



**GAS GOES  
GREEN**

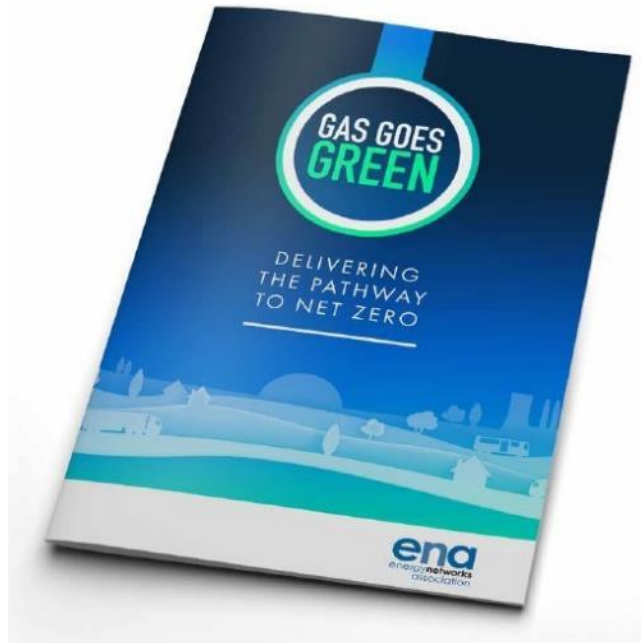
Shrinkage Forum

26 August 2020

**DELIVERING THE  
PATHWAY TO  
NET ZERO**

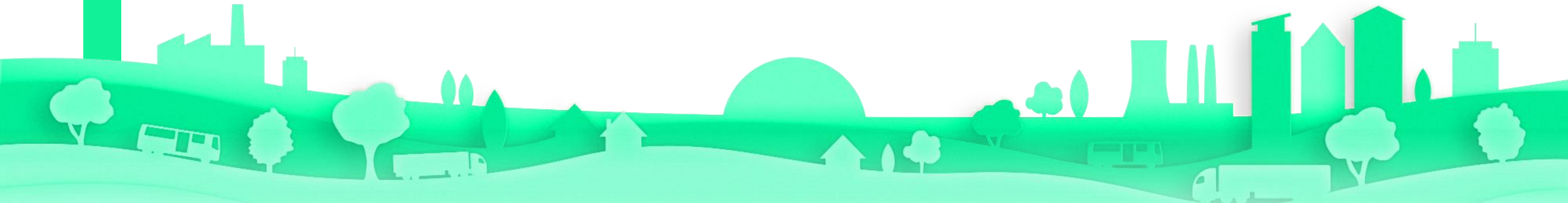


# Delivering the pathway to net zero



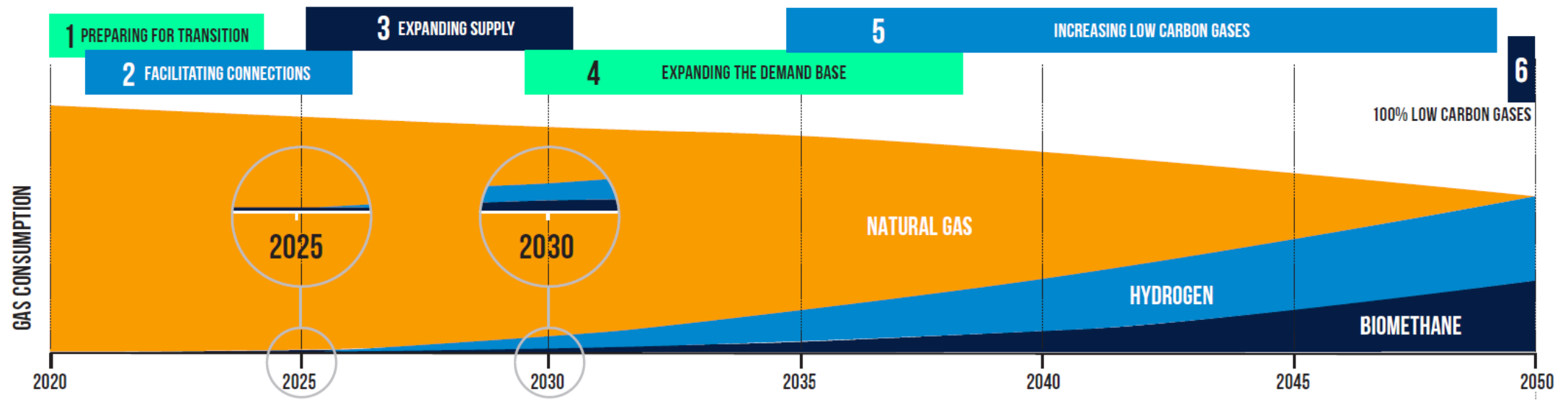
The Gas Goes Green programme will deliver the world's first zero carbon gas grid, helping meet the UK's net zero carbon emissions target.

