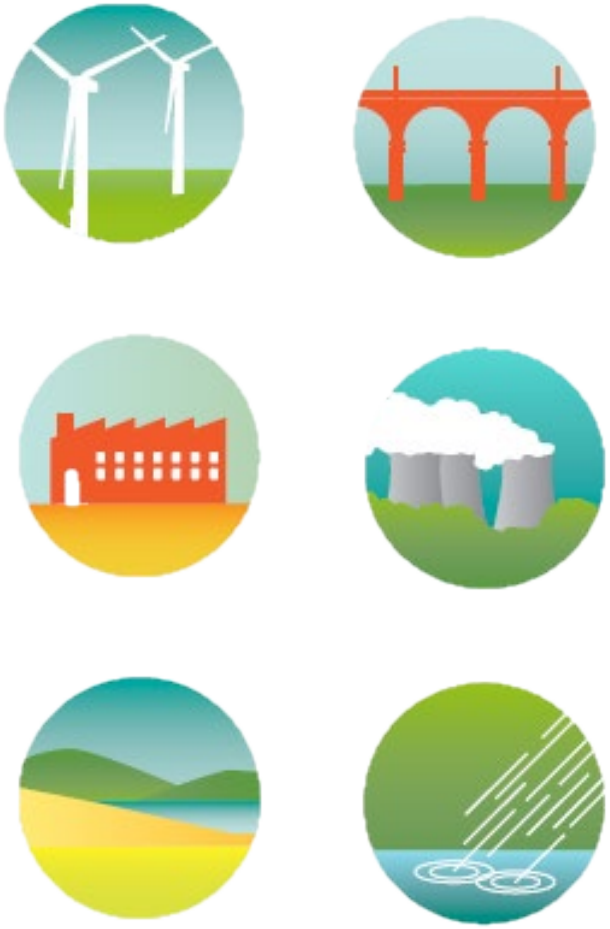
LOCAL CLIMATE ACTION PRACTICES GREATER MANCHESTER (UK)



#GMGreencity

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We face environmental threats and challenges, but tackling them will present opportunities for Greater Manchester…

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5 environmental threats and challenges to Greater Manchester

Climate change – mitigation	Air Quality	Production and consumption of resources	Natural Environment	Climate change – resilience and adaptation
More radical local and national action to accelerate CO_2 emissions reductions	Health impacts of particulates and nitrogen dioxide – NO_2 levels in breach of legal limits	Throwaway society and particular issues with plastic and food waste	Multiple benefits still yet to be fully realised or accounted for – lack of other sources of investment	Increasing risk of extreme weather events – particularly flood risk but also heat stress

3 opportunities in tackling them

People	Places	Economy
Improve health and quality of life, increase productivity and reduce inequality	Create vibrant and sustainable places and good quality homes	First mover advantage – increase prosperity and productivity

