

A System Operator View on Transport

Cathy McClay

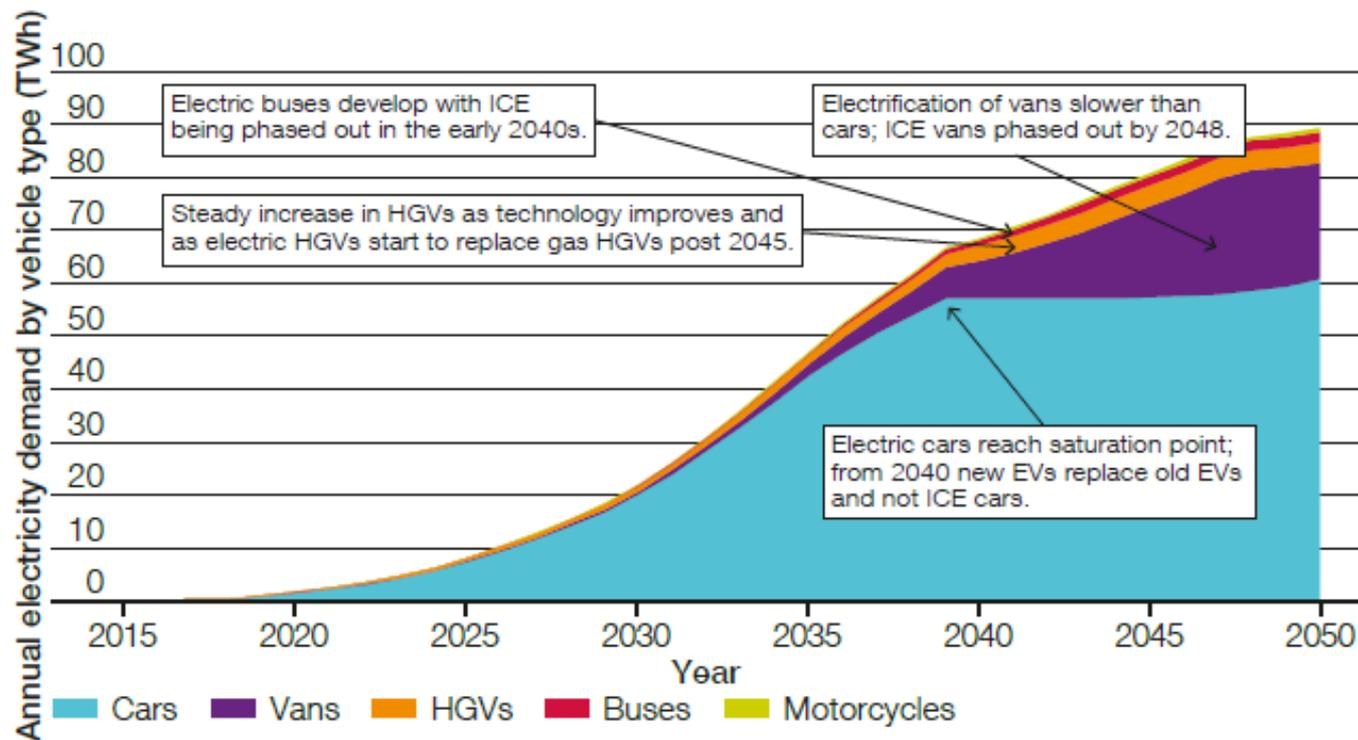
Head of Future Markets

The Future Energy Scenarios (FES) look at a range of credible future energy landscapes out to 2050

