Regional Demand and Update

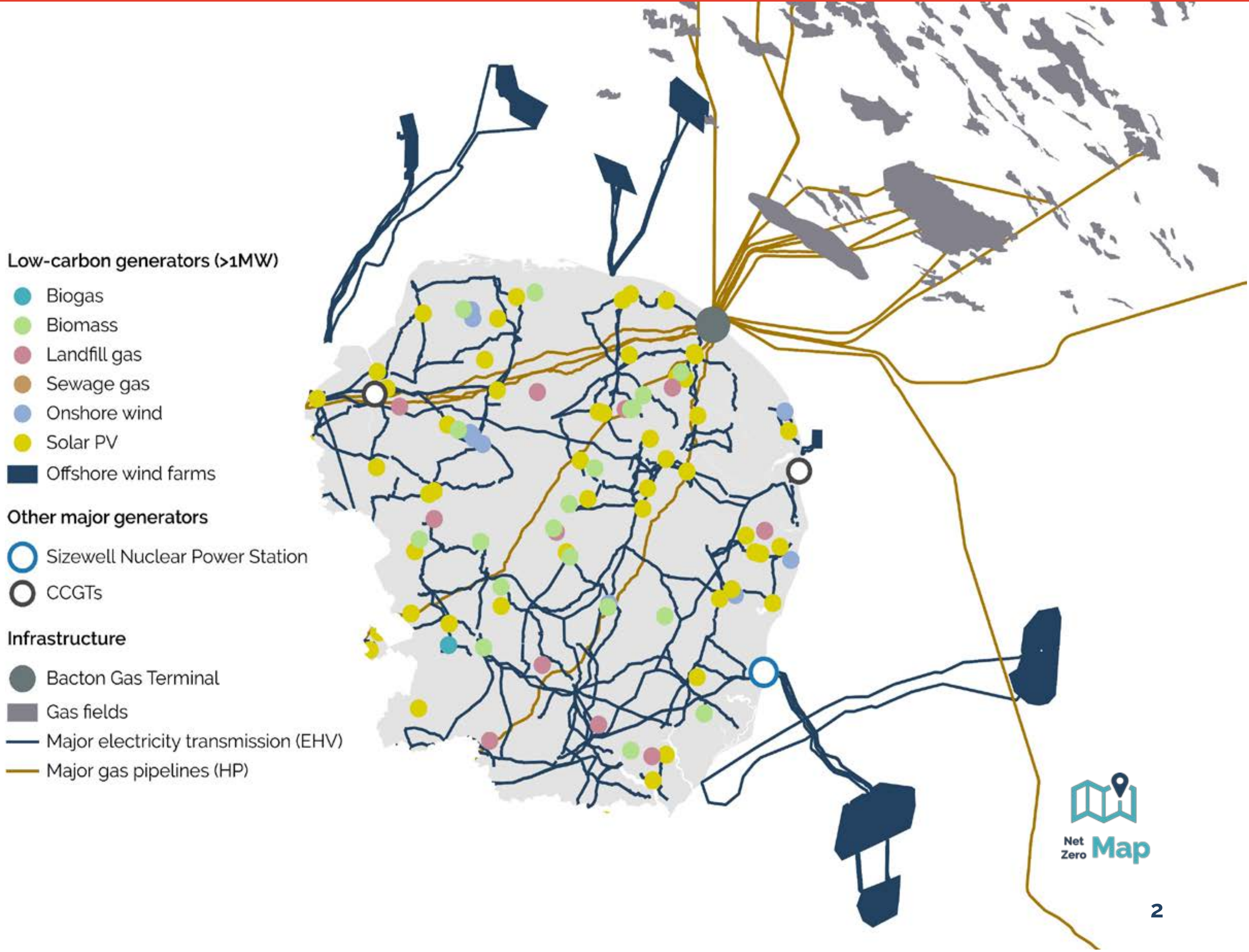
October 2022

East of England an energy powerhouse

EEEGR
EAST OF ENGLAND ENERGY GROUP

- at the **heart of the world's largest market for offshore wind**
- a hub for **new nuclear** in Suffolk
- One fifth of the UK's **solar** and **onshore wind** portfolio
- our agricultural heritage driving growth in **bioenergy** projects
- a future hub for **green hydrogen** production and servicing
- the **Southern North Sea** is the **UK's gas capital** with potential to support **carbon storage**

