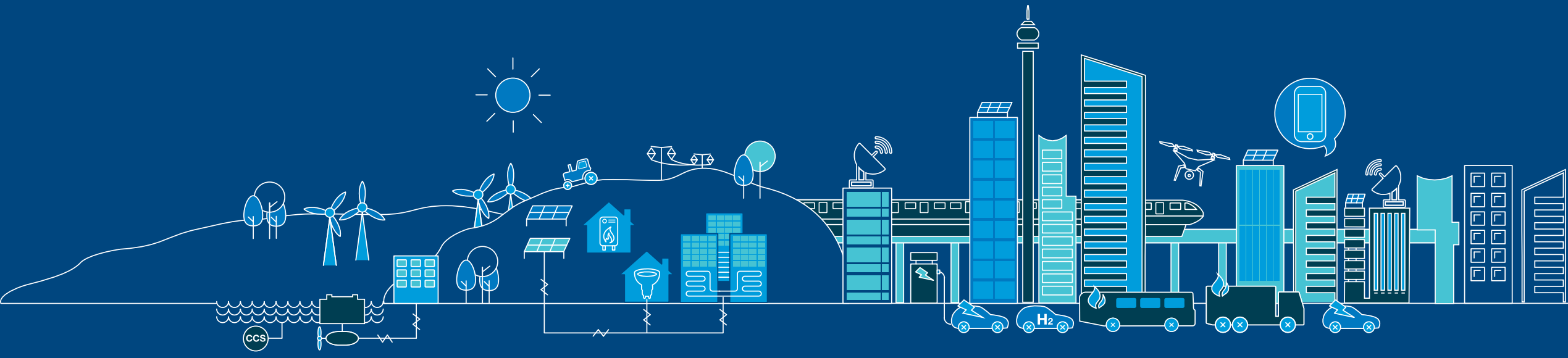




# Future Energy Scenarios 2017

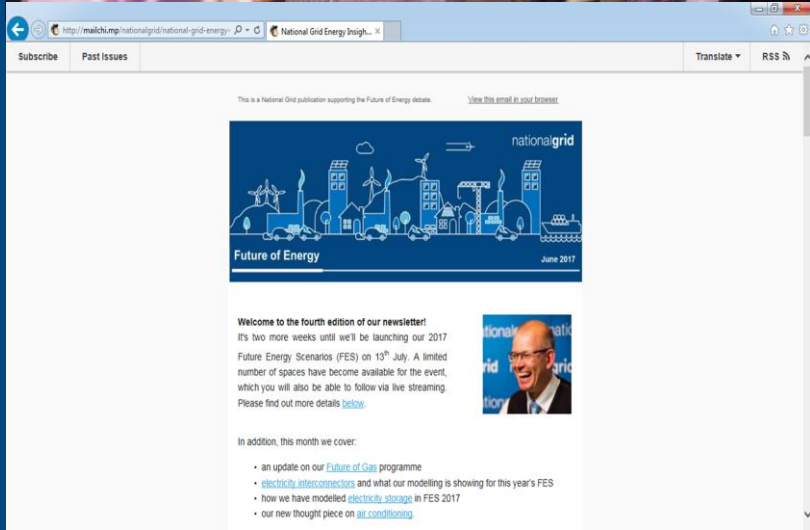