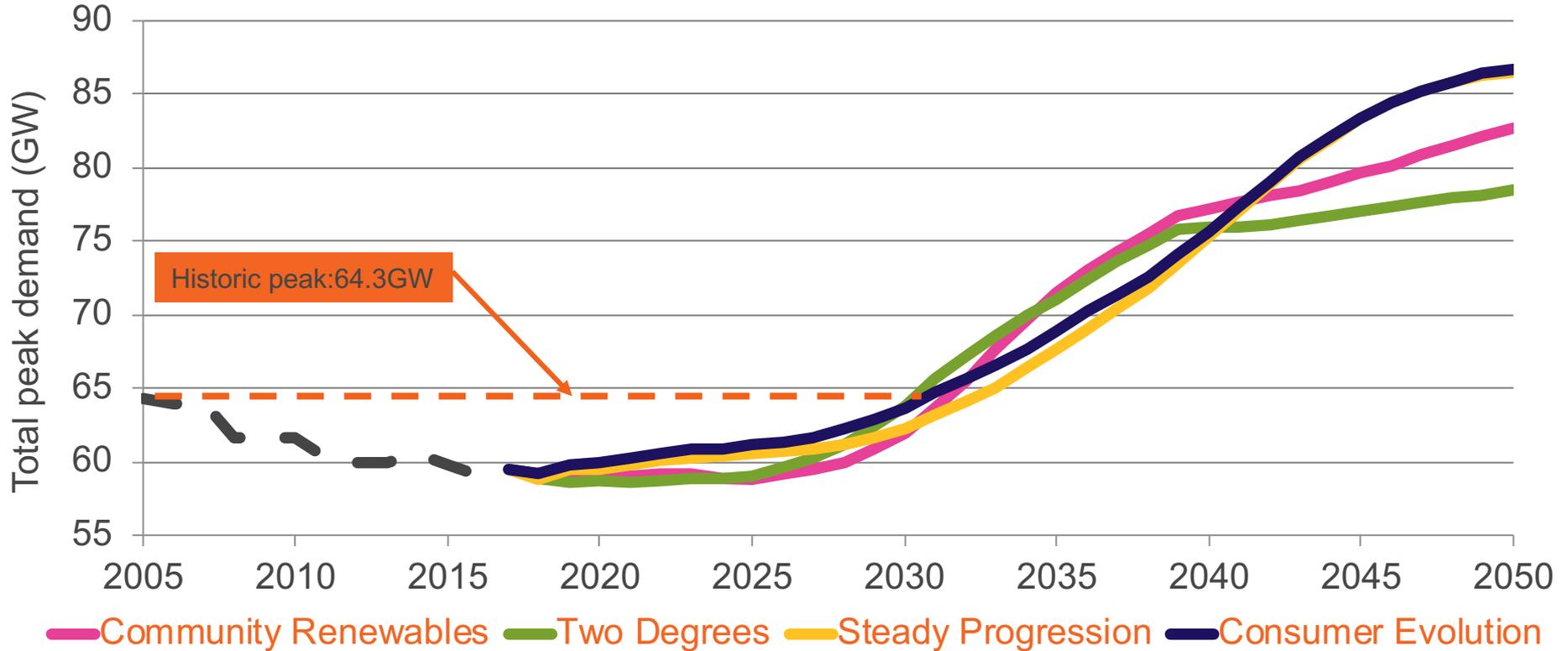
- The FES framework consists of four credible futures for the GB energy landscape
 - Developed on whole system basis
- For 2018, based on stakeholder feedback, the scenarios reflect levels of decentralisation and speed of decarbonisation
- Two scenarios Community Renewables and Two Degrees meet the UK's 2050 climate change targets