The region with the right ingredients for whole systems integrated thinking and the place to become an integrated energy exemplar…



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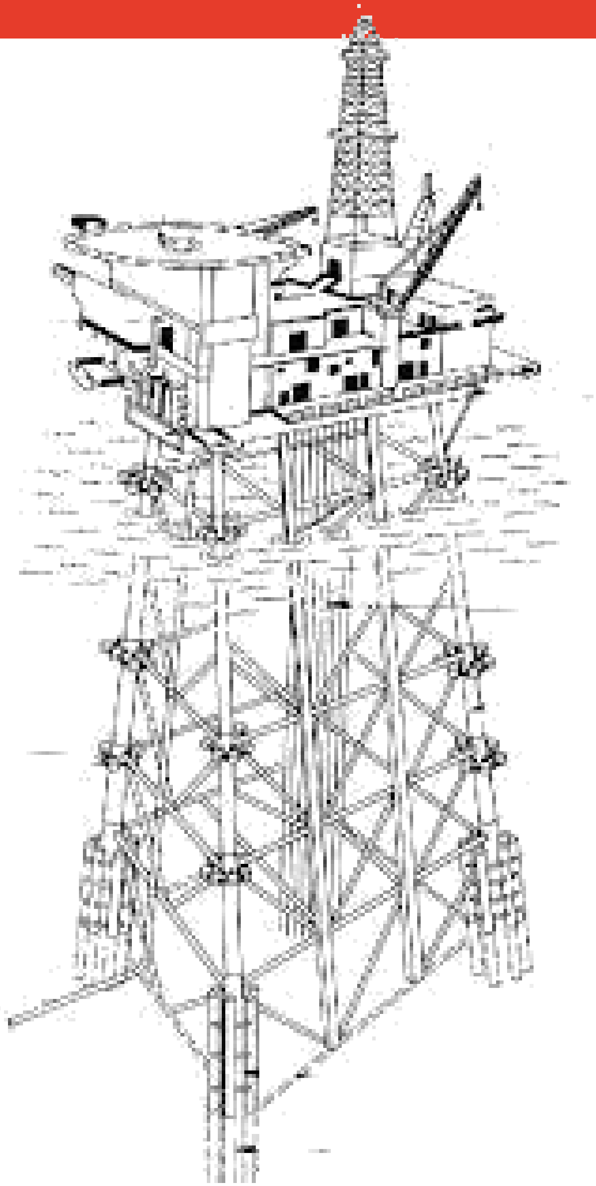
SNS Ports



Great Yarmouth Outer Harbour and O&M Campus

Lowestoft LEEF Facility

Harwich Freeport

East of England
All the right ingredients

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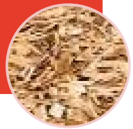
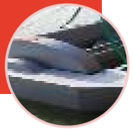
5GW
44% of UK fleet off **East of England**
Offshore Wind

