

# HIL: Hydrogen in Transport Conference 2024

## Market Intelligence and Demonstrator Programme

Richard Bradley – Midlands Connect



# Midlands Connect

## Sub-National Transport Bodies

One Midlands

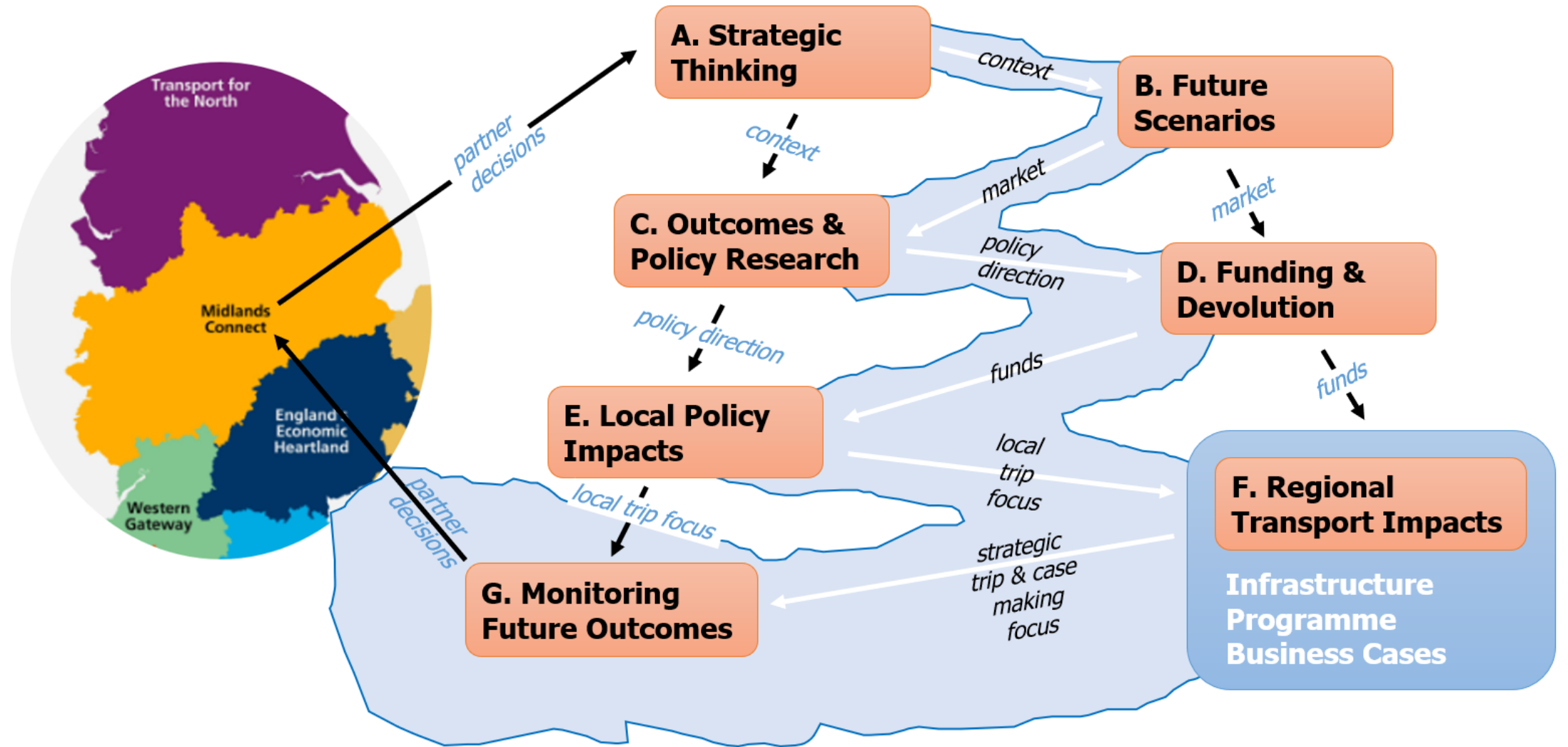


- Partnership of 22 LTAs, funded by DfT
- Hosted by WMCA
- DfT remit
  - Strategic transport plan & investment programme
  - Planning for a fairer, greener & stronger Midlands

