



Welcome to our regional workshop

Sarah Williams – Director of Regulation

January/February 2021



Purpose of today

- **Connect with new and existing stakeholders and provide you with an update on what we've been doing over the last year**
- **Gather your valued input into how we can effectively build a sustainable future focusing on how we support the transition to net zero and the green recovery**

Introducing...

EQ Communications

- Who we are
- Zoom protocols
- Introductions

Agenda

Item	Time	Lead
Welcome & purpose	14:00- 14:10	Sarah Williams
Agenda and zoom protocols	14:10-14:15	James Garland
Presentation: Business update	14:15-14:30	Sarah Williams
Break out - Introductions	14:30-14:40	
Presentation: Transitioning to net zero and the green recovery	14:40-14:55	Chris Clarke
Discussion session	14:55-15:15	James Garland/Facilitator
Feedback session	15:15-15:20	Facilitators
Presentation: Focus on Hy Compact	15:20-15:30	Chris Clarke
Discussion	15:30-15:45	James Garland/Facilitator
Feedback session and voting	15:45-15:55	Facilitators
What's next and Close	15:55-16:00	SarahW/James Garland



Who we are and a business update

Sarah Williams
Director of Regulation

Wales & West Utilities – about us

- Supply gas to 2.5m homes and businesses
- Serve a population of 7.5m people across Wales and south west England
- Provide a 24/7 service, 365 days a year
- 11,000 new customers connected each year
- Respond to 70,000 gas emergencies every year
- Maintain 35,000km of gas pipes
- Invest £2m a week in the gas network
- More than 1,500 skilled and experienced colleagues



Keeping our customers, communities and colleagues safe



Our Safe and Warm fund has supported charities and organisations to help the most vulnerable

21



913 colleagues in Operations working to keep the gas flowing



74% of customers surveyed said they were comfortable with an engineer entering their homes

The majority of customers surveyed (including those shielding) in our qualitative in-depth survey were reassured that with appropriate PPE our pipe replacement work could go ahead safely

This has been a year like no other. In the face of a global pandemic, we've all had to deal with personal and professional challenges - that none of us could ever have dreamed of.

But whatever life throws at us, at Wales & West Utilities we know that our role is clear. Our priority remains to keep the gas flowing so our 7.5m customers and communities stay safe and warm.



Heated and powered **11** NHS Nightingale and Field Hospitals

329 Post Self isolation Wellbeing calls made to colleagues

- Weekly** wellbeing e-newsletter
- 24 hour** wellbeing helpline
- Regular wellbeing cafés



Maintaining momentum and high standards

7th

consecutive RoSPA Gold Awards and **winners** of the overall **Oil and Gas sector Award** for the 2nd year running

ISO 45001

Occupational Health & Safety Management standard, ISO 55001 - Asset management and ISO 14001 - Environmental Management System achieved

99%

of gas emergency call-outs attended within 1 hour over last regulatory period

Investors in People strategic review in June 2020

BS 18477

for Inclusive Service Provision maintained

75

Homes in a hybrid heating trial showed smart dual fuel technologies can deliver

Current capacity to supply **150,000** homes with green gas

With dual fuel hybrids; green gas goes 5 times further and could support 500K + homes

19

Biomethane plants connected to our network



We continue to meet all our regulatory and safety targets

Our sustainable plan at a glance

It's our ambition to help communities and the environment thrive by delivering reliable, affordable and sustainable energy that will help power a green recovery from Coronavirus and get the UK to Net Zero.



Sustainable

Our plan is aligned with the UN Sustainable Development Goals.



25,000 people

Helped us write our plan



Working in partnership

To respond to the climate emergency and improve the environment.



Zero emission fleet

By 2035, helping us become a Net Zero business by 2050



Net Zero a top priority

For our youngest customers.



A sustainable team

Investing in diversity and skills so we're ready for future challenges.



Green gas

1 in 4 homes heated by green gas by 2026



Biodiversity Net Gain

Helping us leave the environment we work in better than we found it.



80%

Of our waste will be reused or recycled by 2026.



Net Zero ready network by 2035

Ready to transport green gases like hydrogen and biomethane



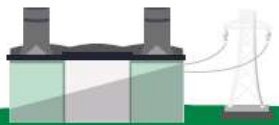
£400m

Invested between 2021-2026 not only to keep the gas flowing safely today but so our network is fit for the future.