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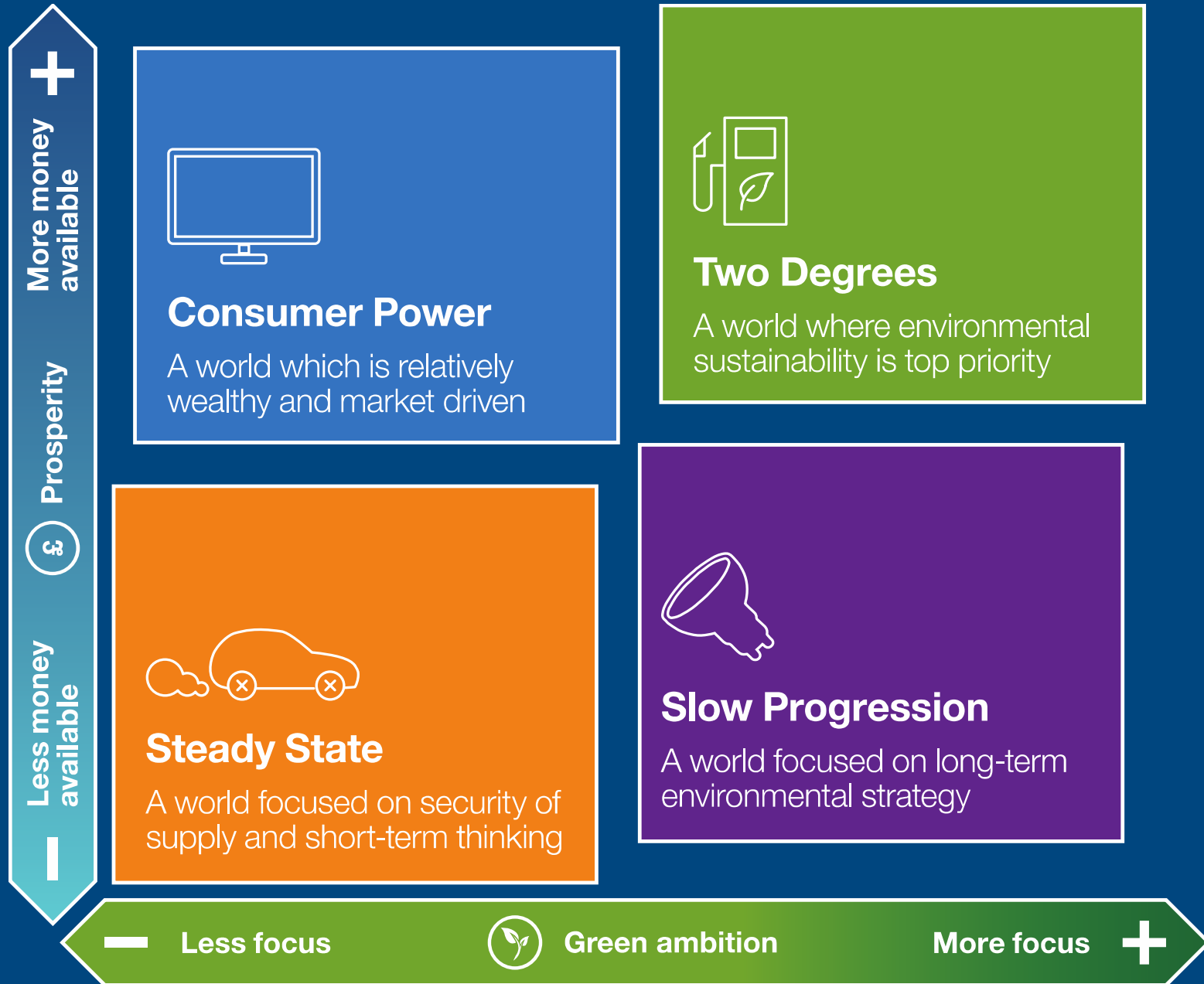
**Marcus Stewart**  
**Head of Energy Insights**





