

SHELL CATALYSTS & TECHNOLOGIES
TRANSFORMING ENERGY TOGETHER



Accelerating a Sustainable Recovery

Hydrogen Technologies

Make Every Molecule Matter

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Today's agenda

⁰¹ Accelerating a Sustainable Recovery: Hydrogen Technologies

- Implications of COVID-19 for the hydrogen economy
- H₂: Rapidly-growing government support
- Hydrogen production technologies now
- Hydrogen in the future energy system

⁰² Hydrogen Sustainable Recovery Panel

⁰³ Live Q&A with Our Panelists



Host



Nick Flinn

GM Decarbonisation
Shell Catalysts & Technologies

Panelists



Andy Gosse

President
Shell Catalysts & Technologies



Paul Bogers

VP Hydrogen
Shell



Yunji Xu

GM Hydrogen
Shell

Implications of COVID-19 for the hydrogen economy



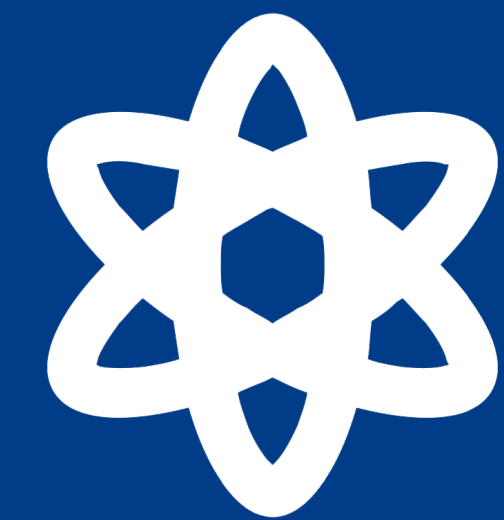
Increased emphasis on cash preservation



Disrupted R&D operations



Impacted global supply chains



Influenced adoption of hydrogen incentives by some governments

Shell sees great potential for the use of hydrogen in a range of sectors, from transport to industry. As governments, businesses and energy consumers continue to align on the need for net-zero emissions in the future, support for hydrogen is gathering pace.

Learn more: [Shell's hydrogen mission on Shell.com](https://www.shell.com/energy-and-chemicals/our-businesses/catalysts-technologies/hydrogen)

H₂: Rapidly-growing government support

Challenge: To support cost reduction and the matching of hydrogen supply with demand, immediate supportive policy is needed to enable investment.



Canada

2050 Target: 30% of energy

C\$1.5 billion low-carbon fuel fund

Chile

Long-term Green Hydrogen Strategy

5 GW by 2025

Australia

National Hydrogen Strategy (2019)