Keeping bills flat

£133 a year to help families' budgets.



Getting to know you

Introductions

Electronic Voting

Slido.com
WWU2021



We pledge to deliver a
Net Zero ready gas network

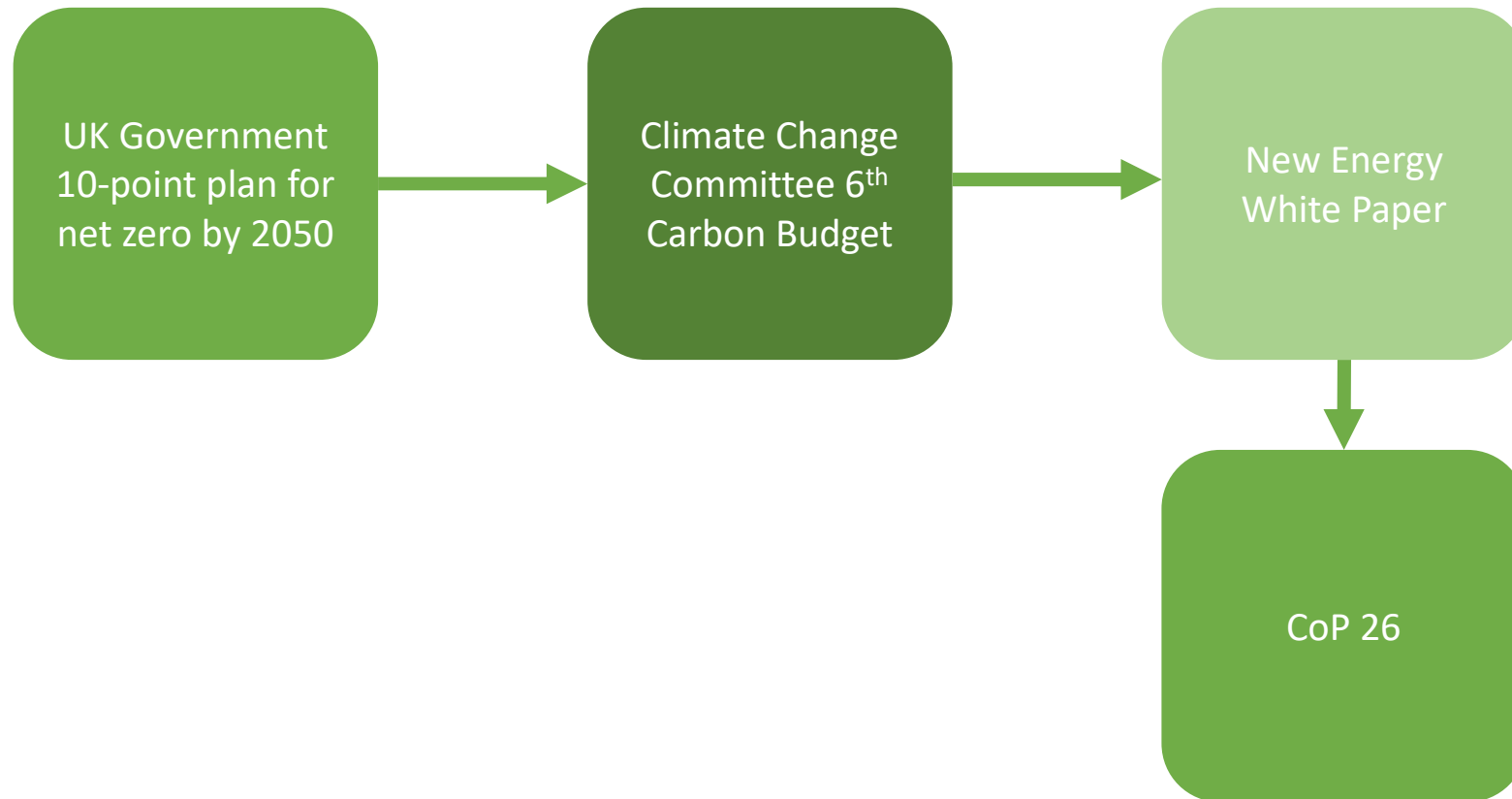
by 2035

Chris Clarke
Energy Strategy Director

Transition to net zero



Transition to net zero – context

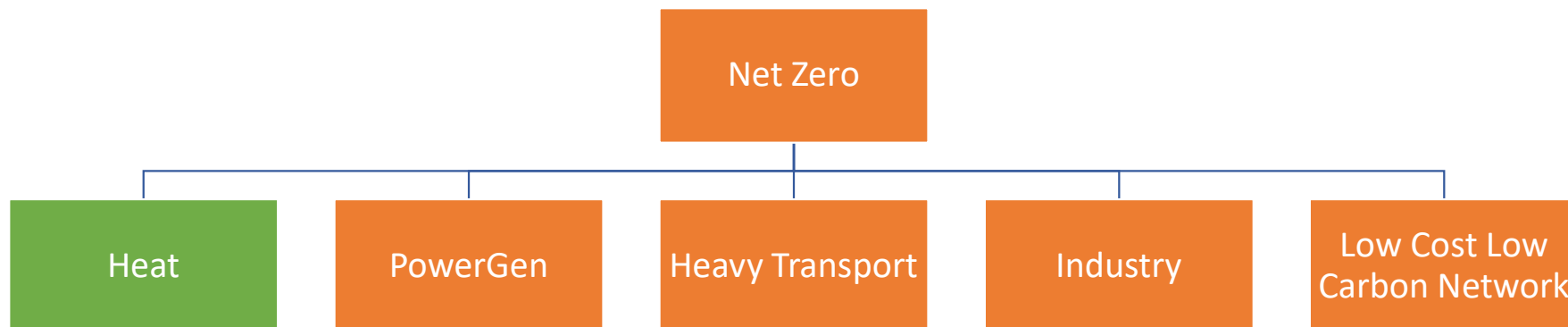


Net zero and the green recovery

- Important role for hydrogen
 - Commitment to hydrogen town by 2030
 - Industrial clusters
- Increase renewable generation
- Deployment of Carbon Capture Utilisation and Storage (CCUS)
- Increase proportion of biomethane in the grid
- Greener buildings including the establishment of a Future Homes Standard and larger role for heat pumps
- Zero emission vehicles

Transition to net zero - WWU

- WWU business plan proposed to be Net Zero Ready by 2035
- Zero carbon gas input already sufficient to feed 150,000 homes
- Hydrogen (green and blue) will need to play a key role as will biomethane
- Hybrid systems make green gas go further – one part green gas to four parts electricity



Heat in buildings

- Disruptive – dependent on the technology chosen
- Significant investment needed
 - Network
 - Generation
 - In the home
- Will cost consumers more
- Skills and labour shortfall – dependent on the technology chosen

Delivering the pathway to net zero

The Gas Goes Green programme:

- will deliver the world's first zero carbon gas grid – hydrogen and biomethane
- helps meet the UK's net zero carbon emissions target
- brings together the engineering expertise of Britain's five gas network companies
- engages with the wider energy industry, policymakers, and academics

