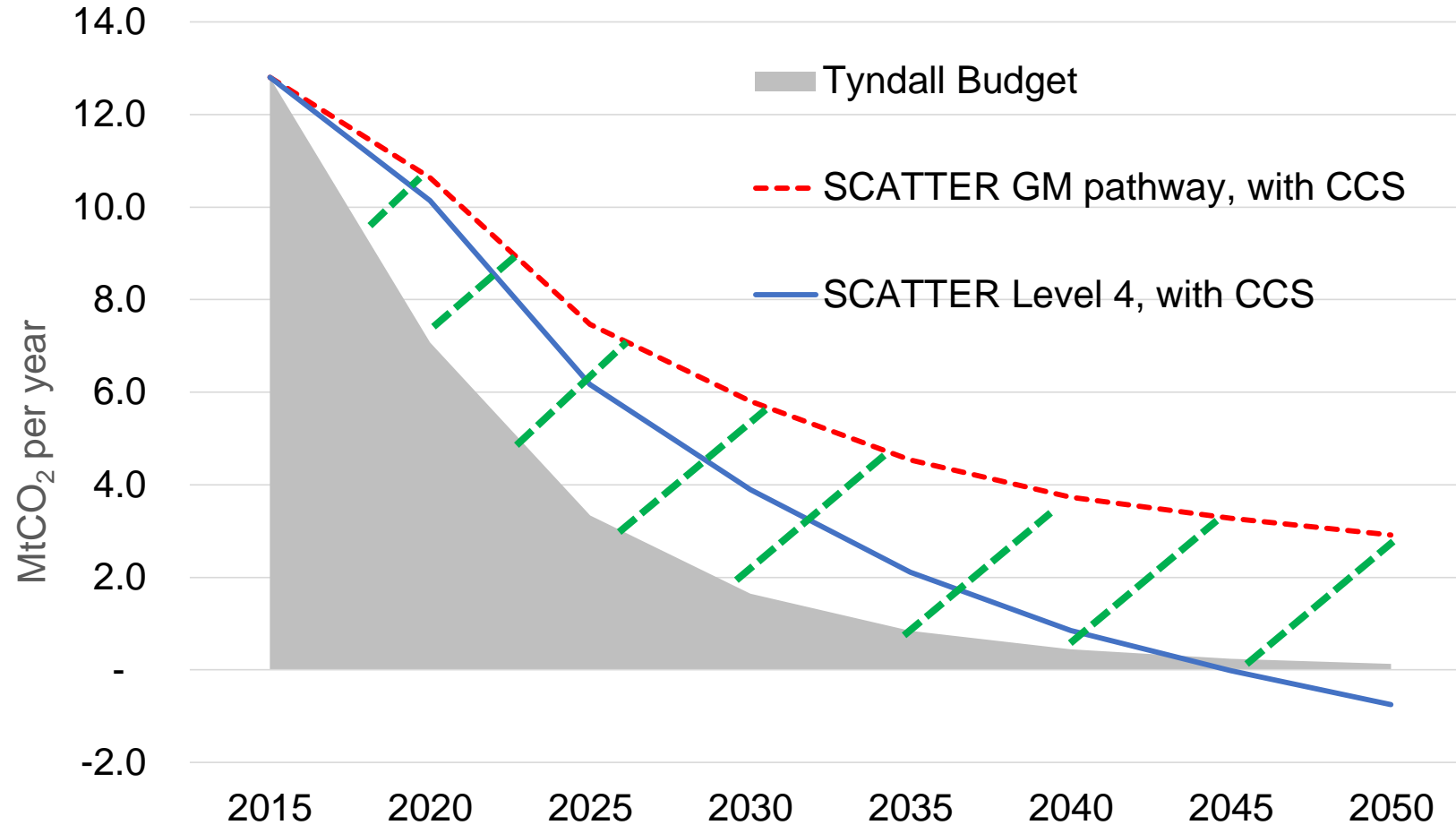
Places

Create vibrant and sustainable places and good quality homes

Economy

First mover advantage – increase prosperity and productivity

Models useful in informing the scale of the challenge



**2016-2050
Total
Emissions**

**Tyndall
94.5 MtCO₂**

**SCATTER
L4
111.9 MtCO₂**

**SCATTER
GM
191.8 MtCO₂**

Most significant carbon drivers:

- Buildings
- Cars, vans, taxis, motorcycles
- Decarbonisation of electricity

Other important drivers:

- Industry
- Freight
- Public transport
- Other (e.g. waste, agriculture)

Focus on the innovation that can close the gap:

- Technology
- Finance and funding
- Partnerships
- Leadership
- Engagement and education
- Skills

Established Funds

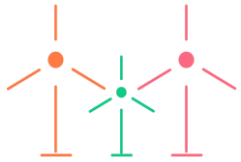
£m	Growing places	NW Evergreen Fund	Evergreen 2	GM Housing Fund	GM Low Carbon Fund
Fund size	£35m	£60m	£45m	£300m	£15m
Managed by	GMCA	CBRE	CBRE	GMCA	GVA
Deal size	£1m - £5m	£2m - £12m	£2m - £9m	£2m - £70m	£0.5m - £5m
Comments	<ul style="list-style-type: none"> • Senior, junior debt and equity for commercial property and infrastructure • Funding between £1m-£5m with a minimum of 50% match from either public/ private sources 	<ul style="list-style-type: none"> • Commercial property debt fund invested to deliver urban regeneration projects • Investment can be at either senior or junior debt • Equity funding can be provided in certain circumstances • Maximum 5 year term and limit of 20% of fund size per scheme with a cap of 30% exposure to any one developer. 	<ul style="list-style-type: none"> • Launched in March 2017 • Commercial property debt fund focussing on: <ul style="list-style-type: none"> - Science and innovation (£30m) - Energy efficiency of buildings (£15m), including new and refurbished office development. • ERDF rules apply with regular reporting • 50% match funding requirement from either public / private sources. 	<ul style="list-style-type: none"> • Senior, junior debt and equity for commercial property and infrastructure • Funding between £500k -£70m • Loans must be to Private Sector entities • Governance process for higher risk Small loans of <£2m is more streamlined • Focus moving forward is to support more non City Centre developments 	<ul style="list-style-type: none"> • Launching imminently • Debt and equity up to £5m focussing • 50% match funding • Maximum term of 15 years • Aimed at renewable / low carbon technology installations and district energy networks • Performance measured by GHG reduction targets.

GM Low Carbon Fund

Fund Manager Avison Young (formerly GVA)

Fund Size £15m

Lifespan 15 years



Wind turbines

Investment can be applied to installation of wind turbines, as part of a wind farm or a property development



Energy from waste

We can invest in plants that use waste to generate heat and power and support more innovative technologies that have the potential to transform waste into other energy products



Biomass Combined Heat and Power (CHP)

We are looking to invest in all types of Biomass Combined Heat and Power projects (heat only, heat & power and heat, power cooling)

About the Fund

- New loan fund to promote the production and distribution of energy derived from renewable resources.
- Allocated from the 2014-2020 European Regional Development Fund
- The fund can invest up to 50% of eligible costs
- Investment repaid by projects will be recycled into further projects across Greater Manchester
- GMLCF will work with the Greater Manchester European Local Energy Assistance (ELENA) fund
- ELENA provides grant funding to support development costs for projects that deliver savings in energy consumption and carbon emissions
- ELENA can provide assistance for upfront project costs with GMLCF providing commercial investment

Evergreen 2

Fund Manager CBRE

Fund Size £45m

Lifespan 15 years



Citylabs 2.0

£12.5m loan from Evergreen 2 as part of £18.5m finance package to deliver 92,000 sq ft of state of the art laboratory and office space.



Didsbury Technology Park

The scheme will deliver 20,000 sq ft of Grade A office space delivering innovation in science and technology sectors through SME collaboration. Evergreen 2 delivered a loan of £2.5m towards the eligible activities of the development.

