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## Real world intelligent charging for the mass market

Smart Urban Mobility Solutions

Session: *Keep charging on: fuelling the future – now!*

Thursday 11<sup>th</sup> May 2017

Liam Lidstone

**ETI10** | TEN YEARS  
OF INNOVATION  
2007 – 2017

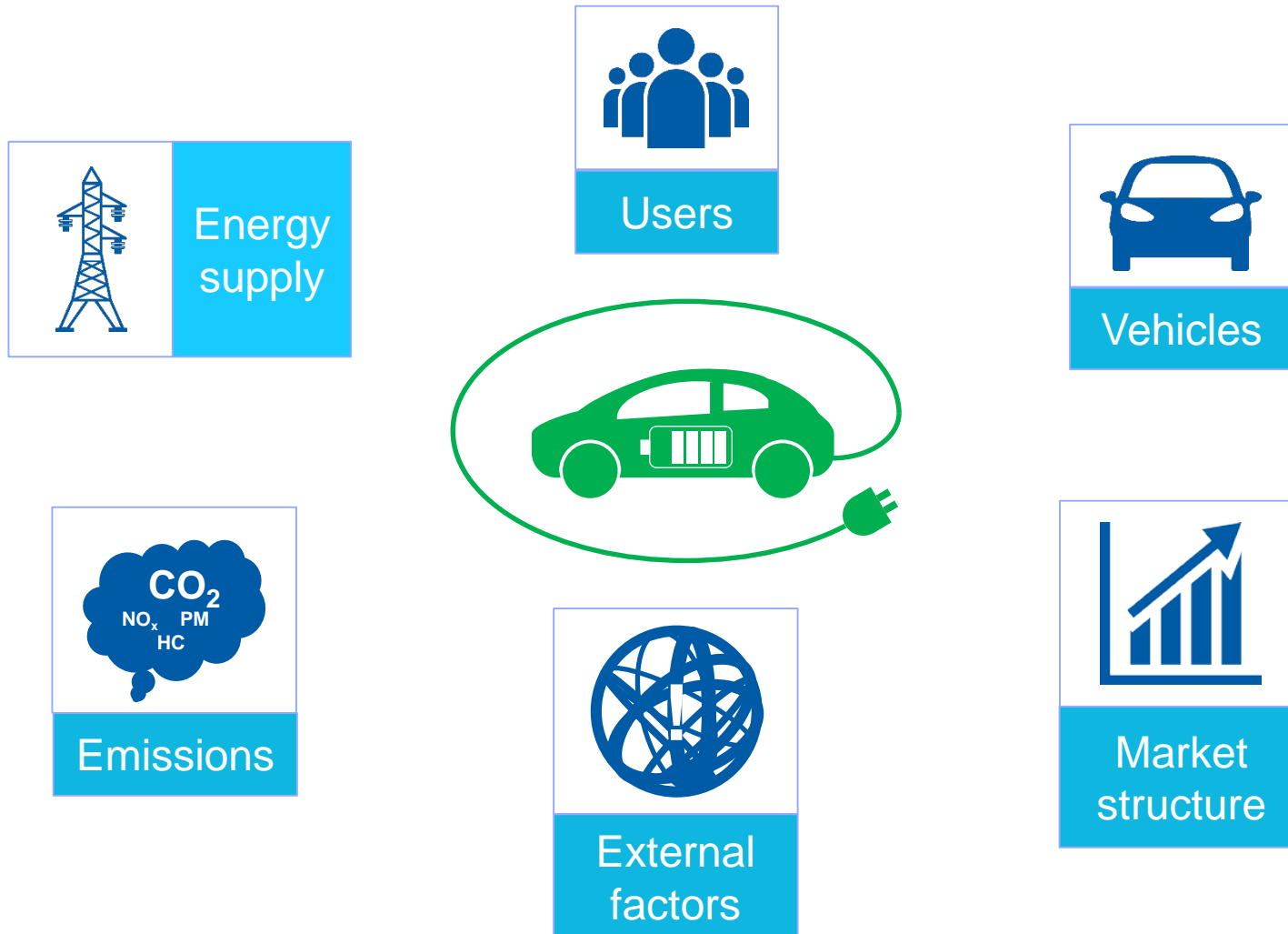
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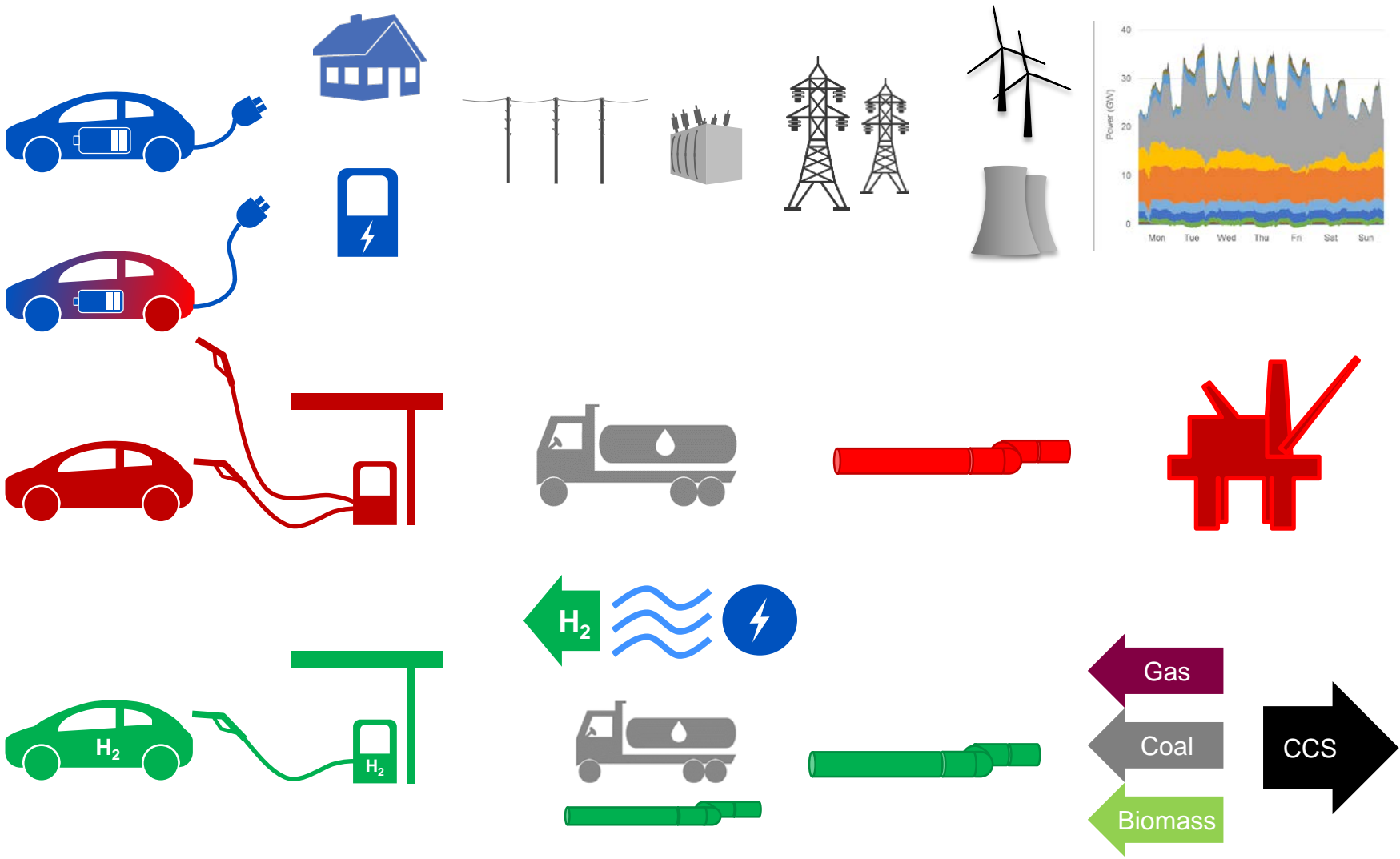
# Vehicle electrification