Midlands Connect & Midlands Engine	Airports	Shire & Unitary Authorities	West Midlands Combined Authority (WMCA) Councils	Non WMCA City Councils	Chambers of Commerce	Local Enterprise Partnerships	Government Agencies	Government Departments
Midlands Connect	Birmingham Airport	Derbyshire	Birmingham	Derby	Black Country	Black Country	Great British Railways	Department for Transport
Midlands Engine	East Midlands Airport	Herefordshire	City of Wolverhampton	Leicester	Coventry & Warwickshire	Coventry & Warwickshire	National Highways	Department for Business, Energy and Industrial Strategy
		Leicestershire	Coventry	Nottingham	East Midlands	Derby, Derbyshire, Nottingham, Nottinghamshire (D2N2)	HS2	Department for Levelling Up, Housing and Communities
		Lincolnshire	Dudley	Stoke-on-Trent	Greater Birmingham	Greater Birmingham & Solihull	Network Rail	
		Nottinghamshire	Sandwell		Herefordshire & Worcestershire	Greater Lincolnshire		
		Rutland	Solihull		Lincolnshire	Leicester & Leicestershire		
		Shropshire	Walsall		Shropshire	The Marches		
		Staffordshire	West Midlands Combined Authority		Stoke & Staffordshire	Stoke & Staffordshire		
		Telford & Wrekin						
		Warwickshire						
		Worcestershire						

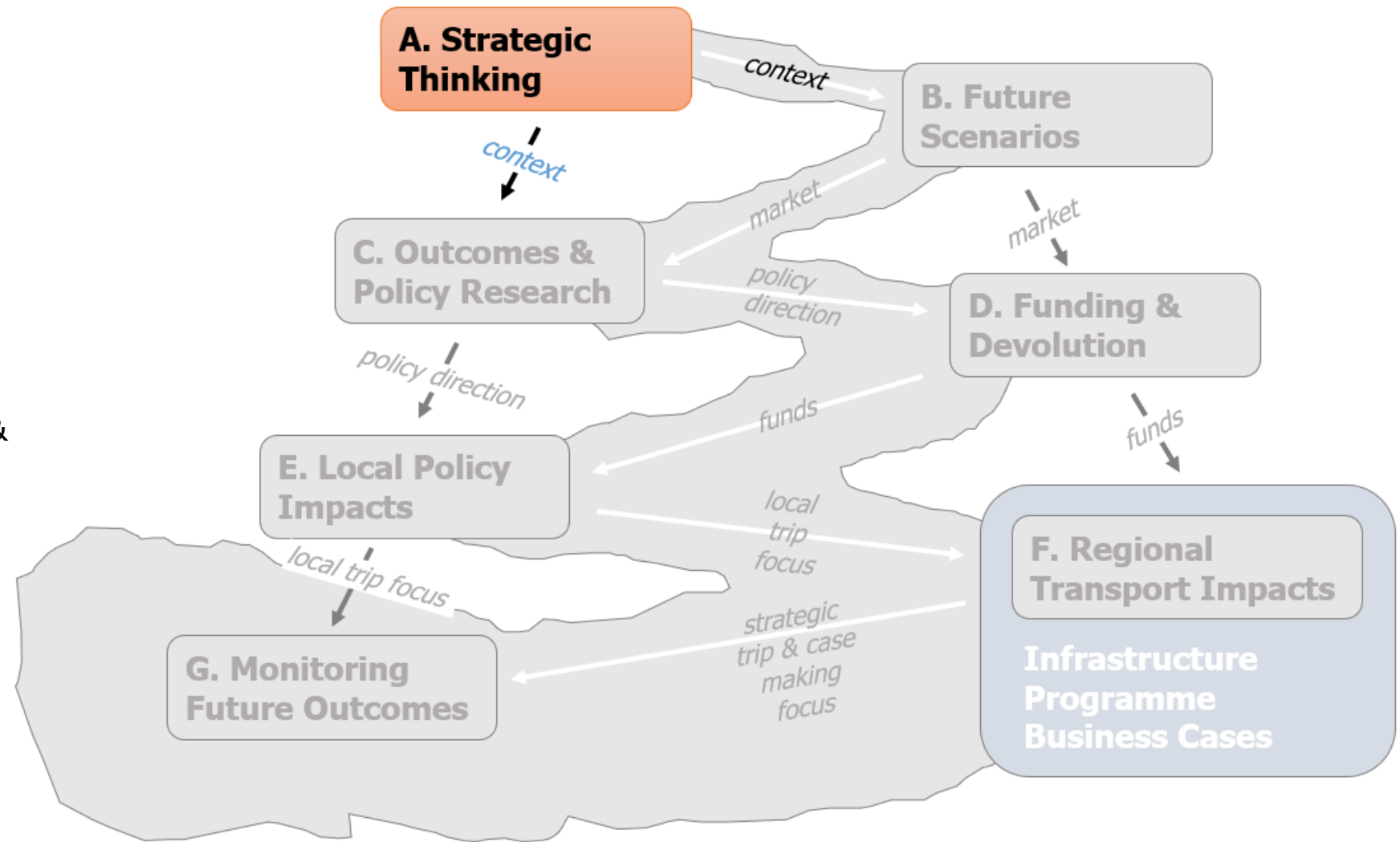
Figure 3: The partners that we work with