It will make the changes needed to move Britain's gas network infrastructure from delivering methane-based natural gas to zero carbon hydrogen and biomethane.

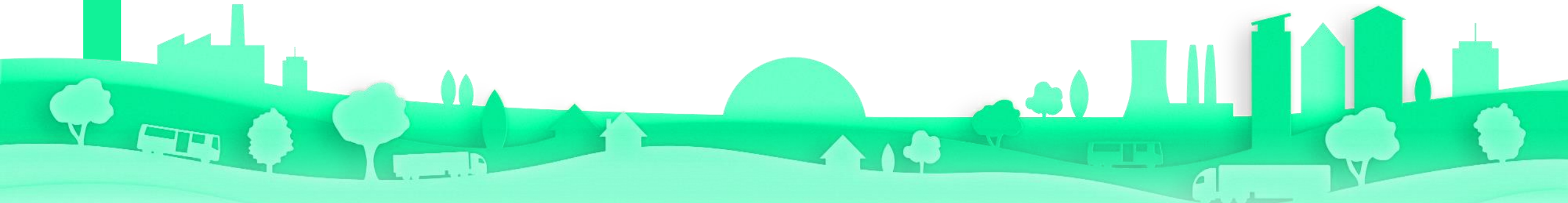




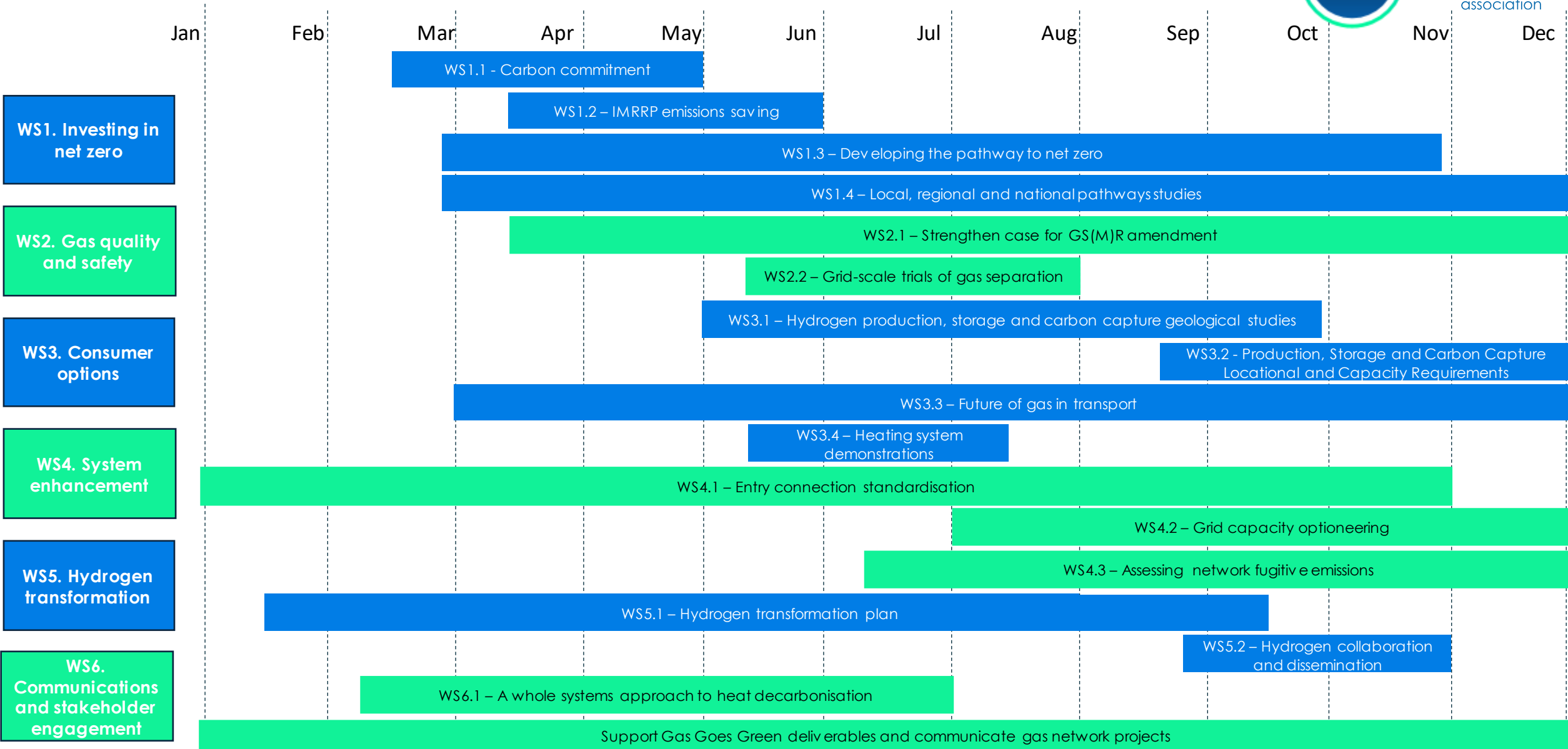
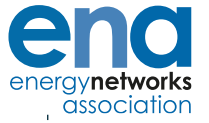
# Pathway to net zero



