

# Hydrogen energy for transport

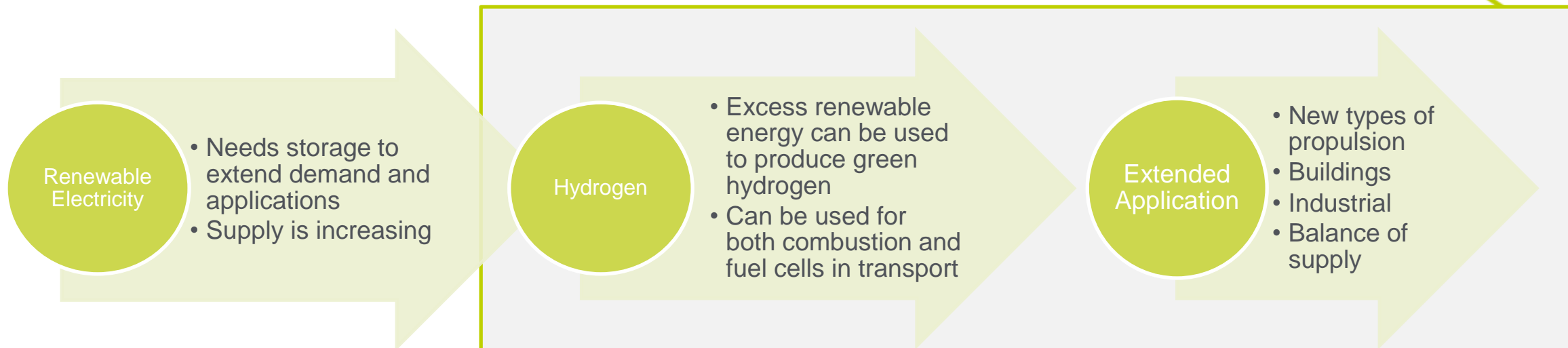
Advanced Propulsion Centre UK  
Journalist briefing

**Prepared by:**

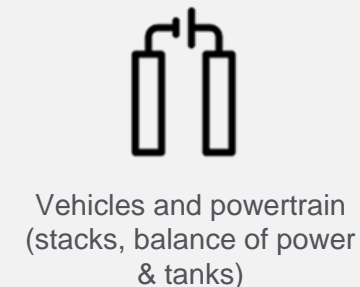
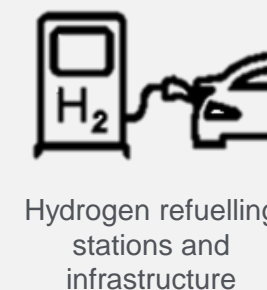
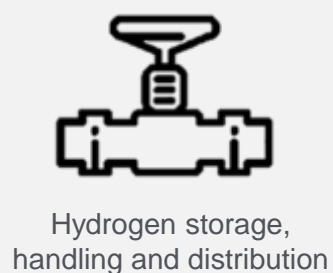
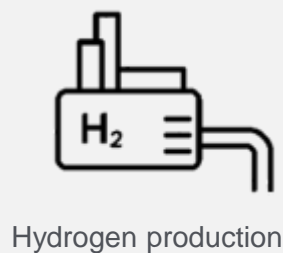
Bhavik Shah *Technology Trends Consultant (APC)*  
Clement Silverman *Stakeholder Engagement Lead (APC)*  
Rebecca Watson *Senior Public Relations Manager (APC)*

# Why does hydrogen make sense?

Harnessing renewable energy in a storable format for zero-carbon transport



## Four value streams in the transport hydrogen economy



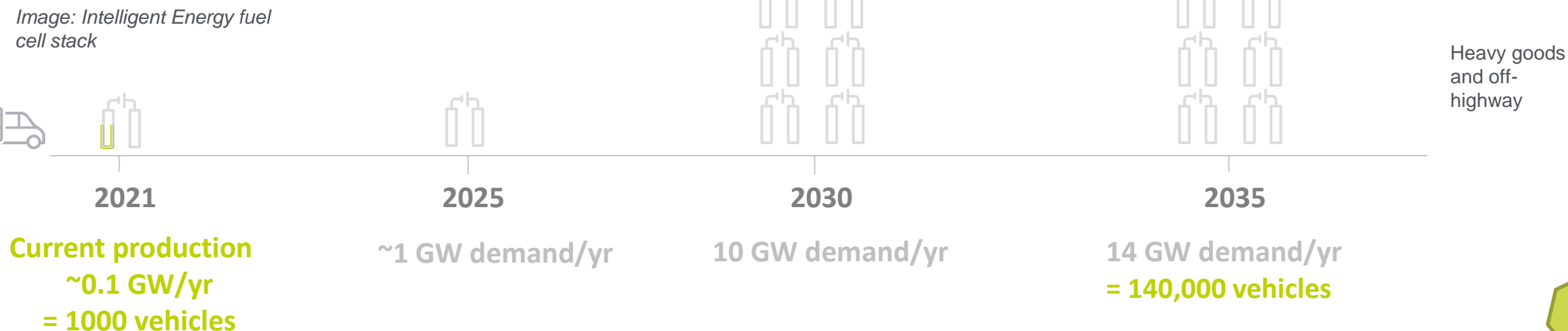
# Over 14 GW of fuel cell stacks needed by 2035 for cars and vans produced in the UK

Light duty vehicle demand is driven by large sports utility and vans, with additional demand from heavy duty and off-highway vehicles



The fuel cell stack is the heart of a fuel cell power system

Image: Intelligent Energy fuel cell stack



Over **400,000** hydrogen on-board tanks will be needed to meet the production demand of 140,000 fuel cell cars and vans in the UK



On-board carbon fibre hydrogen pressurised tank, valves and regulators



2025

25,000 light duty vehicle (LDV) tanks/yr



2030

263,000 LDV tanks/yr



2035

408,000 LDV tanks/yr  
= **140,000 vehicles**

+



Heavy goods and off-highway



ADVANCED  
PROPULSION  
CENTRE UK

Accelerating  
Progress