# Circular Decision Process



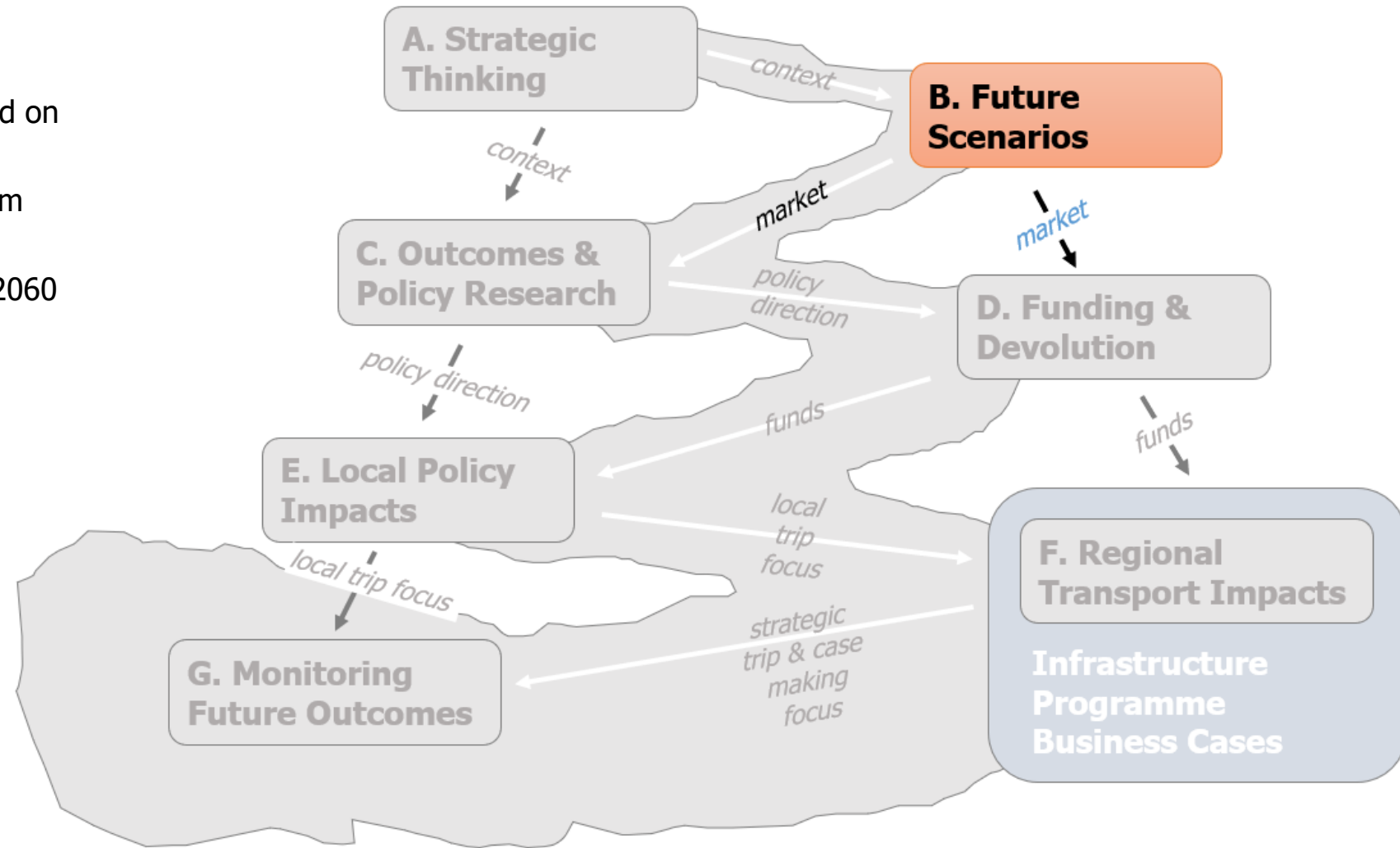
# Strategic Thinking

- Undertake scenario planning, megatrends review, etc.
- Understand direction of new Govt strategies & policies
- Understand local Govt plans
- Understand economic clusters & growth corridors
- Define key future drivers of change & likely policy levers available
- Develop strategic & economic narratives
- Develop an outcome-based vision & measurable strategic objectives



# Future Scenarios

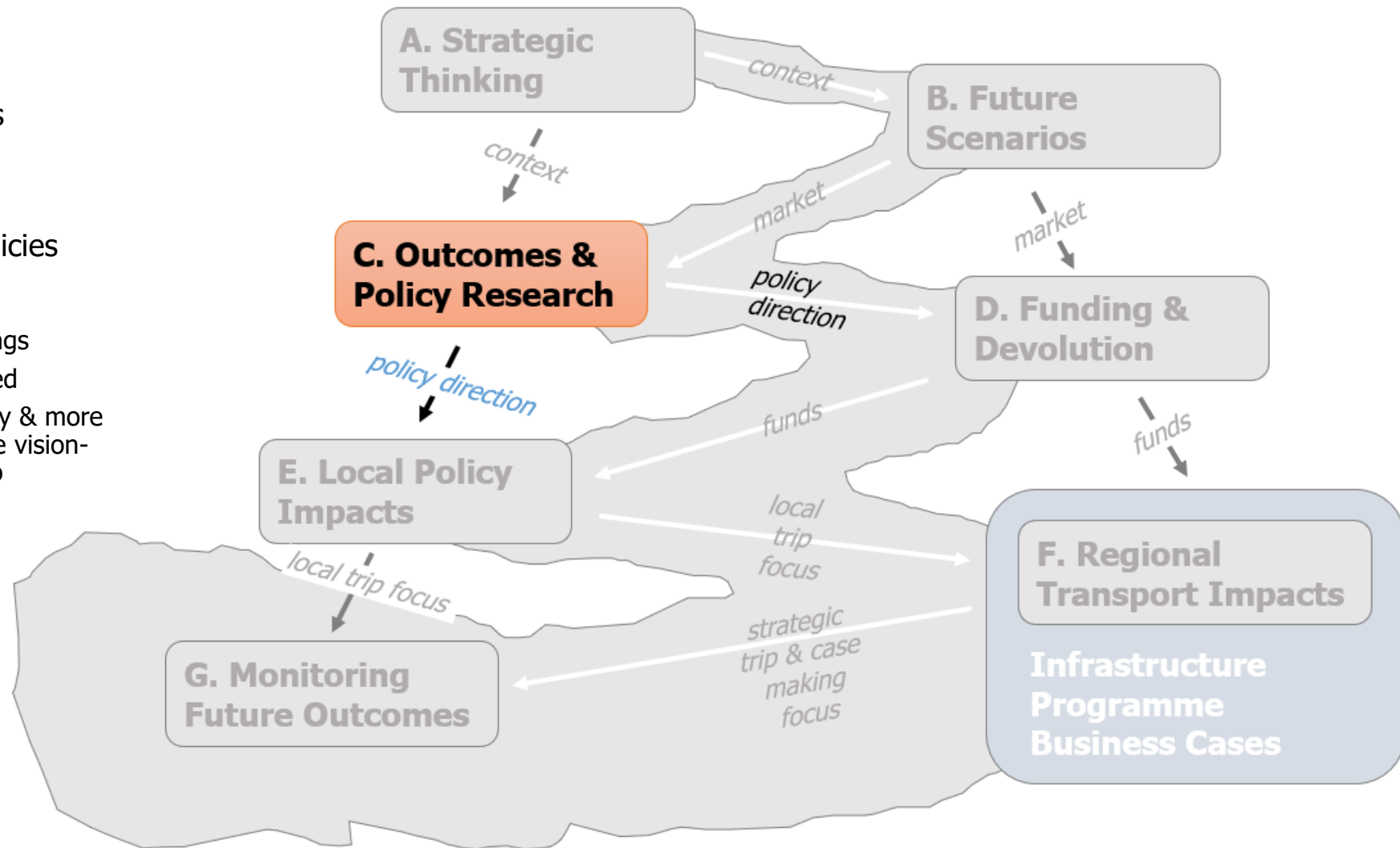
- Travel market is a derived demand based on the drivers of change
- Developed working from right to left from 2060→2050→2040→2030
- Assume outcomes achieved by 2050 & 2060
- **Business-as-usual (BAU)** = most treasury compliant
  - 'Vanilla' future
  - Off-the-shelf data
  - Less chance of outcomes by 2050
  - 2030 & 2040 more certain
- **Preferred way forwards (PWF)** = best chance of hitting the vision
  - Vision-led policy lever settings & pathways
  - Innovate to zero by around 2050
  - 2030 & 2040 harder to define