5 Year Plan Priorities

Key Inter-relationships

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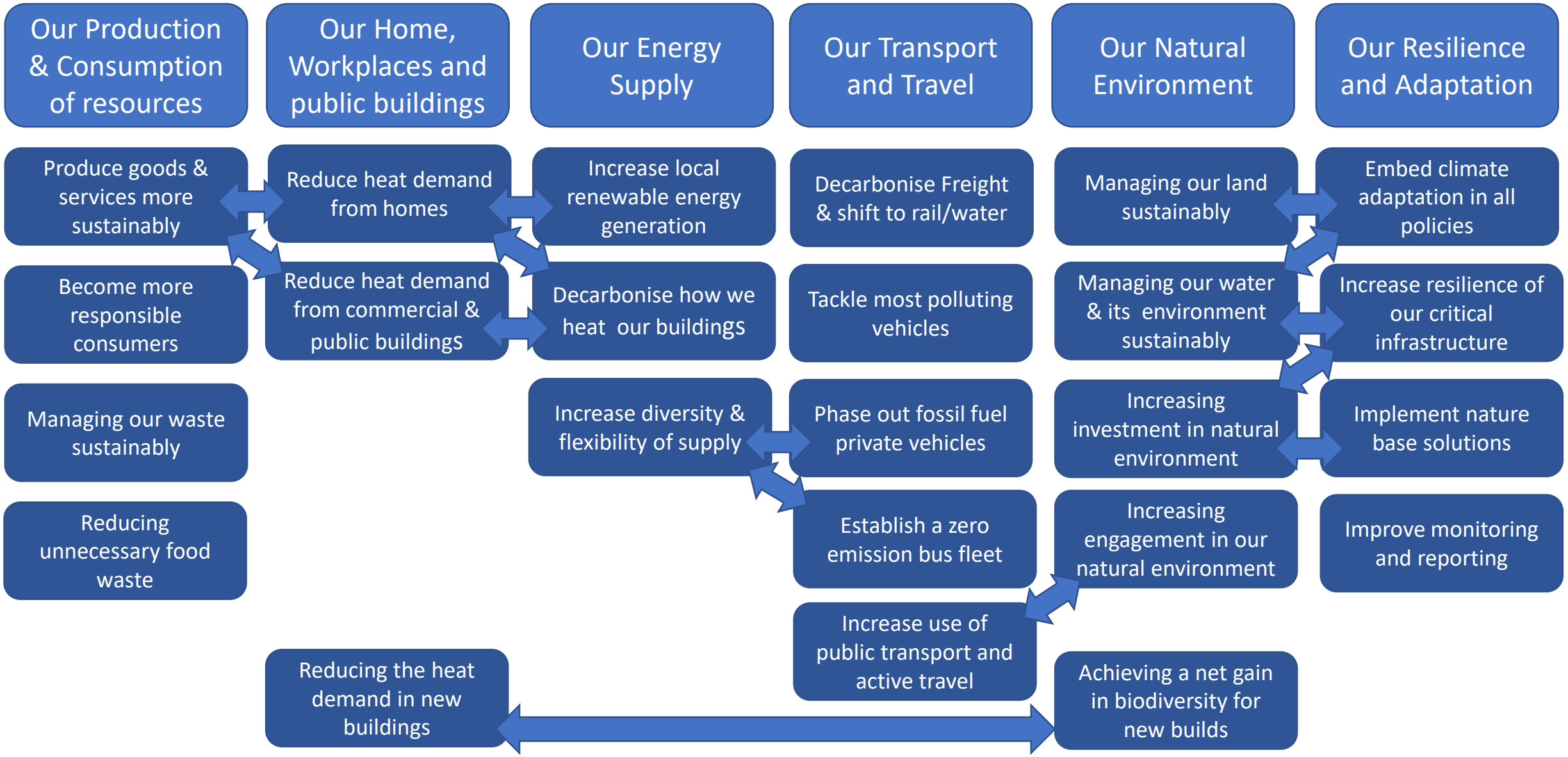

Models are useful in informing the pathway….

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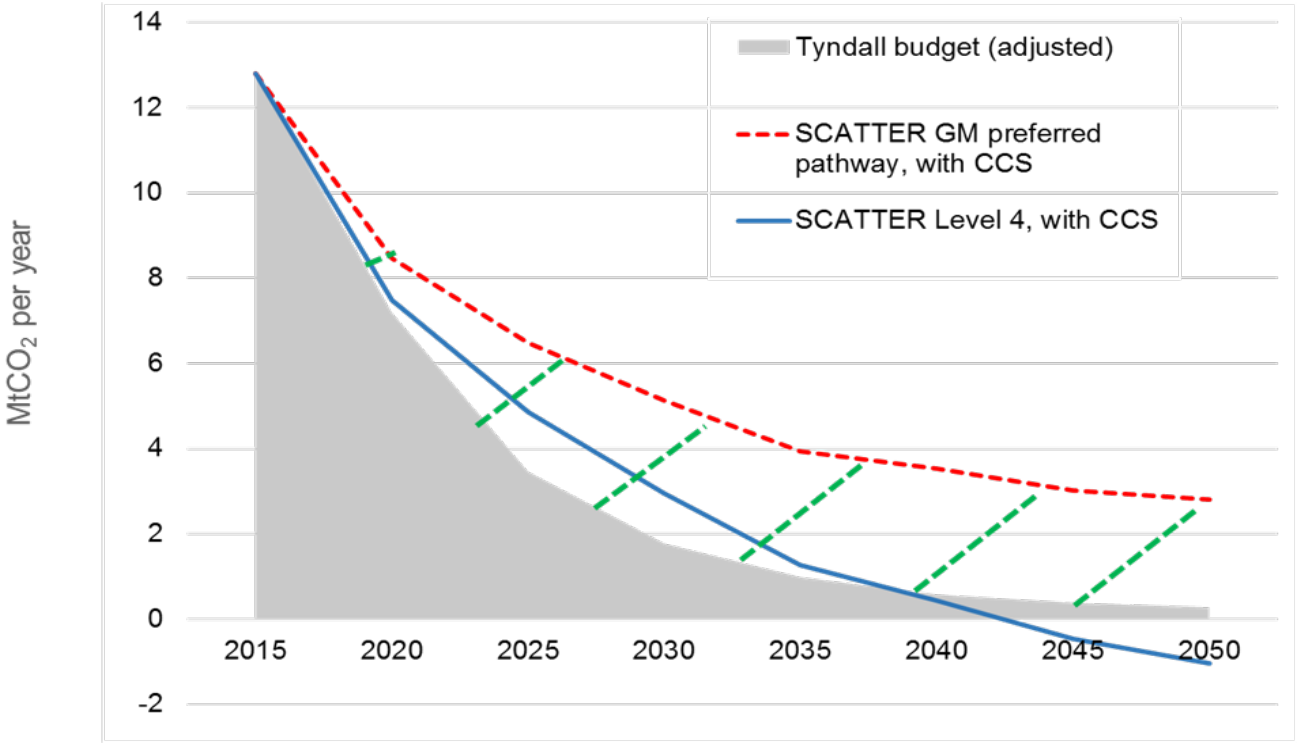