About the Fund

- The Evergreen 2 fund will invest up to £45m of European Regional Development Fund monies from the 2014-20 ERDF Operational Programme.
- Under Priority 1a, it will develop, retain and exploit excellence in GM's Science / technology / Innovation assets, through investment in the appropriate volume, specification and flexibility of commercial floor-space.
- This will include investment in the development of new sites, the remediation and redevelopment of brownfield and the development / refurbishment of commercial floorspace.
- Under Priority 4b, the aim will be to promote increased energy efficiency, in particular in SMEs. The Investment Priority presents an opportunity to use ERDF resources to support improvements in the buildings. This includes energy efficient new buildings as well as deep renovations of existing buildings.
- The fund can invest up to 50% of eligible costs.
- Investment repaid by projects will be recycled into further projects across Greater Manchester.

The GM Energy Challenge

GM aspires to be the leading region in the UK to enable the transition and benefit from the innovation and green growth potential, through a whole system approach

Energy

72% of energy consumed within GM is from buildings, both domestic homes and non-domestic offices, industrial, public

Growth

The GM forecast for 2035 is to have approximately an additional:

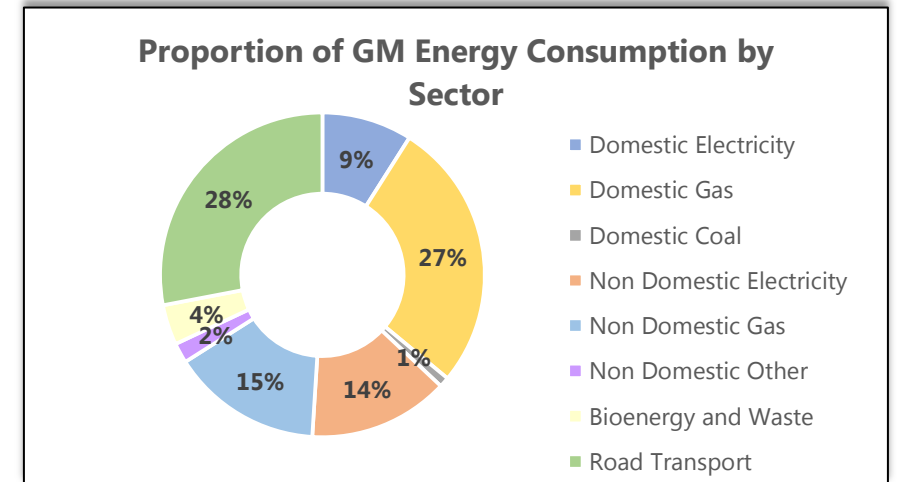
- 201,000 new homes, for 250,000 extra residents; and 6.7 million m² of additional commercial and industrial floor space.

This continued anticipated future growth to 2035 will, unless action is taken, lead to:

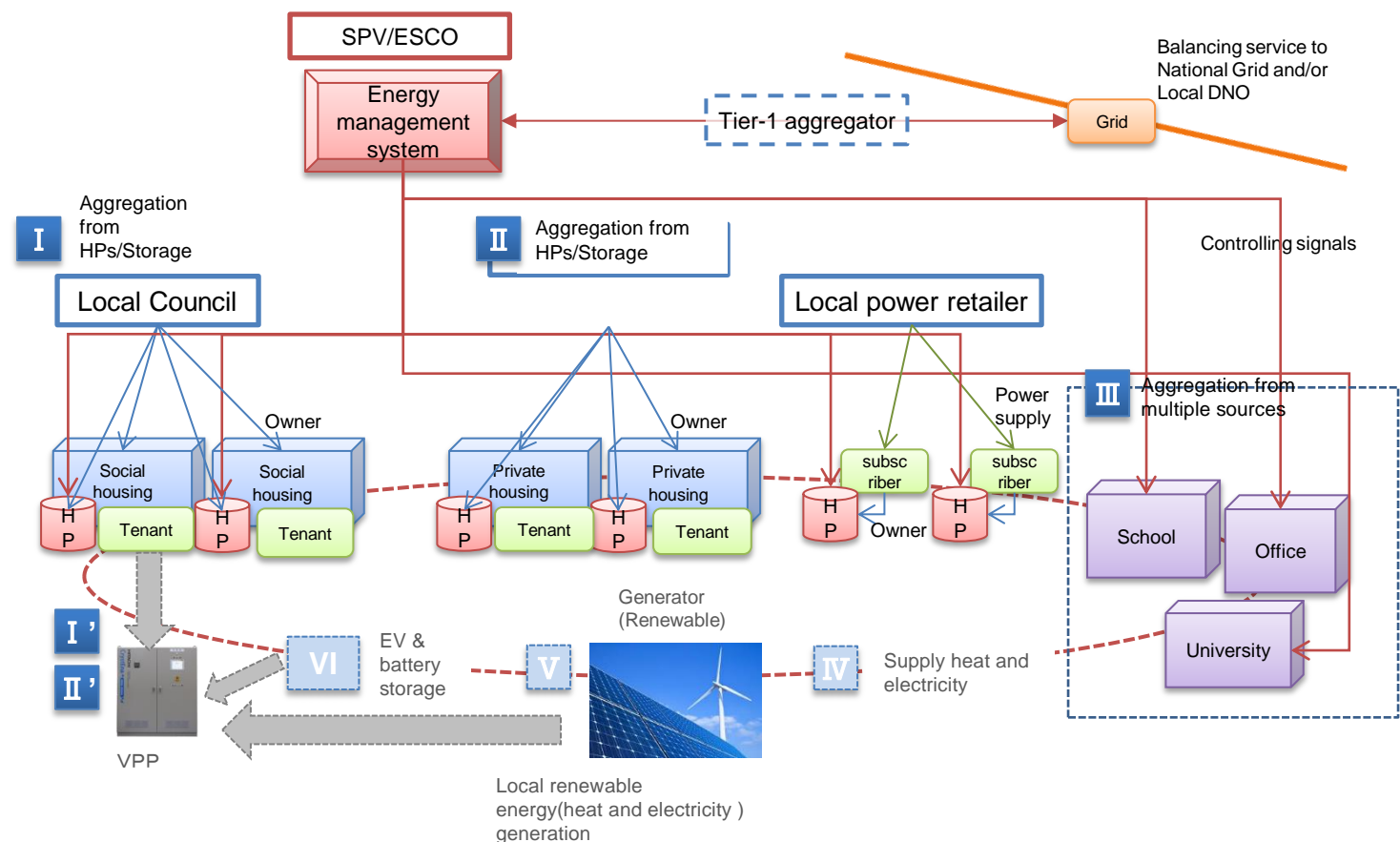
- An additional 2,400 GWh/yr. energy.
- An increase of 0.4Mt CO₂ emissions increase under business as usual activity.
- Which represents a 3% increase in energy consumption.