CLIMATE CHANGE ACT TARGET FOR 100% GREENHOUSE GAS EMISSIONS REDUCTION RELATIVE TO THE 1990 BASELINE.



# 2020 Deliverables



# Assessing network fugitive emissions

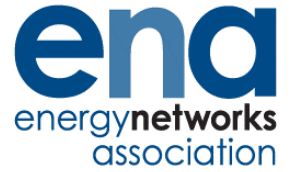
Gas Goes Green 2020 deliverable:

- Networks to undertake desk based research of AGI emissions and evaluate the case for a further programme of live trials to quantify methane leaks and test possible mitigation measures on different parts of the gas networks.

Gaps identified:

- CBA to determine approach/frequency of monitoring emissions; materiality threshold developed to determine which AGIs to target
- Standardising equipment for measuring fugitive emissions
- Develop a joint network position on recommended changes to the shrinkage model to put to the Shrinkage Forum

The Voice of the Networks



# Energy Networks Association

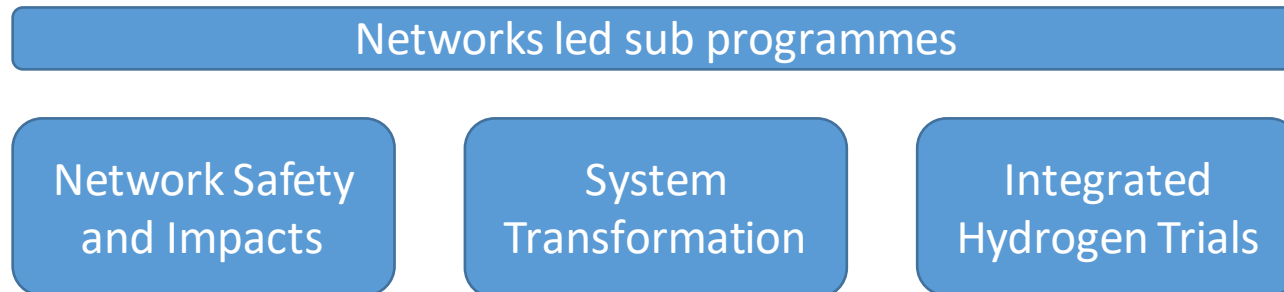
## Hydrogen Programme Development Group

26 August 2020

# Hydrogen Programme Development Group

The Group will help ensure a full co-ordinated and appropriately governed joint Government and industry programme is established to enable the impacts of introducing a hydrogen grid to be investigated objectively, comprehensively, rigorously and in a timely fashion.

A collaborative and comprehensive programme of work to provide the necessary evidence to assess key issues for hydrogen in networks including safety, feasibility, costs and benefits and the overall consumer experience.



# Network Safety and Impacts sub programme

## NSI role to undertake gap analysis and plan further work necessary

### 1. Gas conditioning

Scope: The distribution networks need to understand if injecting MEG is still required for the 10-15% of remaining distribution system.

- The first phase would be a desktop study to look at whether gas conditioning, MEG, is still required and identify possible mitigations (e.g. encapsulation of joints removing the requirement for MEG)
- Depending on phase 1 a second phase would test whether MEG carries in hydrogen and the impact of hydrogen on MEG.

Has the Shrinkage Forum considered MEG in its recent work, to determine whether MEG would be continued in principle?



# Network Safety and Impacts sub programme

## 2. PE permeation

Scope: For initial testing, hydrogen permeates around 5 times that of natural gas. This is still a small amount, but across the 280,000km of distribution network, it could all add up.

- Initial review of work in the area to determine if further work is required.
- If required, phase 2 would determine changes required to the shrinkage calculation and commercial impacts

How is PE currently treated in the shrinkage model currently and how could this change going forward?