

# 5 YEAR ENVIRONMENT PLAN

## Retrofit Report



# Priority areas in the 5 Year Environment Plan



Our energy supply



Our energy demand in our buildings



Our travel and transport



Our consumption and production of resources



Our natural environment

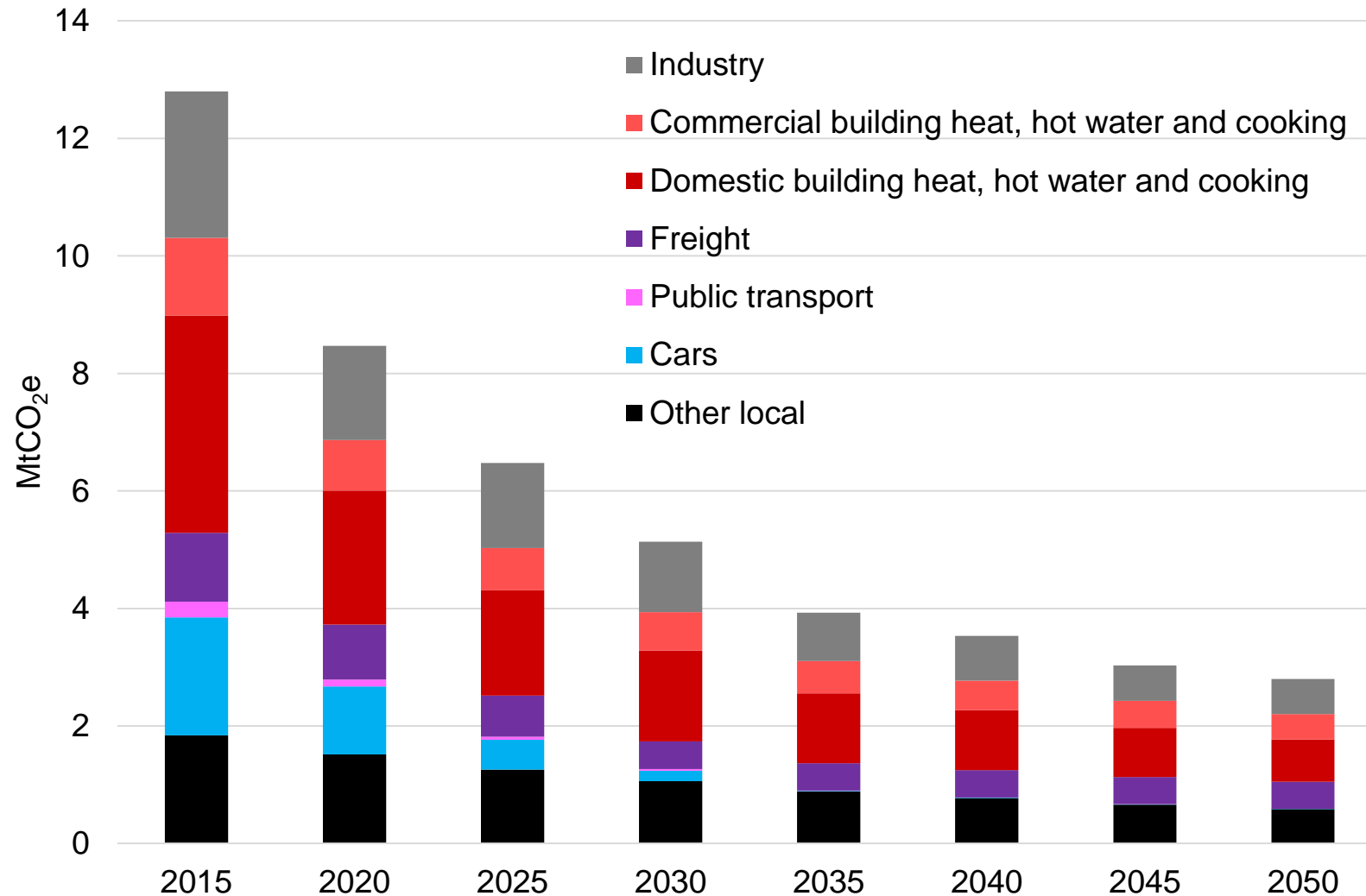


Our resilience and adaptation to climate change

Scope:

- Existing buildings not new build
- Heating – rather than appliances, lighting, active cooling
- Different types of buildings: homes, commercial, public

# The importance of buildings in meeting our environmental ambitions



# The scale of the challenge in achieving those reductions

Key assumptions about now to 2040 in the SCATTER GM model



Half of our homes have solar PV plus a further 5.5km<sup>2</sup> commercial/ground-mounted