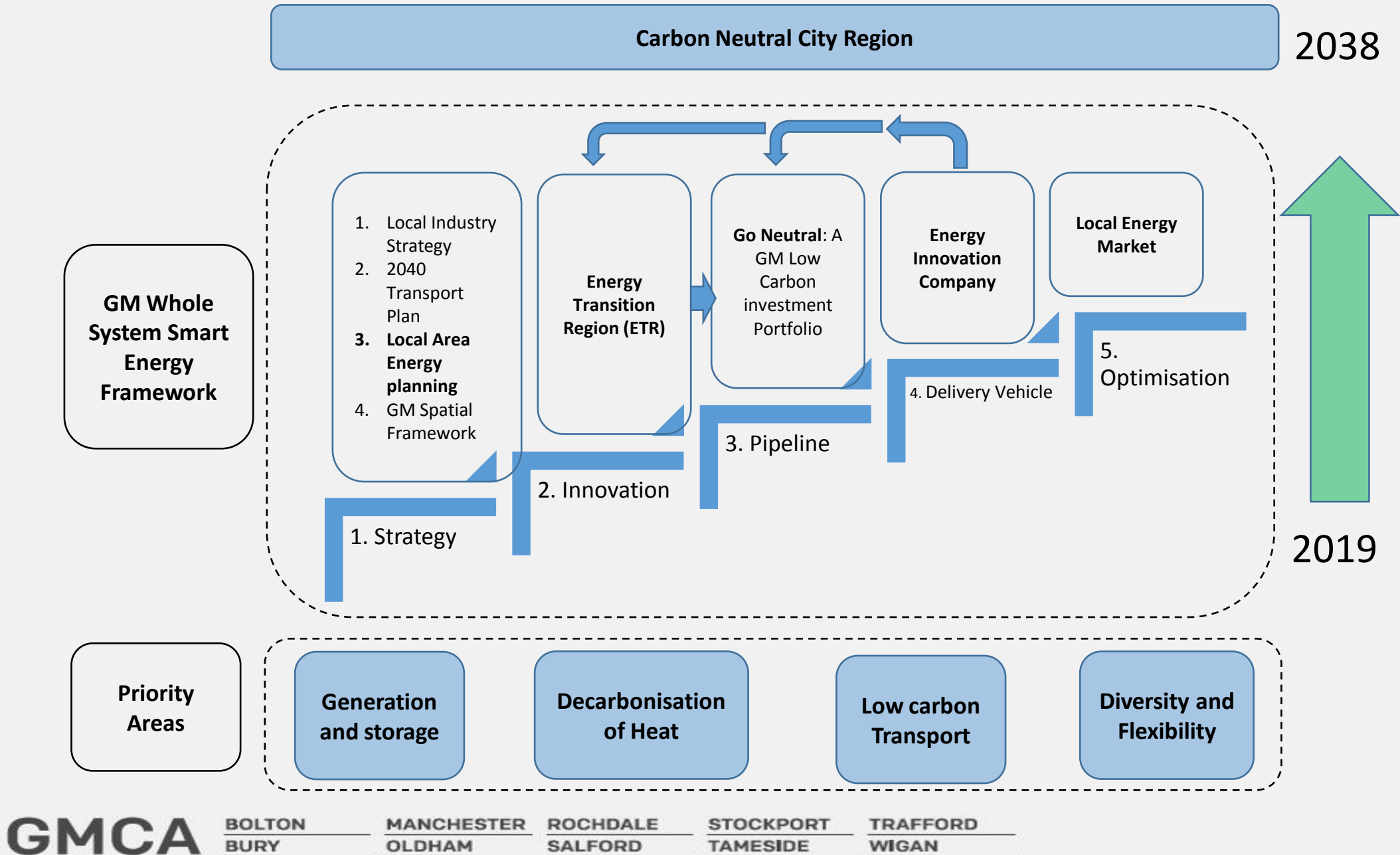
Low Carbon Transport

The National Infrastructure Assessment (July 2015) states that “most charging should be slow and smart”, but “fast and rapid chargers will be needed to tackle range anxiety.”



Future Possibilities for Delivery





Natural Capital Investment Plan

The investment plan aims to support the agreed vision of:

“A Greater Manchester where investments in natural capital enhance the long-term social, environmental, and economic health and wellbeing of its people and businesses.”