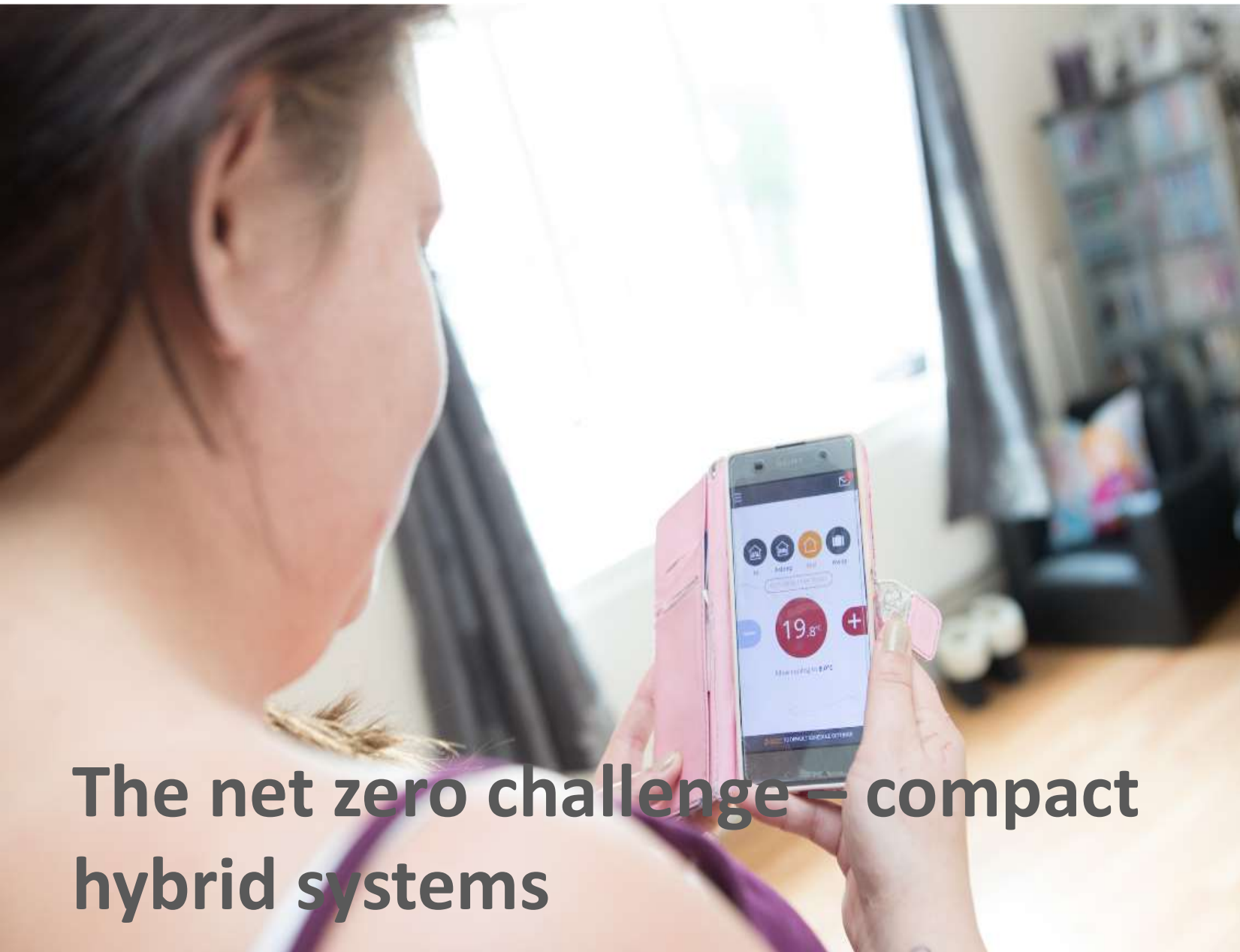


Discussion Session



Group Feedback





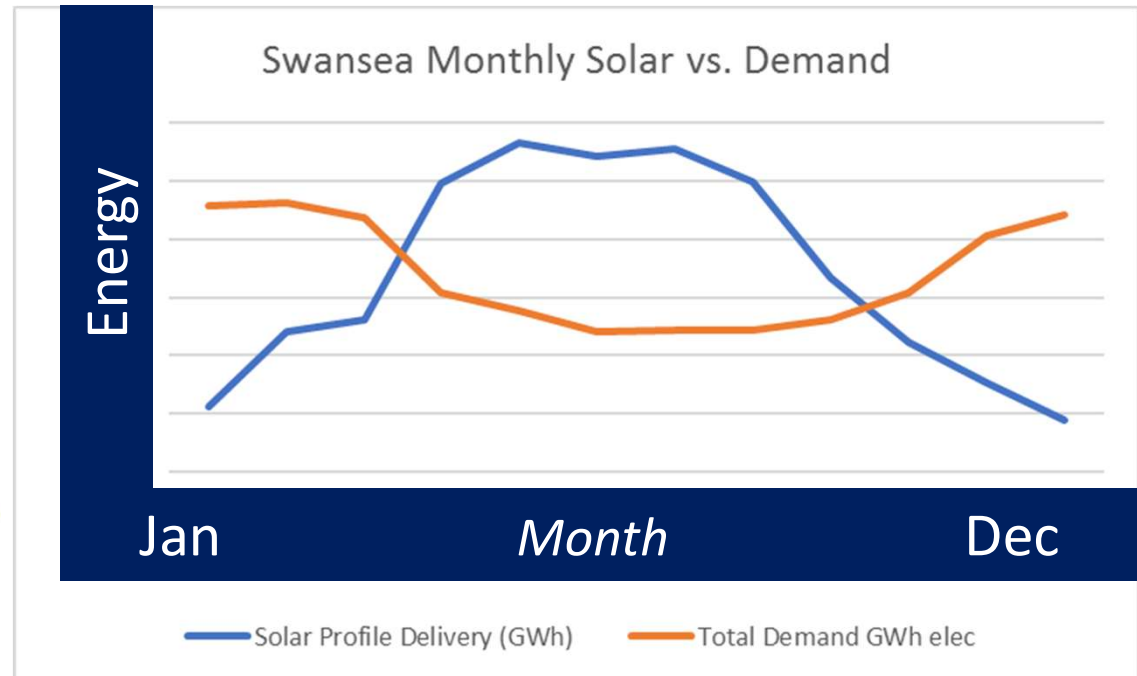
The net zero challenge – compact hybrid systems

