



- **What is “Net Zero”?**

- The UK Government has set a commitment to bring Green House Gas (GHG) emissions in the UK to zero by 2050. Any remaining emissions must be offset by GHG removal from the atmosphere (e.g. by carbon capture and storage).
- In June 2019, in response to the 2015 Paris agreement (ratified by 189 countries), the UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050 (2045 in Scotland), setting the standard for the EU
 - “We’re pioneering the way for other countries to follow in our footsteps driving prosperity by seizing the economic opportunities of becoming a greener economy” Energy and Clean Growth Minister Chris Skidmore
- This target and associated measures are based on recommendations from the UK Committee on Climate Change (CCC), the UK’s independent climate advisory body, outlined in a detailed 2019 report
- Similar targets are being set by other countries (e.g. France, Denmark, Sweden, New Zealand)
- “Net Zero” is an important aspect of the United Nations 17 Sustainability Goals (Goal 13: Climate Change & Goal 7: Affordable and Clean Energy) that the Energy Industry must play their part in.



- **Why is Net Zero an important focus area for the London Section SPE Membership?**

- **The oil and gas industry’s reputation, social license to operate, ability to attract new talent and finance new projects and growth depends on us setting action plans and delivering on Net Zero**
- Significant changes are required across the energy, power, industry and agriculture sectors, with complex linkage between them. COVID is likely to accelerate changes through government plans for a lower carbon “greener recovery”.
- To achieve Net Zero requires considerable innovation and collaboration between industry, academia, government and society. Many believe the Oil and Gas sector in the UK can take a leading role through their expertise, infrastructure and existing supply chain network. Taking a leading role now can secure jobs for the future but requires engagement, collaboration and working collectively across our industry.
- The UK’s Oil and Gas Authority closed a consultation 29 July 2020 to revise their strategy to incorporate 2050 Net Zero ambitions (as well as MER –Maximising Economic Recovery of UKCS). This revised strategy is likely to put a stronger emphasis on emission reduction, a more integrated offshore energy sector with stronger links to renewables & social license to operate
- The Majors are leading the way, rebranding to Integrated Energy Companies, making their own commitments in line with Net Zero 2050 and refocusing and diversifying their portfolios.

How does Oil and Gas factor into Net Zero 2050?

- **UK Committee for Climate Change predict that fossil fuels will still be required in 2050**
 - Electricity demand doubles 2017- 2050 due to wide spread electrification (transport & heating); gas will still be required to provide reliable electricity, produce hydrogen and/or some domestic heating
 - Cement, steel, ammonia and ethylene still likely to require fossil fuel feedstock
 - Focus on domestic production, minimising emissions, operations electrification and carbon capture
- **The UK Oil and Gas sector can take a leading role and act as an enabler for decarbonisation**
 - Integrated Energy Systems –gas, wind, carbon capture, hydrogen production
 - Technology development & skills transfer –e.g. carbon capture for power, industry and bioenergy
 - Strategic partnerships and advising on realistic policy for moving low carbon projects forward
 - Exporting low carbon technology, skills, experience to other countries

UK Oil and Gas Demand versus UKCS Production to 2050

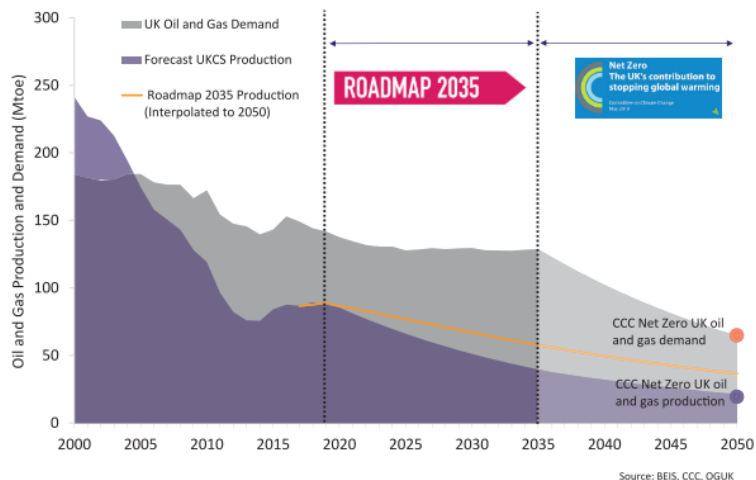
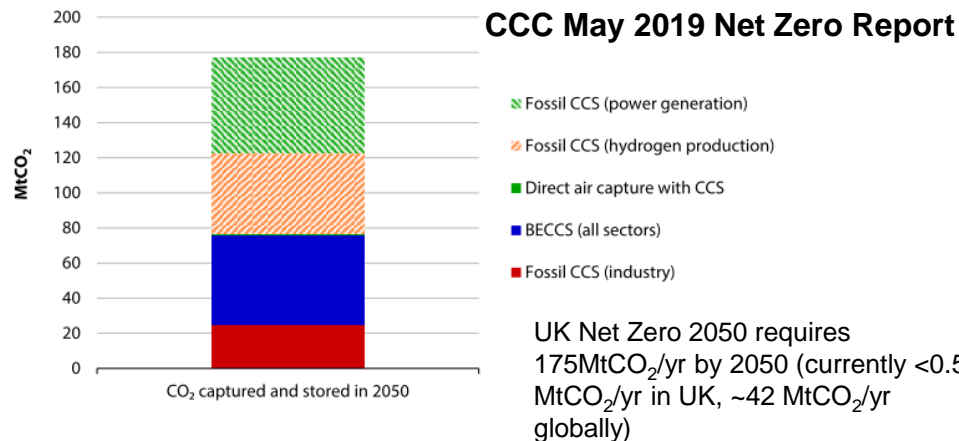