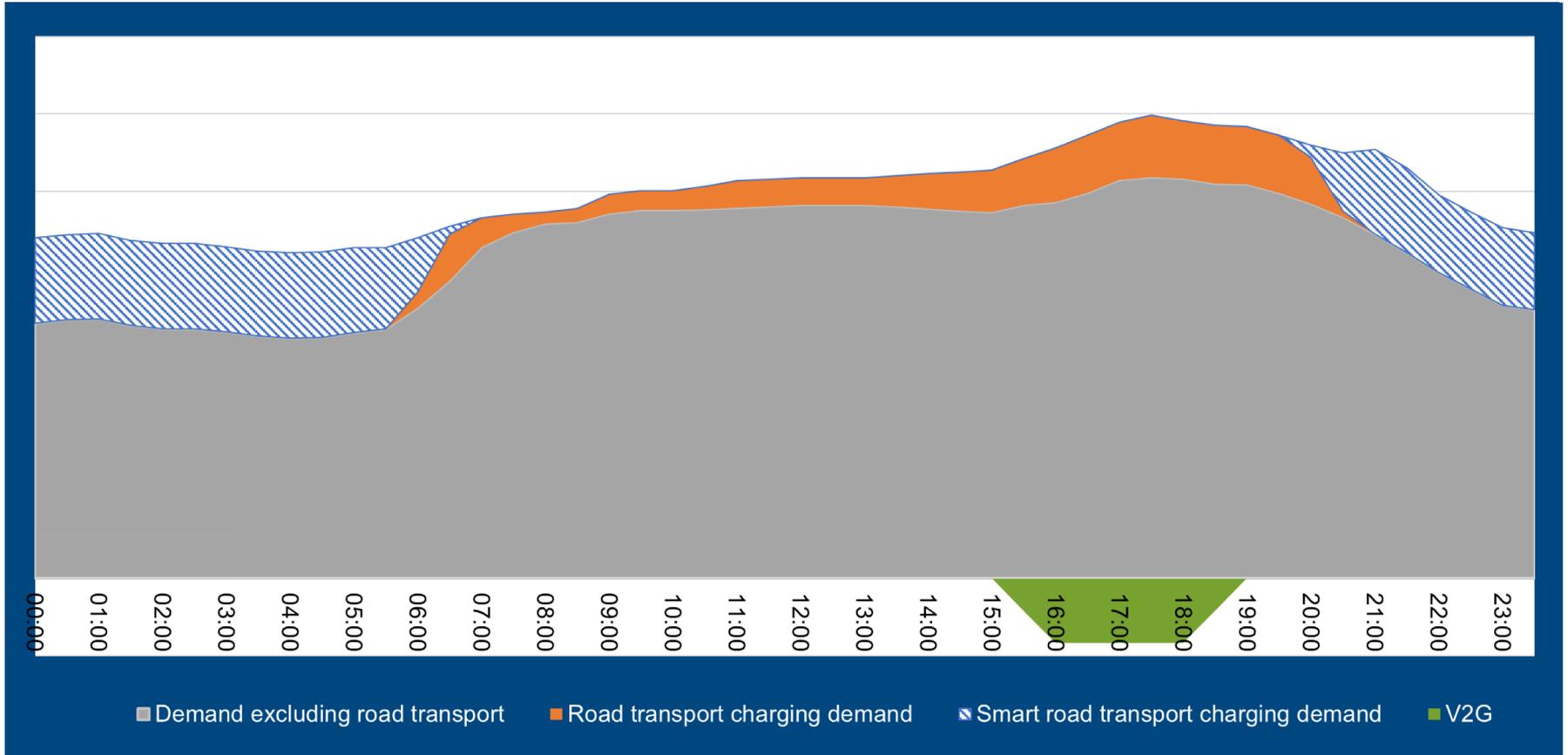
Potential View of Transport Electrification from FES



Total electricity peak demand



Smart integration is key to successful EV rollout



What is NG ESO doing to facilitate EVs?

EVs can play a greater role with smart integration with the energy system through:

- Smart charging to manage peaks
- Vehicle to grid to supply at peak
- Flexible demand to soak up excess renewable generation
- Other balancing services

Our approach:

- Planning for EV growth
- NGSO working with industry through EV Taskforce, Low Carbon Vehicle Partnership, Autonomous and Electric Vehicle Bill etc.
- Participation in Innovation projects (including V2G)
- Opening up balancing services market to smaller providers