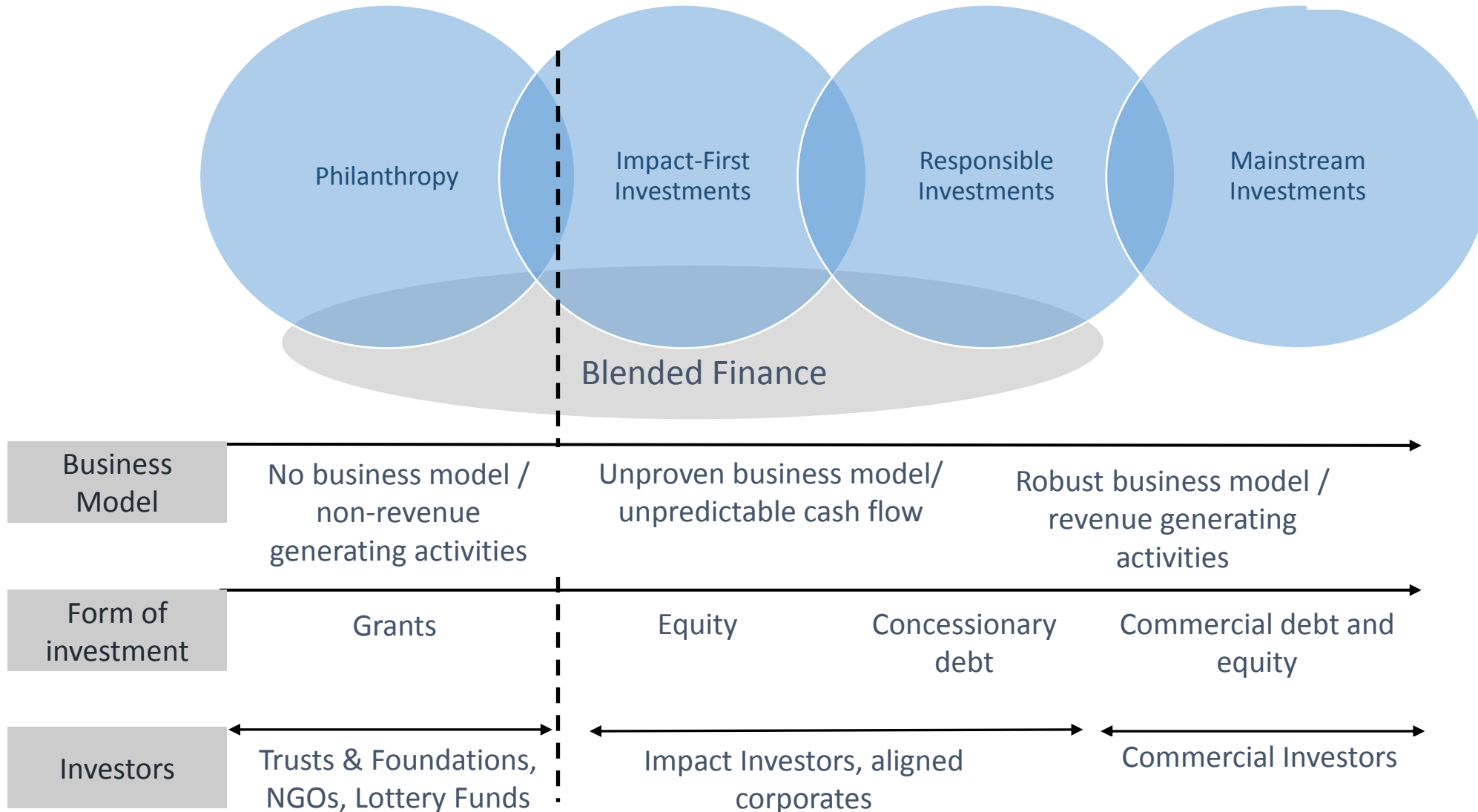
Investment in natural capital defined as:

“Funding that is intended to provide a return to the investor while also resulting in a positive impact on natural capital.”

- Returns are defined predominantly, although not exclusively, in financial terms.
- Public and third sectors still have an important role to play, as enablers and innovators.