Gas accounts for less than 35% of heating supply



61,000 homes a year are retrofitted, reducing “thermal leakiness” by 57%

Commercial heating demand drops by over 20%



All cars on our roads are zero emissions (tailpipe) by 2035

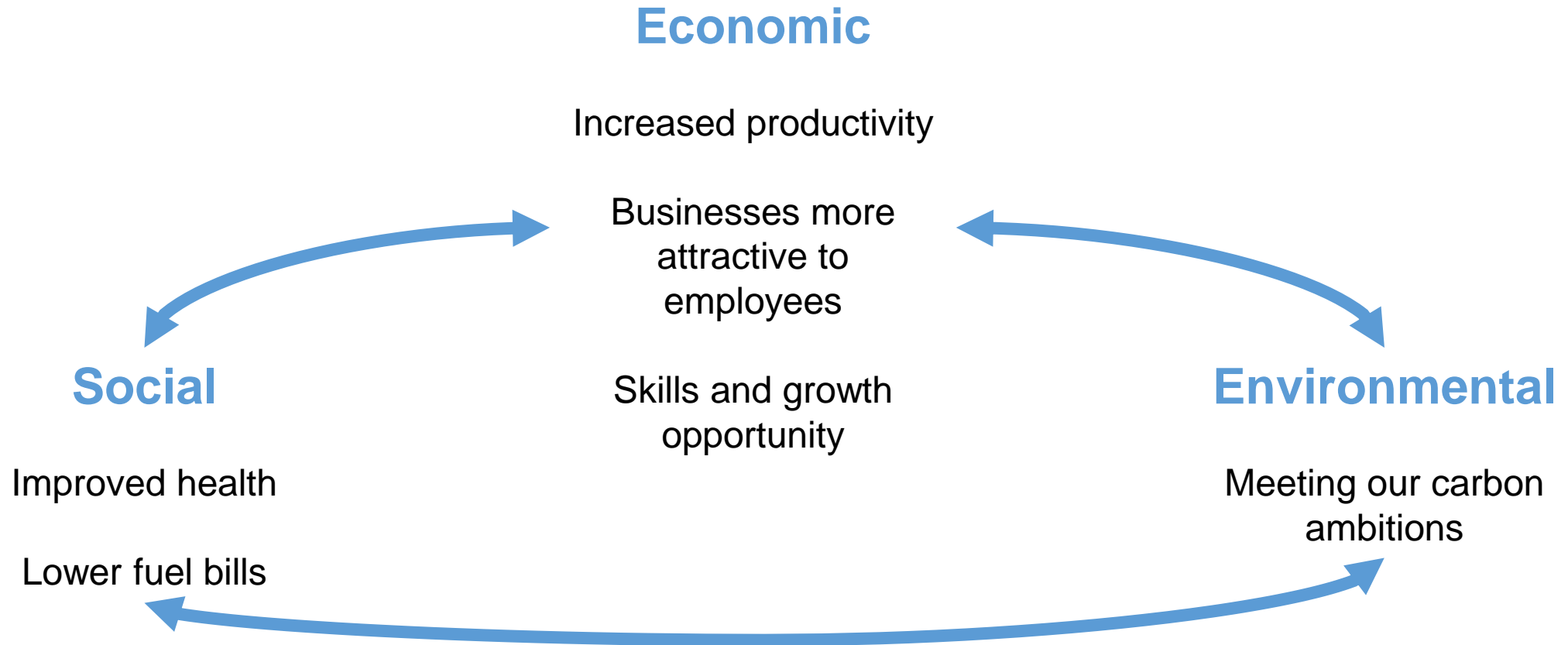


Industrial emissions reduce by 50-75%



3m trees are planted by 2035

# The wider opportunity and the need to take action



# Reducing energy demand in homes

## Challenges:

1. Increasing levels of fuel poverty across GM

2. Scale of upscaling retrofit extent and depth

## Where are we now:

1. Current national ECO funding not delivering enough

2. Pilots/small programmes in 100s; barriers of:

- High up-front costs and need for patient finance.
- Lack of supply chain capacity and capability.
- Lack of demand and straightforward customer journey.

## What do we need to do (Recommendations)

1. Develop proposals for and push for changes to current the current ECO framework when it ends in 2022 to better align it with the city-region's ambitions.

2. Further research to identify appropriate space heating demand targets for different property types to inform action

3. Develop business models for investment – including proposals for equity loans and how price signals (e.g. council tax) might be used as a “nudge”

4. Understand future skills needs and opportunities and develop packages of work to tackle these issues

5. Develop delivery models to build up local markets – building on recent work in this area.

# Reducing energy demand in commercial buildings

## Challenges:

1. Reducing energy demand, driven by increased measurement and reporting.

## Where are we now:

1. Lack of requirements or incentives for measurement and reporting of operational energy performance

2. Lack of requirements or incentives for improving operational energy performance

## What do we need to do (Recommendations):

1. Investigate Building measurement and reporting into new developments using the planning system

2. Develop a pathway for embedding measurement and reporting for commercial building heat demand, starting with voluntary reporting whilst looking at ways to encourage this (via nudge)

# Reducing energy demand in public buildings

## Challenges:

1. Reducing energy demand in public buildings.

## Where are we now:

1. Lack of consistent reporting across public sector

2. Lack of coordinated action to work to agreed targets

## What do we need to do:

1. Standardised measurement and annual reporting across the public sector

2. GMCA and LAs work to agreed targets for the energy efficiency of their buildings, including their Display Energy Certificate ratings and developing a measure and targets for space heating demand, and encourage other public sector organisations to do likewise.



# Low Carbon Buildings – Challenge Group and Potential Task and Finish Groups