# Outcomes & Policy Research

- Understand how transport improves
  - Public outcome priorities
  - Business outcome priorities
- Research new Govt strategies & policies
- Update policy lever settings
  - Start from 2050 & 2060 settings
  - Assume vision will be delivered
  - But difficult to define the early & more transformational stages of the vision-led pathways in PWF scenario
- If too many uncertain policy lever settings in 2030 & 2040
  - **'Chicken & egg' conundrum!**

**Hype Cycle  
Alert!**

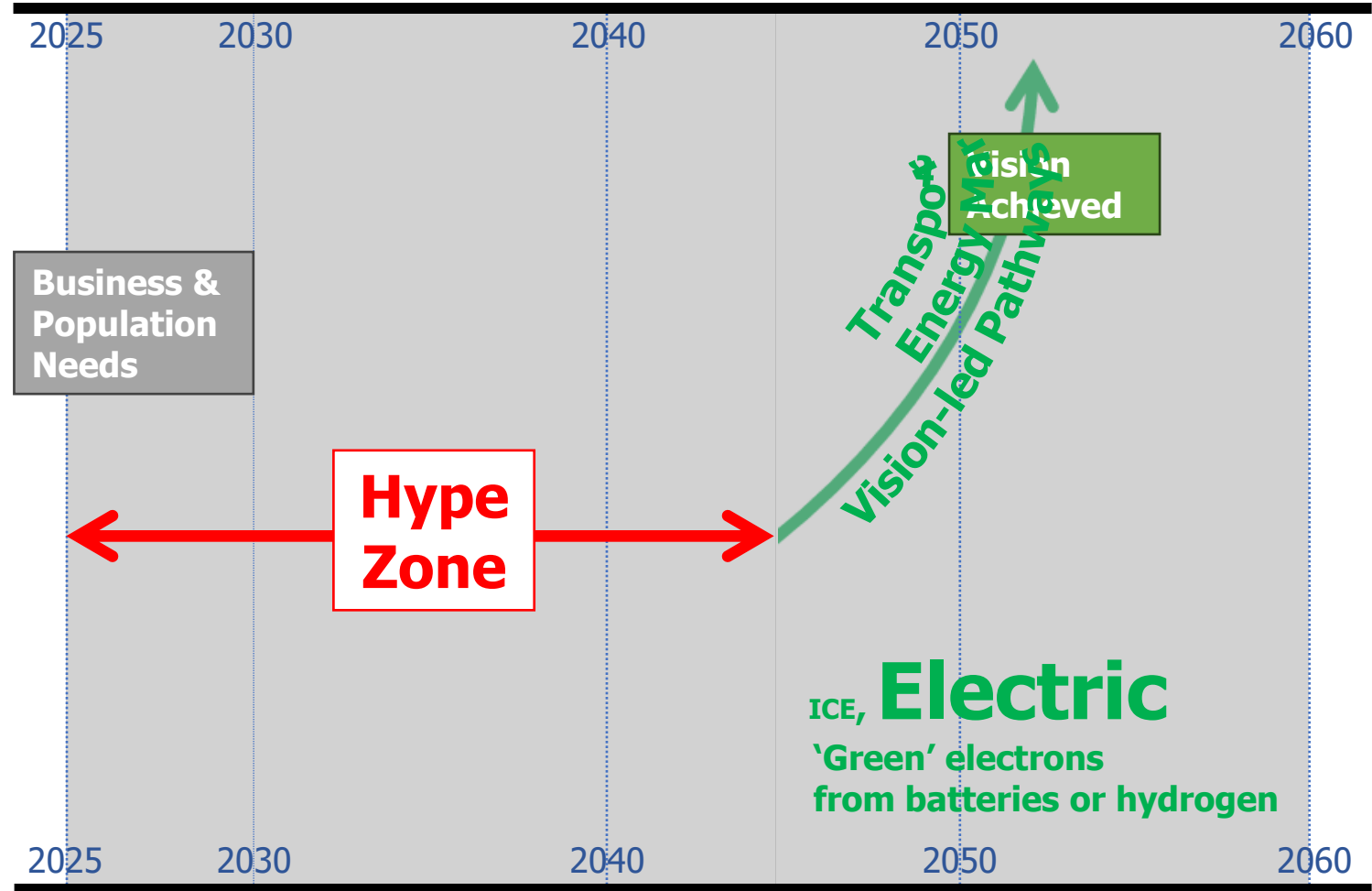


# Right to Left Planning

- **Is policy getting too far ahead of the market?**
- Still need a vision-led 'guiding star'
- Better understanding business & population needs
  - Drive more market certainty
  - Don't try to shape the market
  - But serve the market with better choices
- Try to make charging & refuelling 'invisible' to operations 'back-at-base'
  - Understand hourly dwell times
  - Assume technology matches dwell times
  - Define 2050 & 2060 energy demand
  - **Attract more investors**
- Plan 2050 local, regional & national hub network for public charging & refuelling