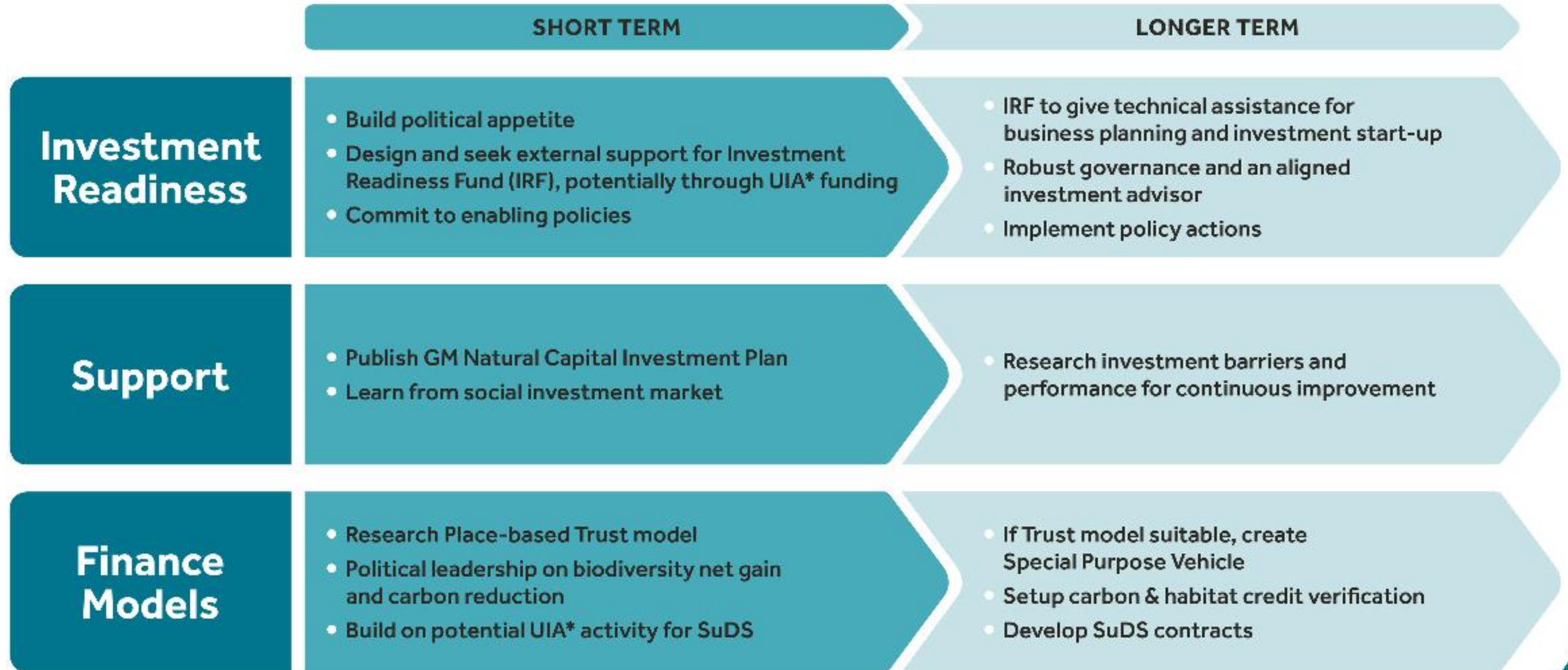
Sources of capital in the market



Pipeline of Project Types

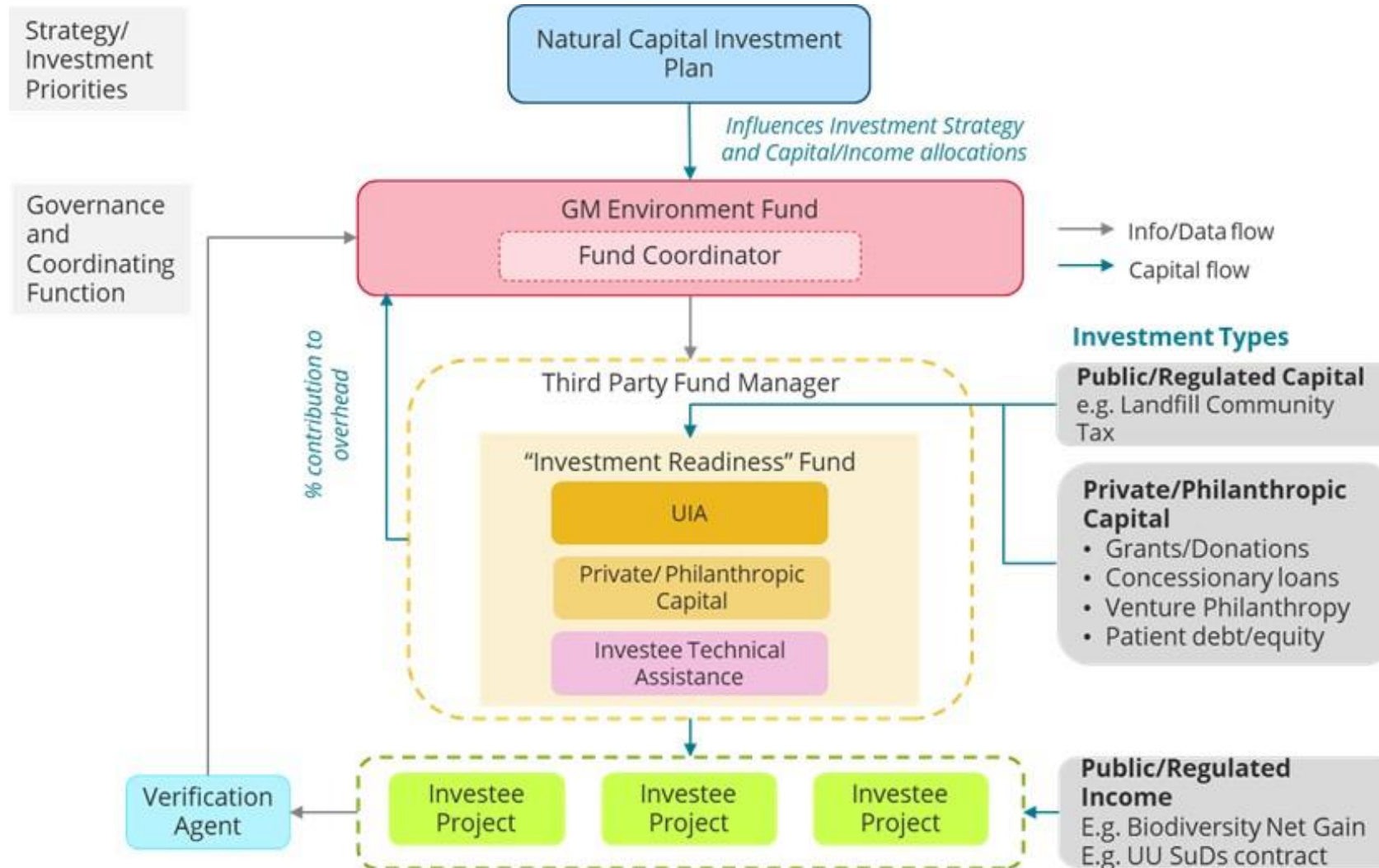


Investment Plan – Summary of Actions



*Urban Innovation Action – Funding TBC

**GREATER
MANCHESTER**
DOING THINGS DIFFERENTLY



Bringing it together – our overall approach

Supporting innovation in technology

Innovation ecosystem to support all firms to be innovative, supporting the creation of new products and services (e.g. Energy Transition Region proposals)

Taking new approaches to funding and financing

Long-term sustainable funding models for infrastructure.

Developing business models in unproven areas (whole house retrofit; natural environment)

Building on public and private sector partnerships

Continuing the engagement from 2018 Green Summit, with GMCA convening stakeholders around key challenges and through a mission-oriented approach

Showing leadership

A set of commitments from GMCA/LAs, plus health and social housing providers, showing we are leading by example.

Engaging & educating residents, communities and businesses

Make a programme of carbon literacy available to young people through the GM career portal, in addition to our own commitments on carbon literacy for staff in procurement.

Upskilling our workforce

Engage the sector in BridgeGM, to better link business leaders into schools and colleges.