Chris Clarke
Energy Strategy Director



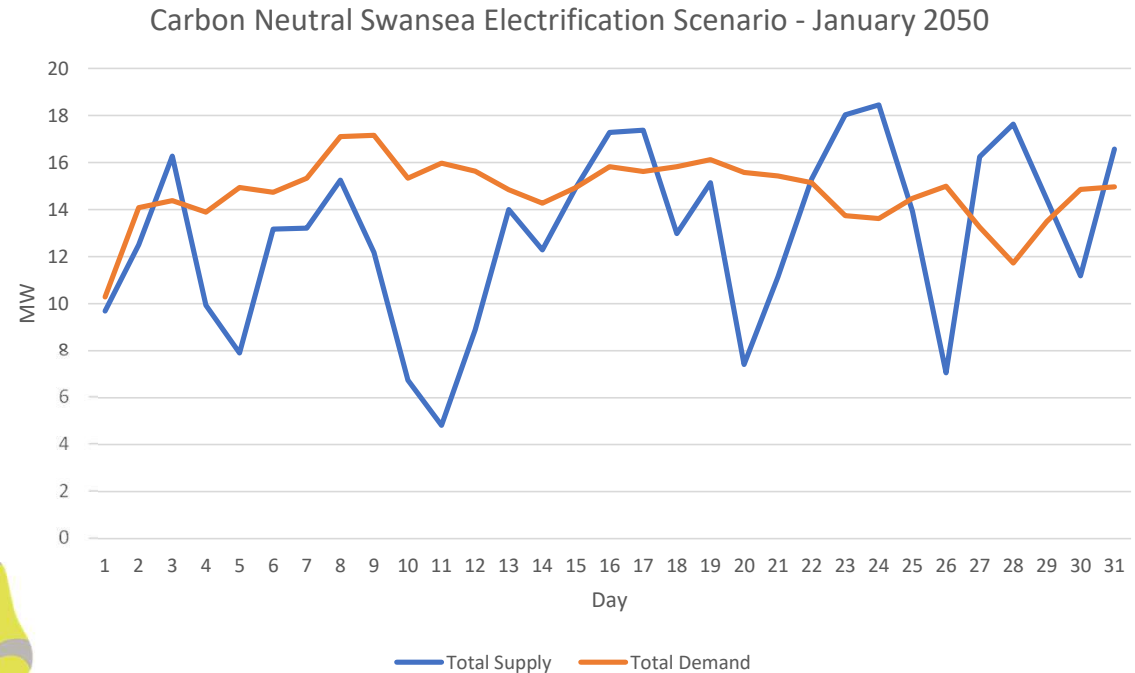
The heat challenge – Swansea case study

- Demand for heat is very seasonal
- Problem for renewable energy is meeting demand in the winter
- Hydrogen is an alternative