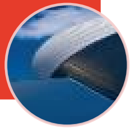

203 turbines generating
423MW
Onshore Wind


55 projects generating
352MW
Bio Energy


1.1GW
battery storage projects operating or in pipeline
Networks & Power Storage


Southern North Sea
conditions ripe for **test & demo**
Wave & Tidal


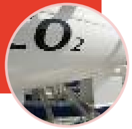
139 projects generating
1.7GW
Solar PV


1.2GW
Sizewell B
3.2GW Sizewell C coming soon
Nuclear


174
SNS platforms
Natural Gas


supplying
30% of
UK natural gas
Bacton Gas Terminal


2
gas fired power stations
Conventional Power Generation


Europe's largest potential **CO2 storage** network?
Carbon Capture & Storage


Could East be at the centre of the UK's **gas green** revolution?
Hydrogen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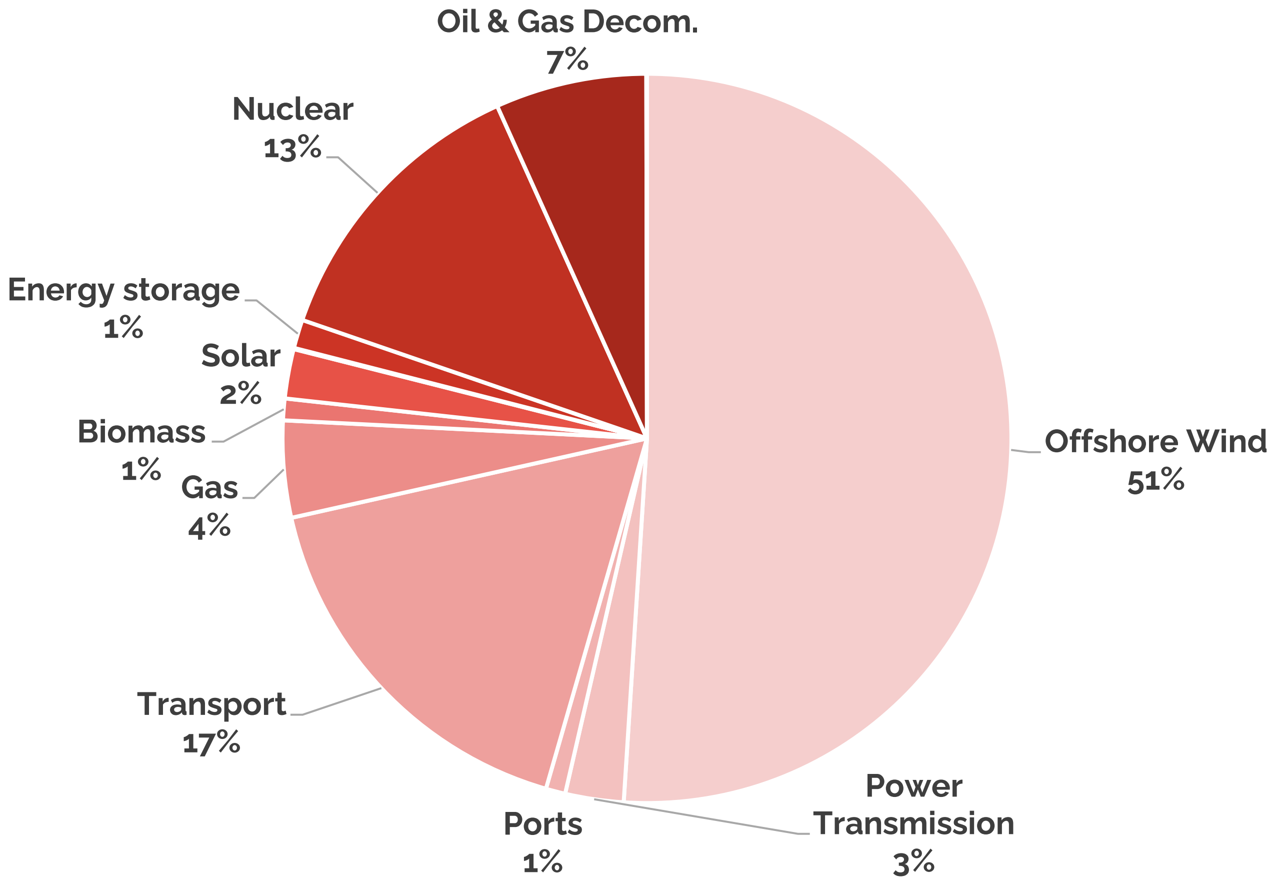
Correct at May 2022. Sources: Opergy Ltd., Net Zero East, BEIS Renewable Energy Planning Database (May 2022)
East of England is defined here as including the four counties of Essex, Cambridgeshire, Norfolk, and Suffolk. (EEGR's geography)