Transport User Energy Demand  
End Point

← Right to Left Thinking  
**Strategic Planning**

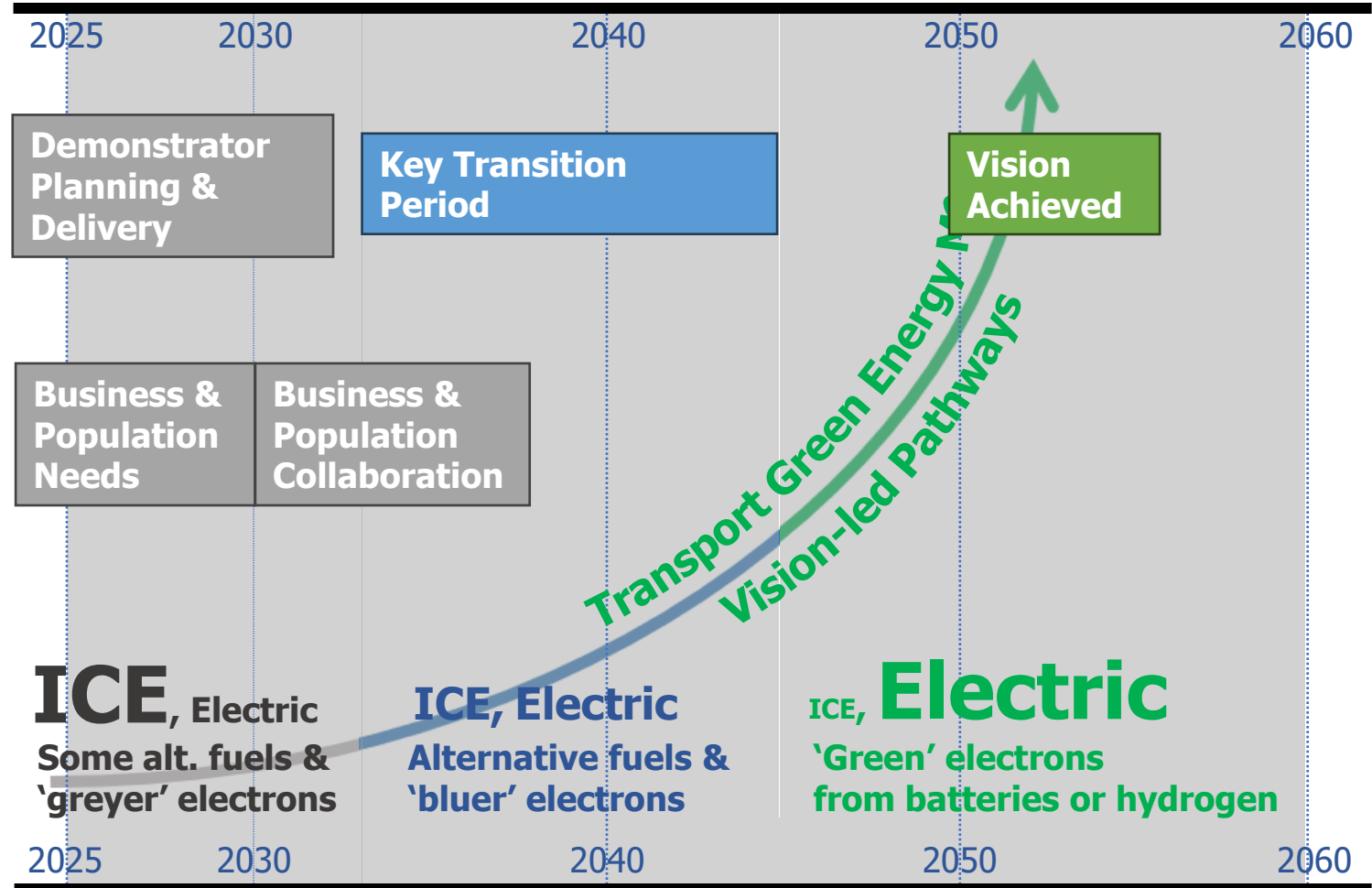


**NOT TO SCALE**

# Left to Right Delivery

- **Create the 'chick' in the chicken & egg conundrum**
- Separate energy supply from end user demand centred around the electron (e.g. ZEBRA buses)
- Support early wins for 'clean' economic growth (e.g. Lower Thames Crossing)
- Plan & deliver 'no regrets' charging & refuelling hubs as demonstrators (e.g. EM Freeport)
- Keep close to stakeholders
  - Monitor current & future technology & market readiness (price)
  - Improve market intelligence & certainty
  - Serve the evolving market with better choices
  - **Attract more investors**
- Accelerate to final business cases & contracts to transition towards the vision (e.g. LEVI)
- Work cross-sector to ensure technology & 'bluer' & 'green' electrons will be ready (e.g. WISERR)

## Transport User Energy Demand Transition



**Delivery Planning**  
Left to Right Thinking →

**NOT TO SCALE**



# Infrastructure Investment

- Find new innovative blends of public & private finance within devolved Govt
- Work with local authorities to help plan great access to land, skills, services, customers & supply-chains
- Work cross-sector to make the case for the strategic infrastructure needed
  - Transport
  - Energy
  - Digital
  - Water
- Monitor future outcomes to understand progress & work with partners to adjust the vision-led pathways