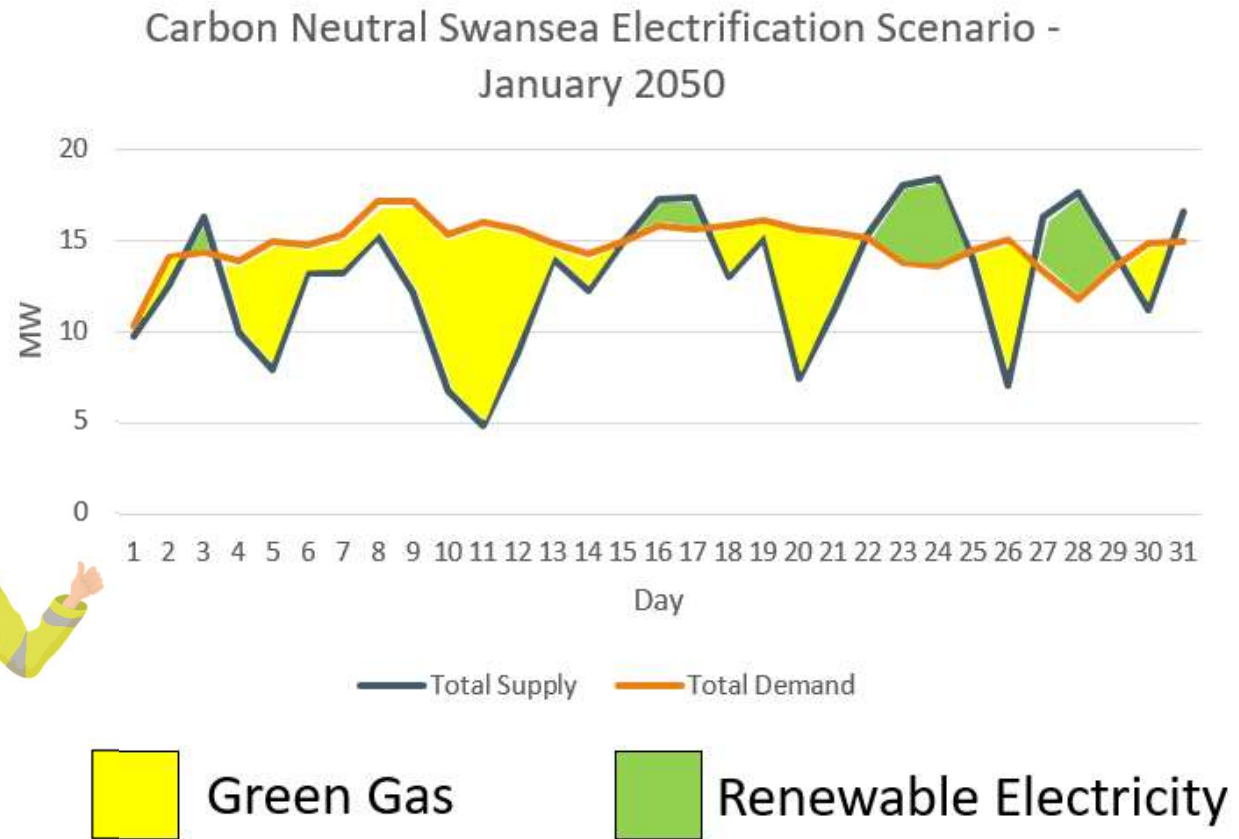
The generation challenge – Swansea case study

- **Example – Swansea 2050**
 - Tidal Lagoon
 - Wind and Solar
- **Still a gap between winter supply and demand**

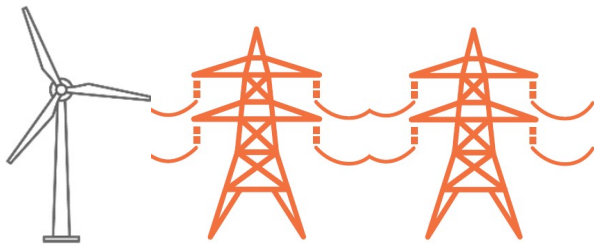


Hybrid Heating Systems

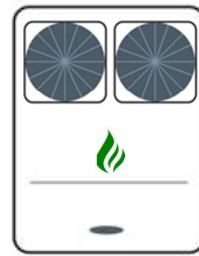
- Options to avoid a heat/power/transport cut
 - Storage
 - Modify demand
 - Build more supply
 - Hybrid Heating
- Hybrids use green gases to fill the gap
- Freedom Project – Electricity 80%: Gas 20%



How does a hybrid heating system work?



Uses renewable electricity when available and mild



Uses green gas when renewable electricity is not available or it is cold

Lowest Cost ✓ Least Disruption ✓ Easiest Action ✓ Earliest Carbon Reduction ✓ Overcomes Skills Challenge ✓

Smart HyCompact Project- What's it all about?