Figure 5.4. Total CO₂ captured and stored in the Further Ambition scenario in 2050





- **What is the purpose of the London SPE Net Zero Committee?**

- To inform and engage the membership on how the industry is supporting activities to achieve Net Zero. To build links with wider Energy community (renewables, academia, institutions, finance, government) where needed to achieve this.
- Help the membership adapt to a changing industry
- Positively promote our industry's support in achieving Net Zero 2050 within our community
- Focal point for Sustainability activities from other SPE Chapters, such as Gaia Sustainability
- Encourage students to consider engineering careers to help achieve Net Zero

- **Membership Activities**

- Net Zero & Sustainability related articles in SPE Review & LinkedIn
- Net Zero & Sustainability topics incorporated in the regular SPE London programme
- Net Zero & Sustainability specific events in collaboration with YP/Continuing Education

- **Community/Students**

- Secondary School Outreach Programme
 - The Future of Energy talk & activities (via adhoc requests or linked programmes, which may need a different format/focus)
 - Careers events
- Arkwright Engineering Scholarship
 - Including Virtual Industry Connect Event



- **Potential Committee Roles**

- Schools programme coordinator
- Schools programme material development
- Arkwright scholarship coordinator
- Net Zero event lead
- Net Zero article lead
- Net Zero specialists (e.g. low carbon tech, projects, finance, policy)

- **Committee Members**

- Maren Strandevold –Lawyer HaynesBoone/Norwegian-British Chamber of Commerce
- Happiness Ative –Imperial Msc Petroleum Engineering Graduate
- Adrian Southworth –Arkwright Scholarship Coordinator
- Sean Gibson –Global Wells Manager, Sasol
- Kanad Kulkarni –Pet Engineering Lecturer, Portsmouth Uni
- Adrian Gregory –Reservoir Engineering Consultant
- Low carbon/Renewables/Sustainability Link?
- Others?

- *Volunteers for school outreach programme –do not have to be part of core committee*



- **Net Zero SPE Areas of Interest**

- **Net Zero low carbon technology development**

- e.g. flaring/venting mitigation, platform electrification, carbon capture and storage, offshore/onshore blue/green hydrogen, renewables integration. Technology centres such as OGTC, Start-up contribution

- **Integrated project case studies UK & overseas**

- e.g. Acorn, Net Zero Teeside, Shetland Energy Hub, Norway full scale CCS, Netherlands Porthos, Canada Quest

- **Company response, transformation, initiatives**

- E.g. BP/Shell/Equinor Net Zero commitments, OGCI (Oil and Gas Climate Initiative), focus on “Purpose”

- **Government policy & funding, industry regulation**

- E.g. 2020 budget commitment £800MM for CCS, OGA revised strategy, COP26

- **ESG, Finance and Commercial frameworks**

- E.g. Equator principles, how oil and gas companies impacted by financial institution ESG risk, partnerships to move big integrated energy projects forward, Sustainability Reporting