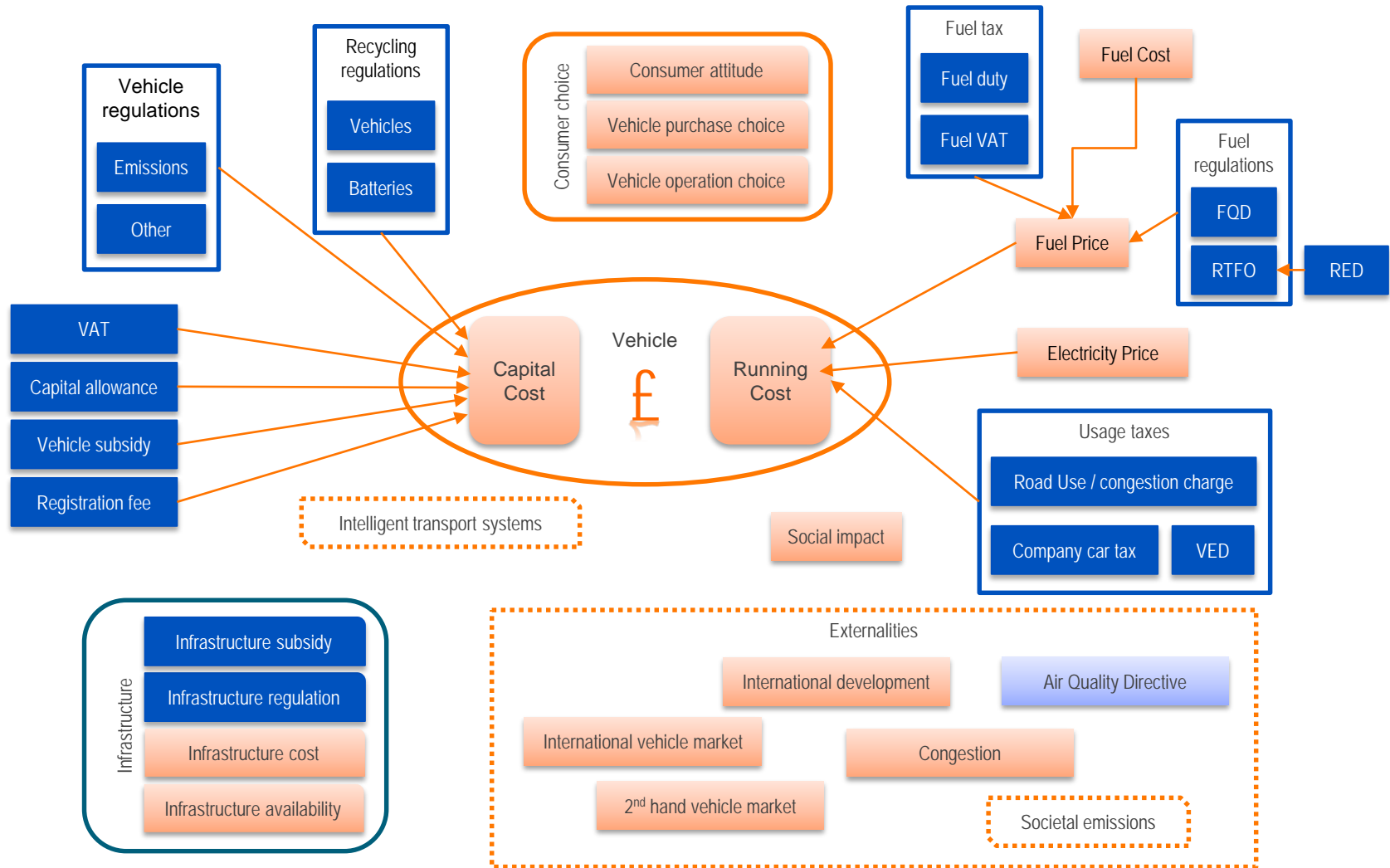


# Energy supply



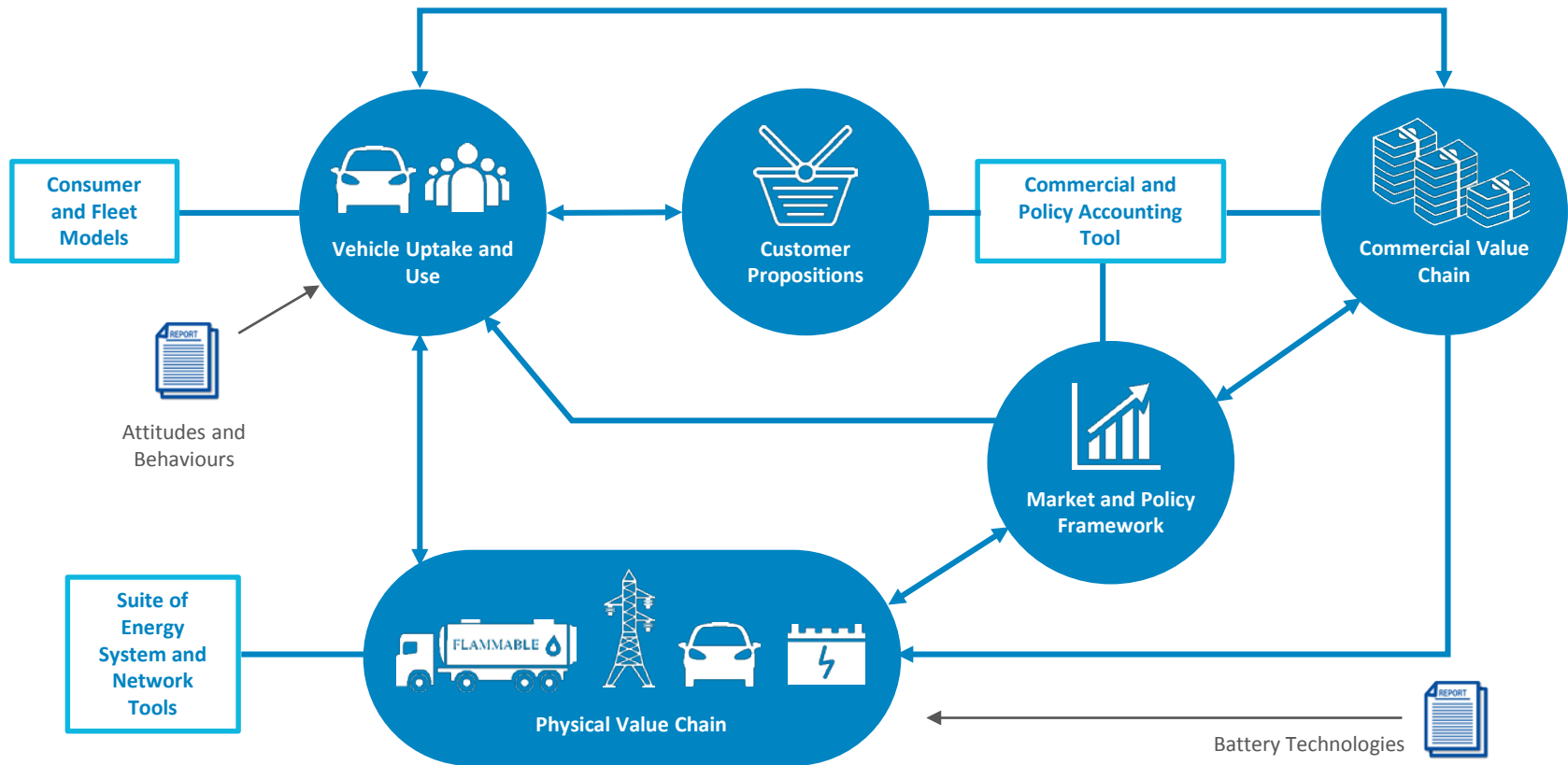


# Market, regulatory and policy factors





# Analysis capability

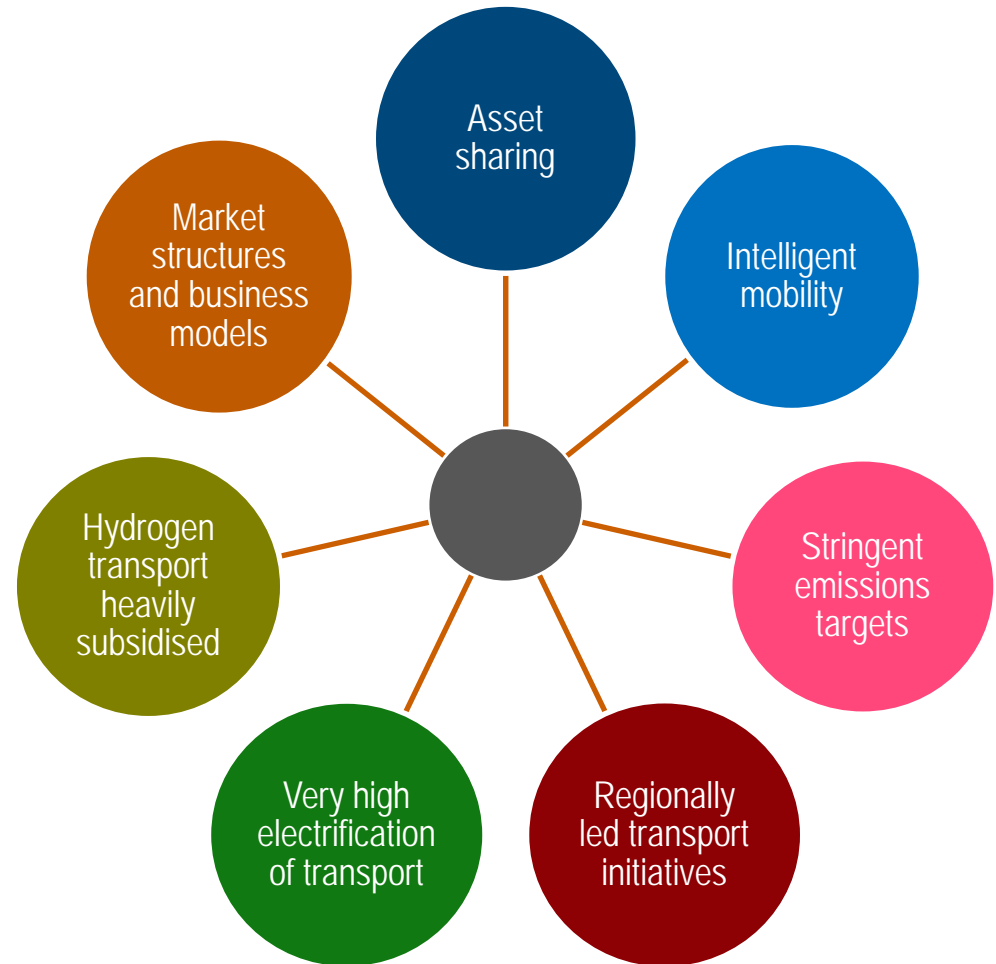


A combined set of modelling tools have been developed to provide an **integrated, holistic** means of quantifying and qualitatively assessing the impacts on and from *infrastructure, consumers, vehicle uptake and use, policy measures and commercial models* across the system



## Accounting for trends and developments elsewhere

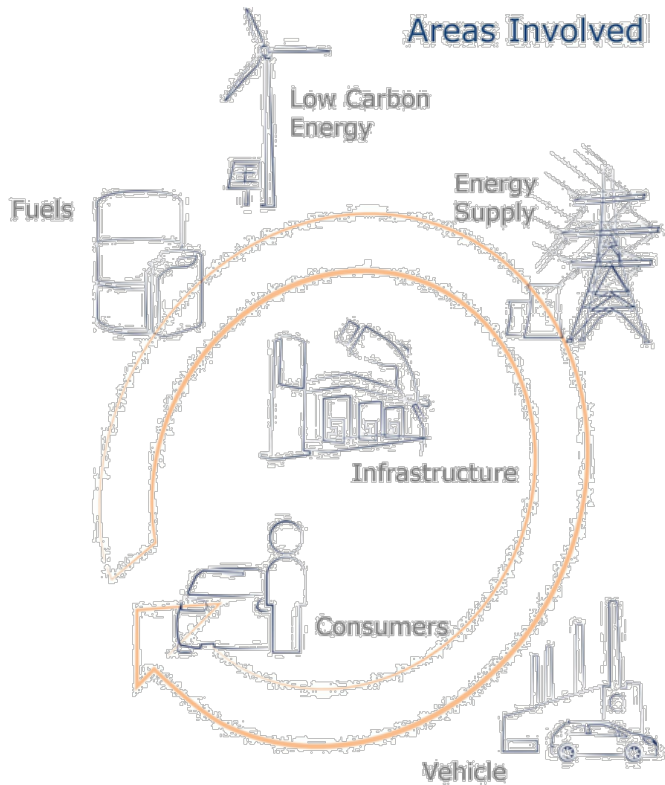
- Various “narratives” (scenarios) defined to describe aspects of possible future environments for **ultra low emission vehicle (ULEV)** deployment and use.
- These are used to “stress test” the effectiveness and robustness of solutions in different futures.
- Each narrative is designed to be self-consistent in how it represents key aspects of the:
  - customer proposition,
  - market & policy framework,
  - physical value chain, and
  - commercial value chain.







# CVEI project overview



- **£5m, 2.5 year project** to address the challenges involved in transitioning to a secure and sustainable low carbon vehicle fleet
- Aims to understand changes to market structures and energy supply systems to support high deployment of plug-in vehicles, the technical implications of any changes and how people might respond to them
- It will examine how tighter *integration* of vehicles with the energy supply system can benefit:
  - vehicle users
  - vehicle manufacturers
  - organisations throughout the energy supply chain
- The outputs will be available to:
  - help inform UK and European government policy
  - help shape energy and automotive industry products





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