Transport Energy Network

Workshop – 4th Feb 2021

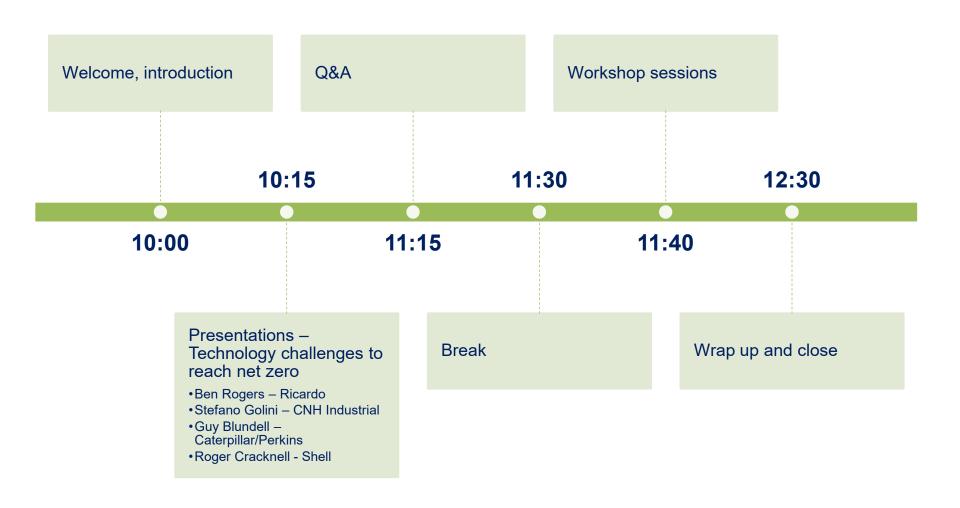
Philippa Oldham (APC)
Dr Penny Atkins (University of Brighton)
Gloria Esposito (LowCVP)
APC facilitators – Luke Bates, Ileana Lupsa, Jon Regnart, Bhavik Shah







Welcome to the Transport Energy Network workshop



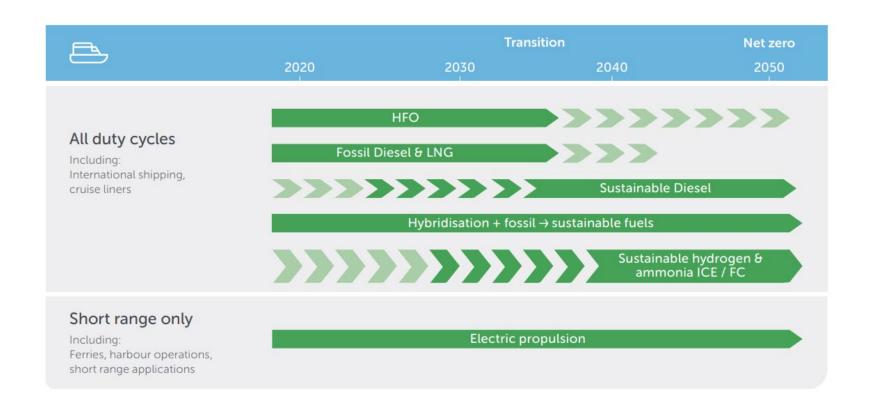
Introduction to the Transport Energy Network

- ■The Transport Energy Network was initiated to accelerate transport decarbonisation, supported by the Advanced Propulsion Centre, LowCVP and the University of Brighton.
 - The network addresses 2050 targets for Net-Zero GHG emissions
 - It considers different transport modes (on road, off highway, marine, rail and synergies with aerospace sector), looking at strengthening the UK supply chain
 - Network activities are designed to encourage collaboration between communities and provide evidence to support policy development in this area



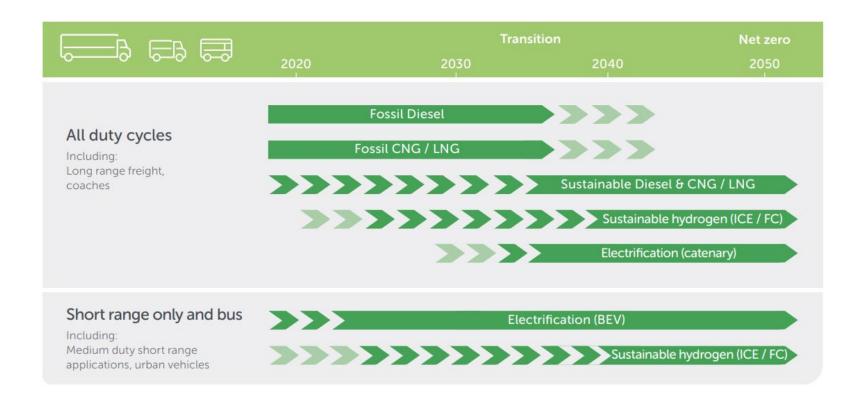
Our 2020 report showed pathways to net zero for different transport sectors