Investment Forecasts



Sector	2050 Investment Forecast (£m's)
Offshore Wind	£62,525
Power Transmission	£3,171
Ports	£1,061
Transport	£20,876
Gas	£5,254
Biomass	£1,176
Solar	£2,684
Onshore Wind	£64
Energy storage	£1,559
Nuclear	£15,926
Oil & Gas Decom.	£8,226
Oil & Gas	£34
TOTAL	£122,555

Note: *No forecast investment in new hydrogen and direct air-capture plants is recognised. This is largely due to a lack of project specific data for an emerging technology, and planned Government investment to support R&D and Demonstration projects.*

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SNS Gas Transition Sector Council

- One of seven newly created Energy Sector Councils, which EEEGR is secretariat of

- Chair by Julian Manning Paradigm and Vice Chair Girish Kabra Spirit Energy

- The Groups aims:
  - Provide a collaborative platform to tackle industry issues and maximise opportunities in the UKSNS
  - Provide meaningful physical events when required
  - Establish Special Interest groups to work on tasks
  - Interface with other Sector Councils
  - Promote and maintain the relevance of current gas operations as a critical energy carrier for the energy transition
  - Communicate

Present *Future*

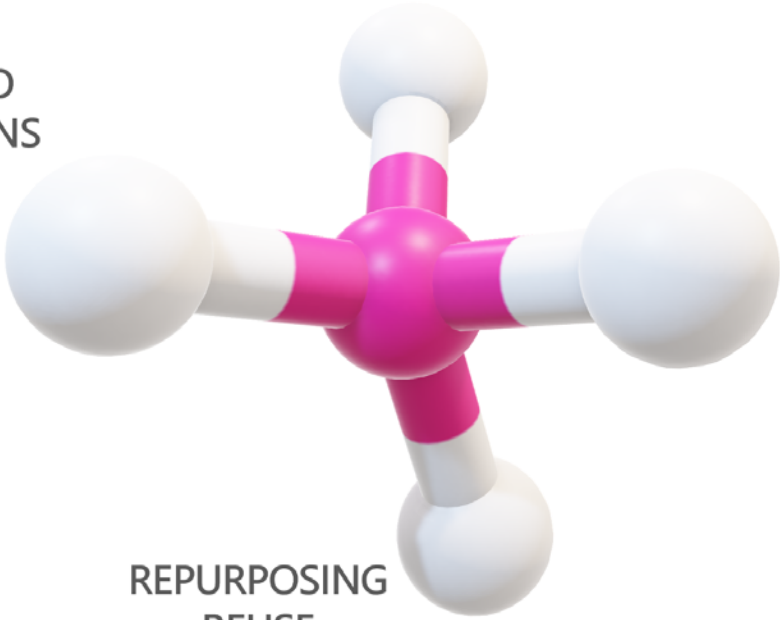
2022 2030

SNS GAS TRANSITION SECTOR COUNCIL

GATEWAY 2 ACCELERATED SUSTAINABILITY

MER

NET ZERO OPERATIONS



REPURPOSING
REUSE
DECOMMISSIONING

ENABLING THE ENERGY TRANSITION

BACTON ENERGY HUB

- BLUE HYDROGEN
- CARBON CAPTURE
- RENEWABLES
- ENERGY STORAGE
- GREEN HYDROGEN
- OTHER ENERGIES

Workstream 3: Reuse, Repurpose and Decommissioning

- Provide a global overview of gas assets in the region and work closely with the Bacton Energy Hub SIGs to evaluate timing of Cessation of Production (CoP) dates. When is the point of Transition?
- Focus on shared learnings, especially in the area of wells which generally represents the largest single spend area
- Keep abreast and communicate to all stakeholder's progress in other regions both within and outside the UK
- Promote inward investment for repurposing opportunities

Membership

- The group will be formed of a mix of:
  - UKSNS gas operators
  - Strategic supply chain
  - Regulators
  - Consultancies
  - Industry bodies with an interest in gas operations in the UKSNS, whether that be through new field development, extending field life, efficiencies of ongoing operations, or reuse and / or decommissioning