SCATTER GM 191.8 $MtCO_2$

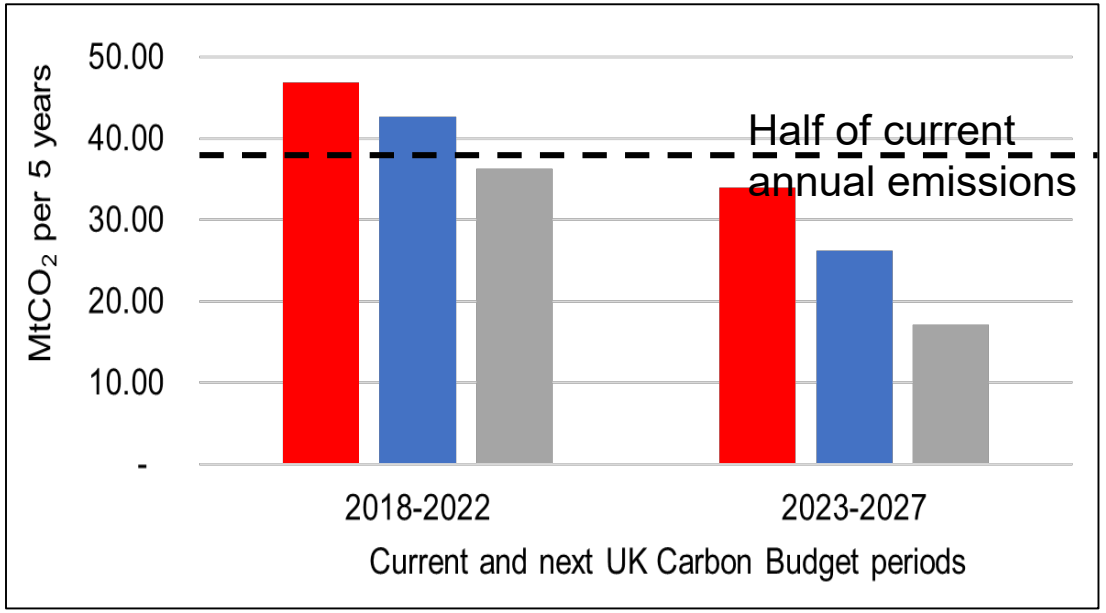
SCATTER L4 111.9 $MtCO_2$

Tyndall 94.5 $MtCO_2$

Focus on the innovation that can close the gap:

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

they show us that we all need to take action now…



…identify where emissions reductions come from…

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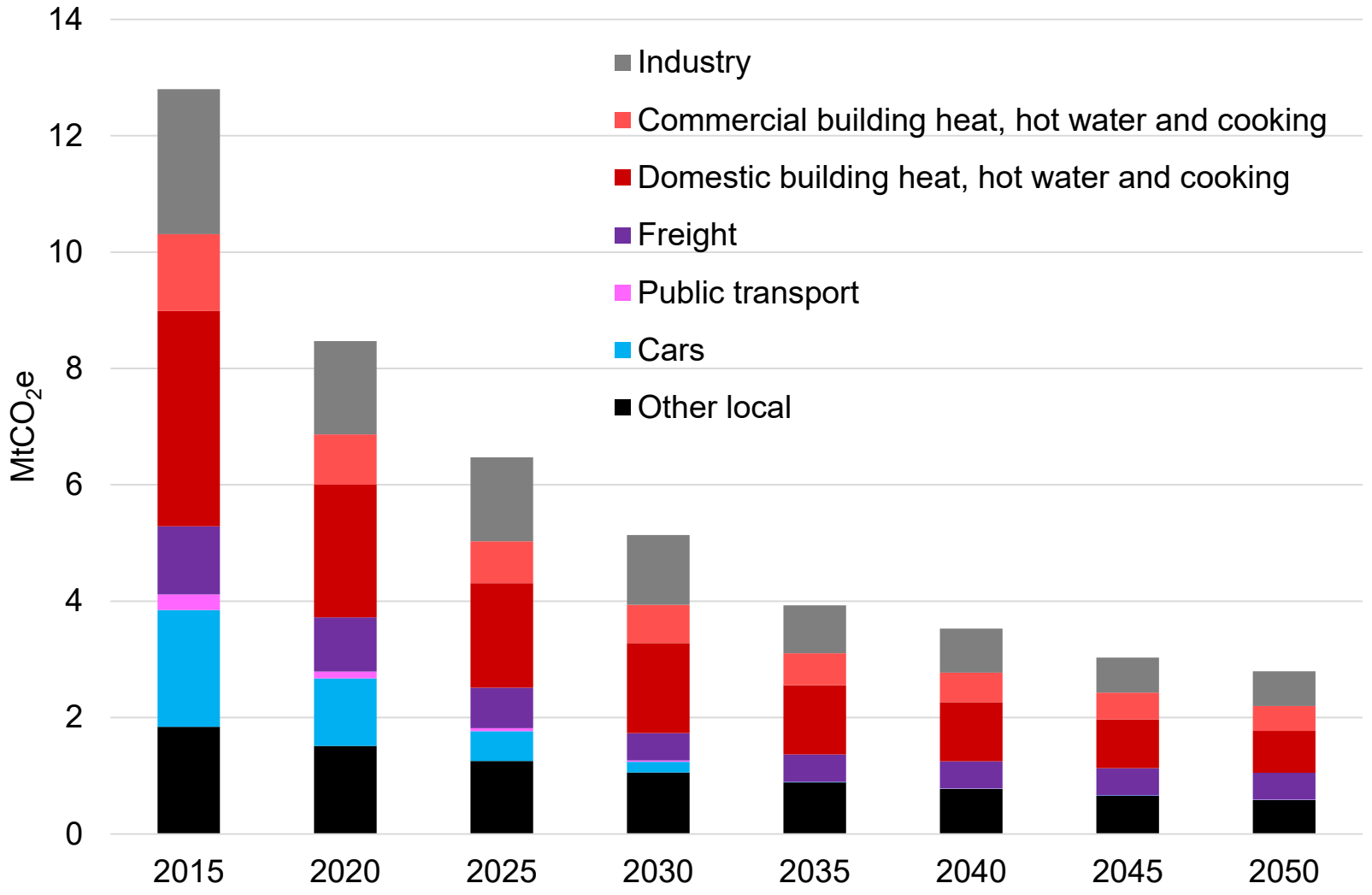
Most significant drivers:

- Homes & Buildings
- Cars, vans, taxis, motorcycles

Need decarbonisation of electricity supply to support this

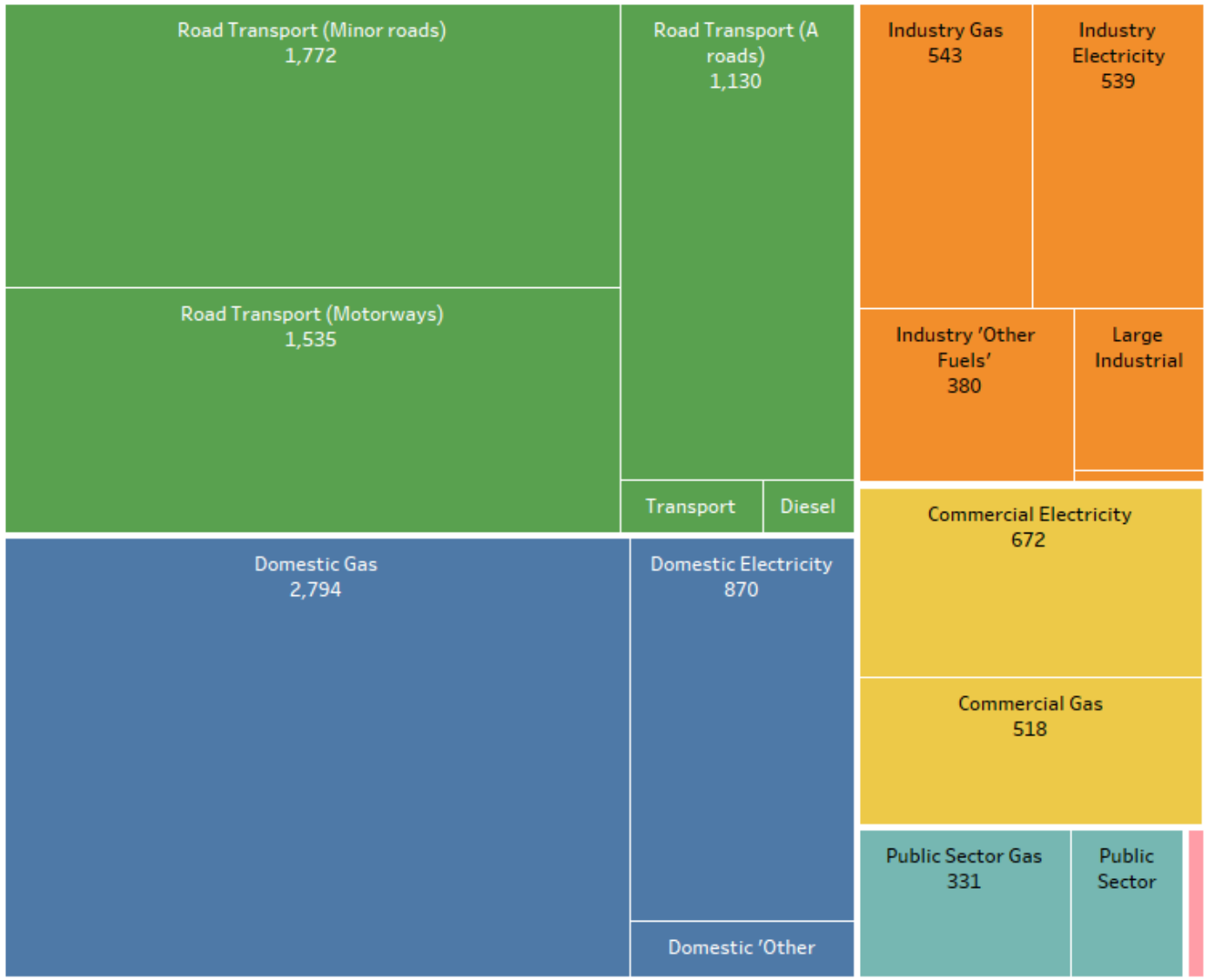
Less significant drivers:

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



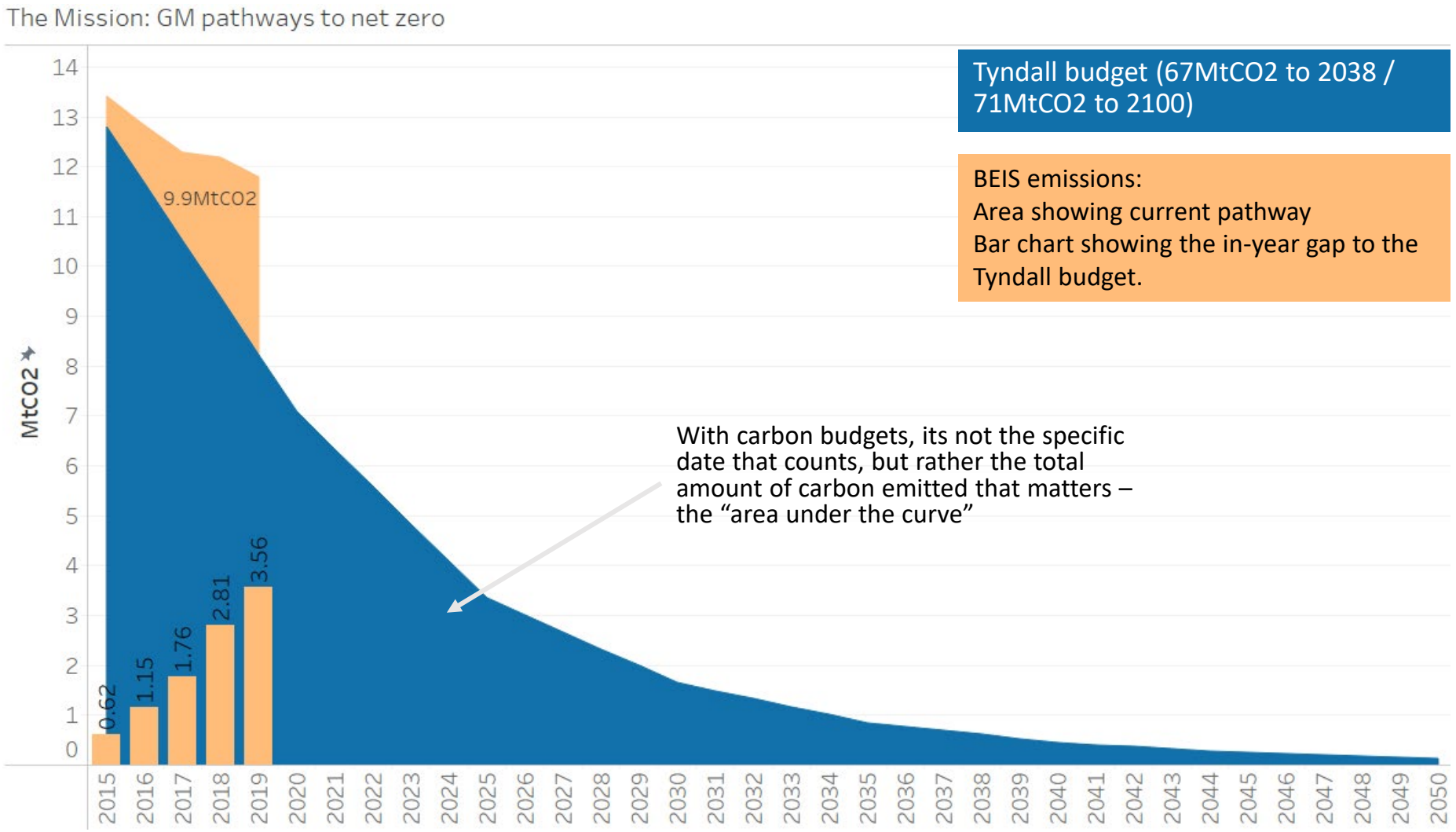
The Mission: Carbon Neutral by 2038

Emissions magnitude by sector (ktCO2 / 2019)



- Transport and domestic gas are currently our largest two largest sources of carbon emissions and the two areas where we are failing most significantly to make the progress we need
- We need to transition away from the use of fossil fuels, towards zero emission solutions
- This will require the region to electrify its heating and local transport and move heavy haulage and industry towards hydrogen
- To enable this the region will need to generate more renewable energy locally that can meet our increasing demands (including green hydrogen production)
- **A whole system approach needs to be adopted.**

The Mission: Carbon Neutral by 2038



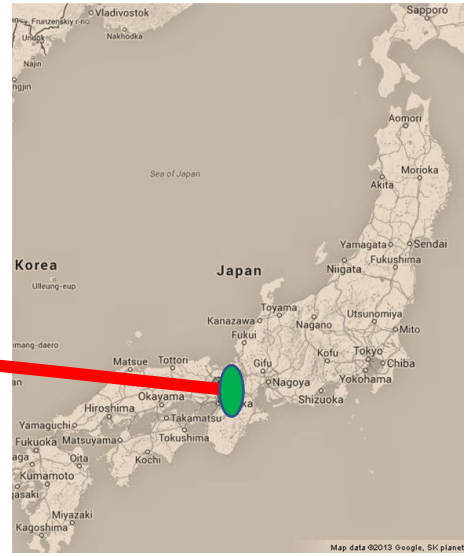
To achieve the 2038 mission, the GM 5-Year Environment Plan outlines our 'fair' carbon budget contribution of **67 mega tonnes for 20 years.** The critical focus is not exceeding our total budget.

Across 2015-19, GM's emissions were 9.9MtCO_2 **above** the Tyndall budget, i.e. an additional 9.9MtCO2 savings need to be made **on top of** the Tyndall budget. **This gap has been increasing year on year.**

Key point is that significant cuts must happen now.

IURC Project with Osaka

- **Japan an international priority for Greater Manchester**
- **IURC Partnership started in 2021**
- **Focused on Climate Change and Environment**
- **First Virtual Meeting in December 2021**
- **Webinar in spring 2022 – Waste and decarbonatization of heating.**



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