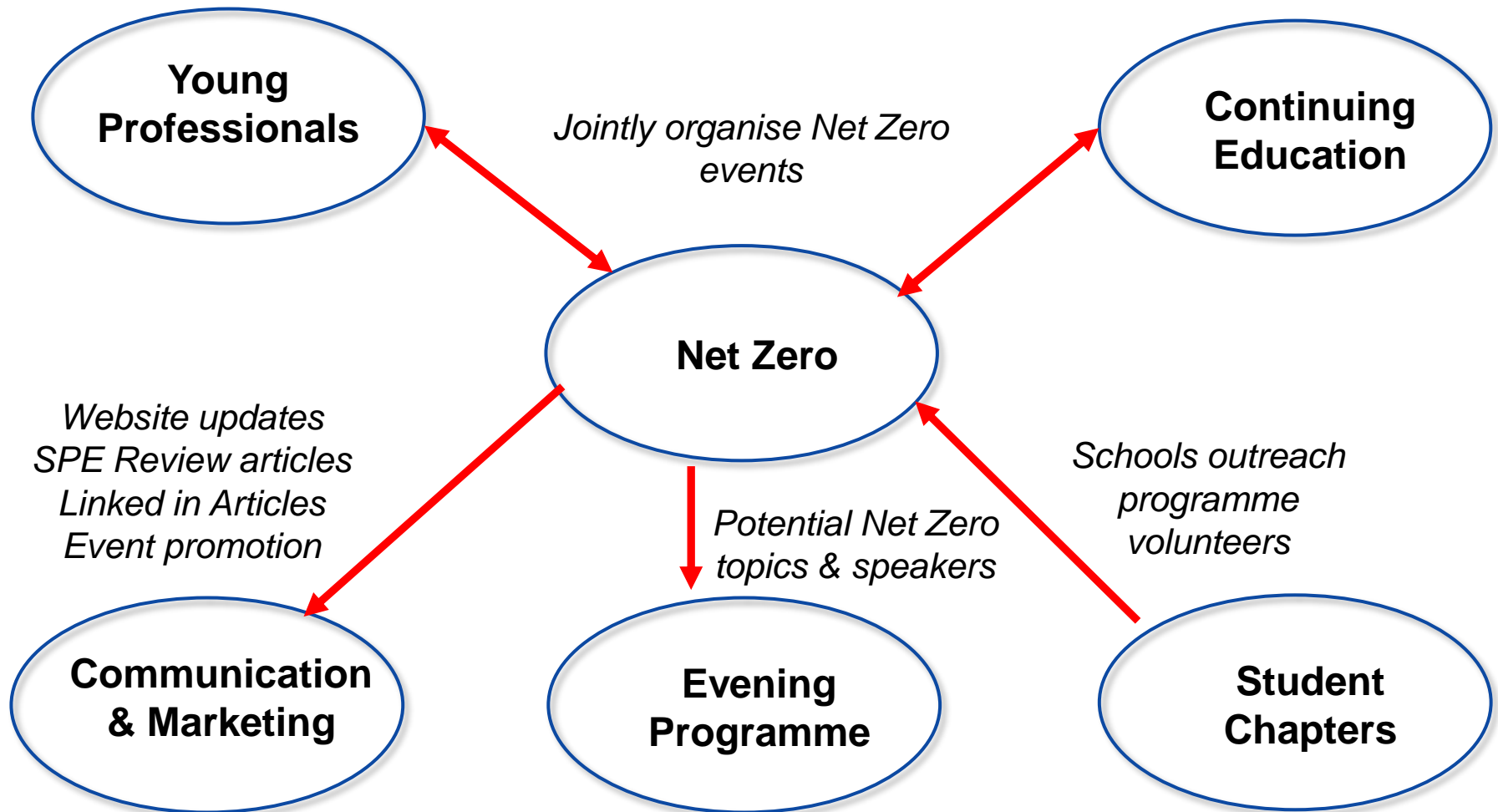
- **Potential Schools Programme Links**

- <https://www.london.gov.uk/what-we-do/education-and-youth/preparing-young-people-workplace/careers-clusters>
- <https://www.inspiringthefuture.org/>
- <https://www.etrust.org.uk/>



Net Zero Committee

- Links to the other SPE London committees





- **Net Zero Committee Website**

- May require quite regular updates, is this possible?

- **Useful Net Zero Links & Reports e.g.**

- SPE Gaia Sustainability Program <https://www.spe.org/en/gaia/>
- UK Committee on Climate Change <https://www.theccc.org.uk/>
- OGA Net Zero <https://www.ogauthority.co.uk/the-move-to-net-zero/>
- Global CCS Institute <https://www.globalccsinstitute.com/>
- Sustainability Reporting <https://www.ipieca.org/our-work/sustainability-reporting/sustainability-reporting-guidance/>

- **Schools Outreach Programme**

- Purpose, contact, links to presentation material, SPE Review article
- Other mentoring volunteer opportunities e.g.
 - <https://www.inspiringthefuture.org/>

- **Upcoming Events**

- Virtual Industry Connect event
- SPE Net Zero events
- External Net Zero related events (e.g. webinars, etc.)



- **Forward Plan**

- **Will require committee commitment to get up and running**
- **Update website and recruit committee by early September**
- **Initial committee meeting in September to discuss & assign responsibilities**
 - Assign roles
 - LinkedIn/SPE review article commitment
 - Arkwright Virtual Industry Connect Event –late October
 - London SPE Net Zero engagement event in Jan2021? Joint Net Zero/YP/Continuing Education? Speakers on SPE areas of interest. Could be virtual or in person.
 - Schools programme development
- **Meet with Continuing Education and YP to plan Net Zero event**
- **Quarterly committee meetings or as required**