- Members must be passionate about the success of the region and committed to the cause of deferring COP, lowering carbon intensity during the extraction of hydrocarbons, open minded for reuse prospects and efficient decommissioning operations

North Sea Transition Authority

Bacton Energy Hub

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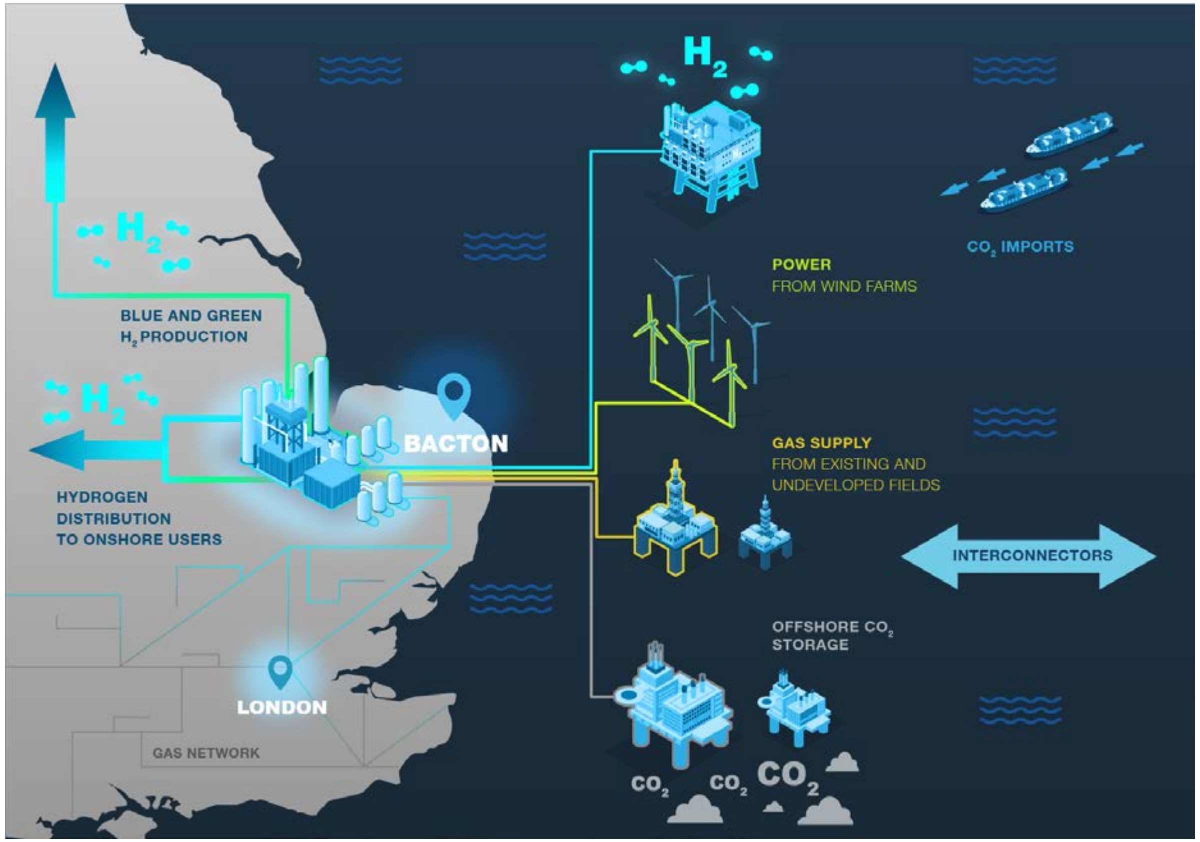
Through a collaborative industry approach, the Bacton Energy Hub will deliver a future for the region whilst achieving MER and net zero.



Bacton is ideally positioned to become a significant hydrogen production site for London and the South East. 5 Special Interest Groups (SIGs) have been established to help demonstrate that a credible project exists and to catalyse the formation of a consortium that will develop and execute a Bacton Energy Plan.

Thank you and any questions?