57 actions with AUD 370 million funding package

Germany

5 GW by 2030

€9 billion hydrogen stimulus

Japan

2017: Basic Hydrogen Strategy

2019: Renewed Strategic Roadmap for H₂ and Fuel Cells

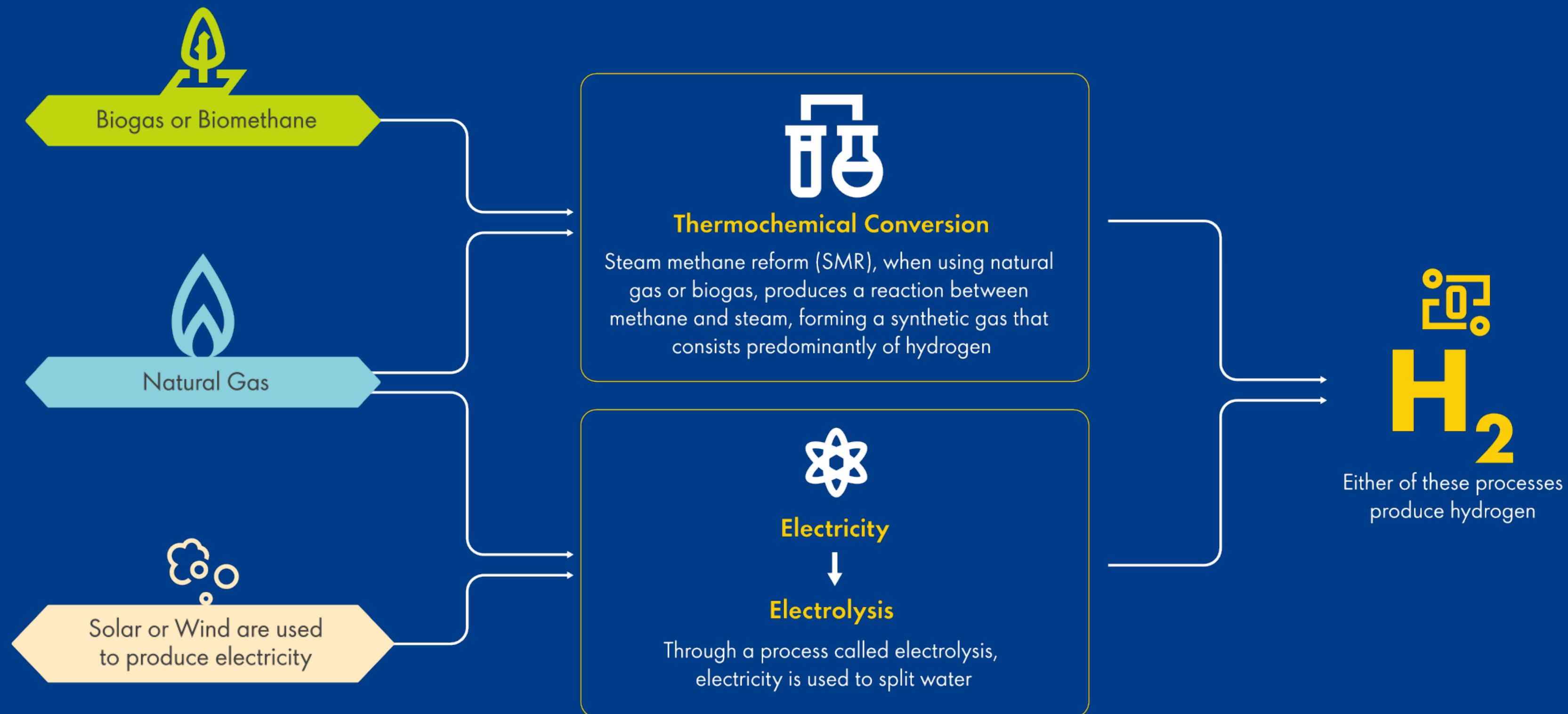
Target: 800,000 FCEVs by 2030

Hydrogen production technologies now

Primary Energy Source

Conversion

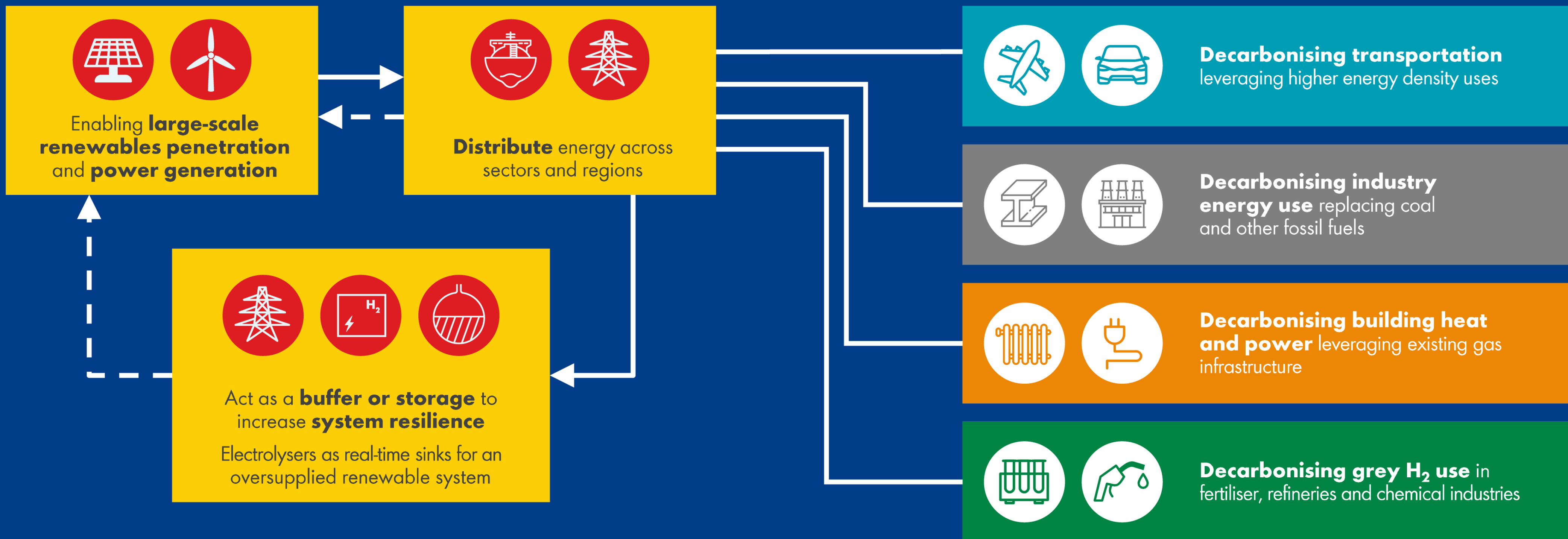
Final Energy Carrier



Hydrogen in the future energy system

Enable deep renewables penetration,
distribution and system resilience

Decarbonise
hard-to-abate end-uses





02

Hydrogen Sustainable Recovery Panel



03

Live Q&A With our Panelists

Thank you for attending!

Accelerating a Sustainable Recovery: Hydrogen Technologies

Get involved by exploring the Make Every Molecule Matter initiative:

[Explore Now →](#)

Get in touch with blue hydrogen experts:

[Get Connected →](#)