Maritime



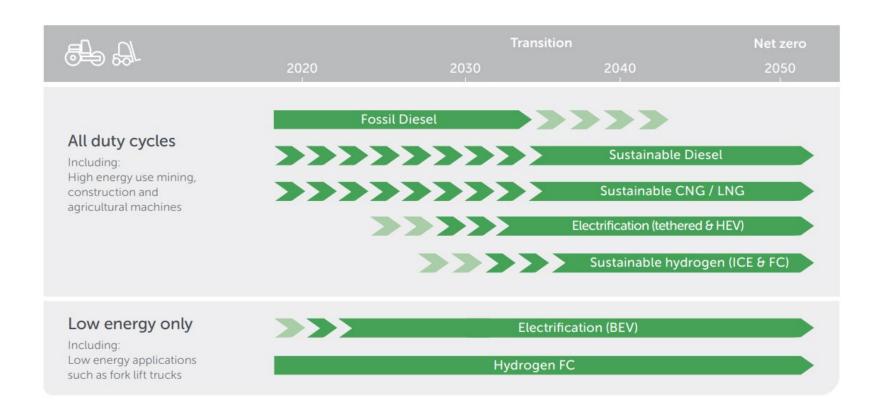
Technology to reduce carbon emissions depends on vehicle duty cycle

Heavy Duty Truck



The off highway sector has a very wide range of machines, leading to a range of different ways to decarbonise

Off highway



The report made recommendations for the R&D community, policy makers and the network

Conclusions

- There is no 'silver bullet' technology to decarbonise transport. Cross sector collaboration could accelerate progress
- Scale up and commercialisation of low carbon sustainable fuels is essential to reach net zero GHG emissions
- Adopting a lifecycle approach is key enabler to long term decarbonisation
- Decarbonising transport cost-effectively requires a shared vision

Recommendations

- Support for development and roll out of technologies to decarbonise transport should be technology agnostic; recognising the diversity of solutions that will be necessary
- Investigate potential for cross sector R&D activities and grow new collaborations
- A clear strategy is needed for the use of sustainable energy vectors, with a particular focus on supporting the quickest possible roll out of sustainable fuels to enable rapid decarbonisation.
- Adoption and harmonisation of lifecycle analysis and sustainability criteria will ensure genuine carbon reductions and avoid adverse environmental effects
- Stakeholder consultation is vital.

This workshop aims to gather views on R&D needed to support decarbonisation – with a cross sector focus

The workshop begins with presentations highlighting key R&D challenges across the sectors

Ben Rogers, Ricardo

Stefano Golini, CNH Industrial

Guy Blundell, Caterpillar Perkins

Roger Cracknell, Shell

Questions? Please add them to the chat or raise your hand

Workshop sessions aim to understand actions needed to reach net zero

- ■We'd like your input on these questions:
 - What will the transport landscape look like for the next 30 years?
 - What are the R&D needs to achieve this?
 - What funding and policy challenges are expected?
 - UK strengths and gaps in capability
 - Quick wins and priorities
- ■We'll split up into breakout groups
- ■MIRO collaboration tool will be used to gather input

MIRO is an online collaboration tool that APC has used successfully for online workshops

Miro Functionality

- Use the notes from the left hand tool bar or press N to add your Post It Notes - drag and drop where appropriate.
- You can adjust the size of your input using one of the white circles in the corner of the surrounding blue selection box.
- Use the speech bubble from the left hand tool bar to add your own comments or press C over others Post-Its
- Drag and move things around where you feel is relevant and fits, be respectful of other members input
- When following a facilitators screen using "Screen Share", please make sure Miro's mic and camera are switched off at all times. The buttons to do this are located towards the bottom of the screen.

Miro Etiquette

- Microsoft Teams will be used for audio
- When a facilitator is presenting, its easier to follow the presentation by clicking "Join" and following their screen
- To avoid interference, please mute your mic when you're not speaking
- We want to keep the discussion as free flowing as possible to encourage debate. However, if this becomes difficult over a conference call we'll implement a turn based system
- If you haven't created an account you will appear as a Guest Writer. If you are a guest, just make sure your initials are on each post-it note so we can identify who's said what.
- Templates have been locked to avoid them being inadvertently moved

You'll access MIRO through a link in the breakout room chat

Thank you for your input

- ■Our next steps are:
 - Consolidate workshop output
 - Targeted stakeholder consultation
 - Dissemination

Stay in touch <u>Transport Energy Network - APCUK</u>