- Low cost hybrid boiler in one box
- Smart boiler modulation & condensing
- Overcomes retrofit skills challenge
- Faster emissions reduction
- Greater consumer acceptance



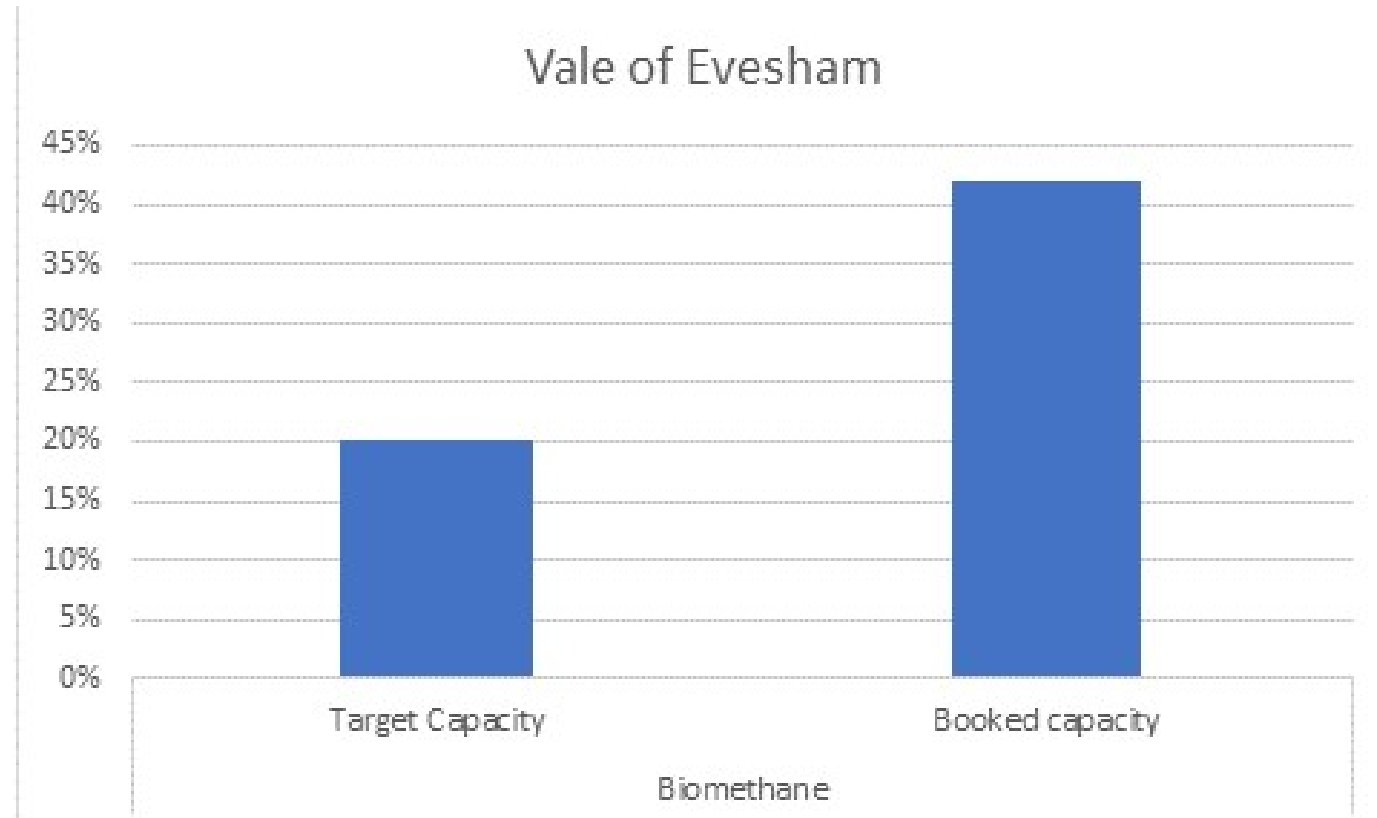
Main heating system options



	Nat Gas Boiler	Electric Heat Pump	Hydrogen Boiler	Compact Hybrid
Invest Cost	Green	Red	Green	Yellow
Running Cost	Green	Green	Orange	Green
Carbon	Red	Green	Green	Green

Green gas case study – Vale of Evesham

- Hybrid ready now
 - Biomethane take up varies by region
 - Target = 20%
 - Capacity circa 45%
 - Enough green gas to support smart hybrids.
- Medium Term
 - BioSMG – Swindon



Discussion Session



Feedback



Electronic Voting

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WWU2021

What's next

Sarah Williams
Director of Regulation

- Research and Citizens Panel trial
- Hy Compact research and trials imminent
- Bring together everything you have told us today along with what people have told us at other workshops and the research findings to shape our approach, delivery and communications.

THANK YOU

Feedback forms and how to get in touch

Sign up for e-newsletter and other events