# Our Engagement





# Sensitivities



**Decarbonised  
Gas**



**Consumer  
Renewables**



**High EV**

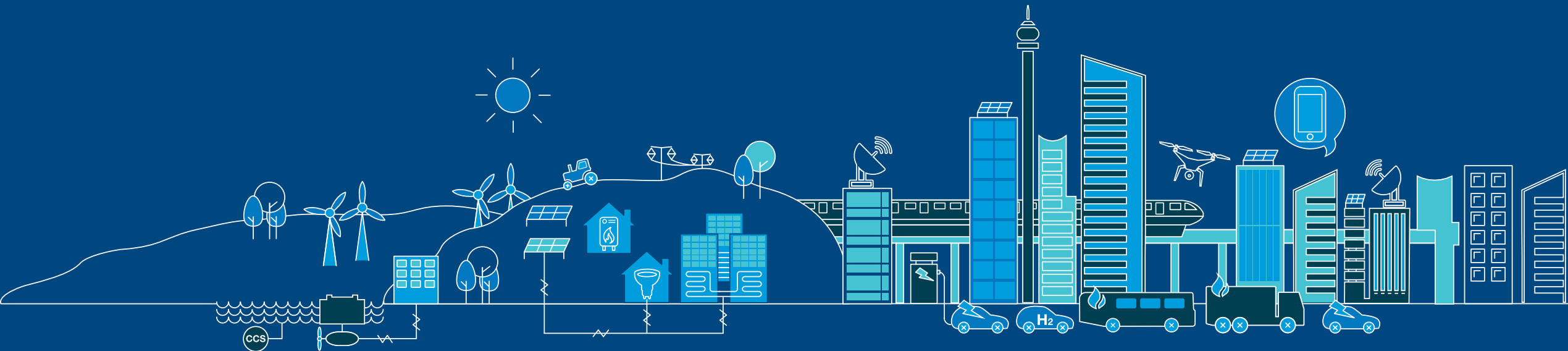


**High  
Electrification**

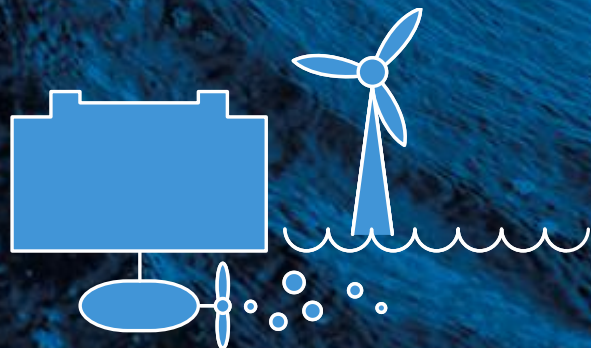


# Key messages

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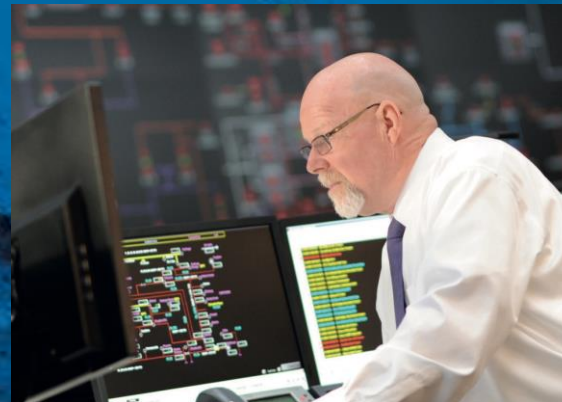
**1** An energy system with high levels of distributed and renewable generation has become a reality. This growth is set to continue, increasing the complexity of operating a secure and cost effective energy system.



**67GW**

Potential increase  
in distributed  
generation  
capacity by 2050.

**2** New technologies and evolving business models are rapidly transforming the energy sector. Market and regulatory arrangements need to adapt swiftly to support a flexible energy system with an increasing number of participants.



**6GW**

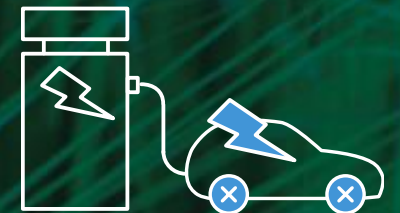
Potential amount  
of electricity  
storage by 2020.

**3** Electricity demand has the potential to increase significantly and the shape of demand will also change. This is driven initially by electric vehicles and later on by heat demand. It will require a range of solutions to deliver best value for consumers, including a coordinated approach across the whole system; investment in smart technologies, transmission and distribution infrastructure; and commercial approaches such as consumer behaviour change.



**9m**

Potential number  
of electric cars  
by 2030.





**4** Gas is critical to security of supply now and as Britain continues the transition to a low-carbon future. It will have a long-term role as a flexible, reliable and cost-effective energy source favoured by many consumers.



**Gas**  
Provides twice as much energy as electricity.



# Key messages

**1** An energy system with high levels of distributed and renewable generation has become a reality. This growth is set to continue, increasing the complexity of operating a secure and cost effective energy system.



**2** New technologies and evolving business models are rapidly transforming the energy sector. Market and regulatory arrangements need to adapt swiftly to support a flexible energy system with an increasing number of participants.



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**COMPLEX**

**ADAPT**

**CONSUMER**

**GAS**