



Breakbulk Americas 2022

US Energy Project Market Outlook

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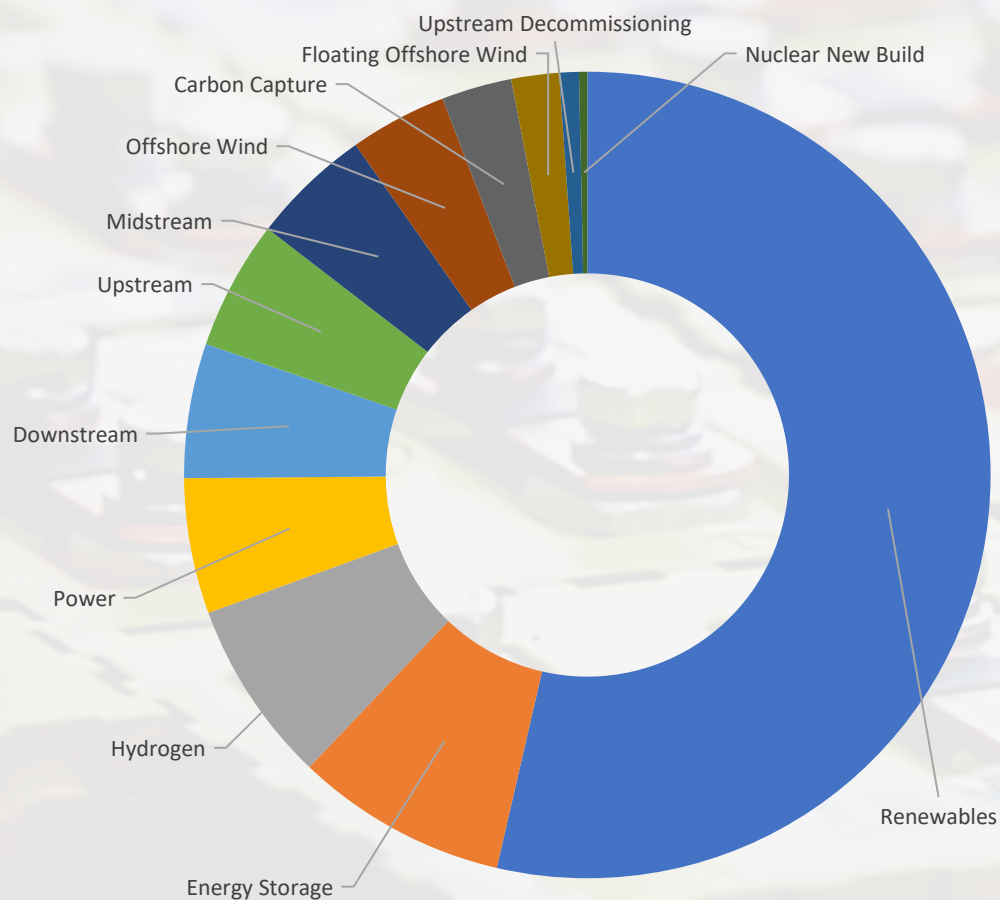
- **Review of 2021 and 2022 to date**
 - Energy project review
- **2022 and beyond in the US**
 - Oil and Gas
 - Renewables – Offshore Wind Focus
 - Hydrogen
 - Carbon Capture
- **Opportunities in Latin America and the Caribbean**
- **Summary remarks**



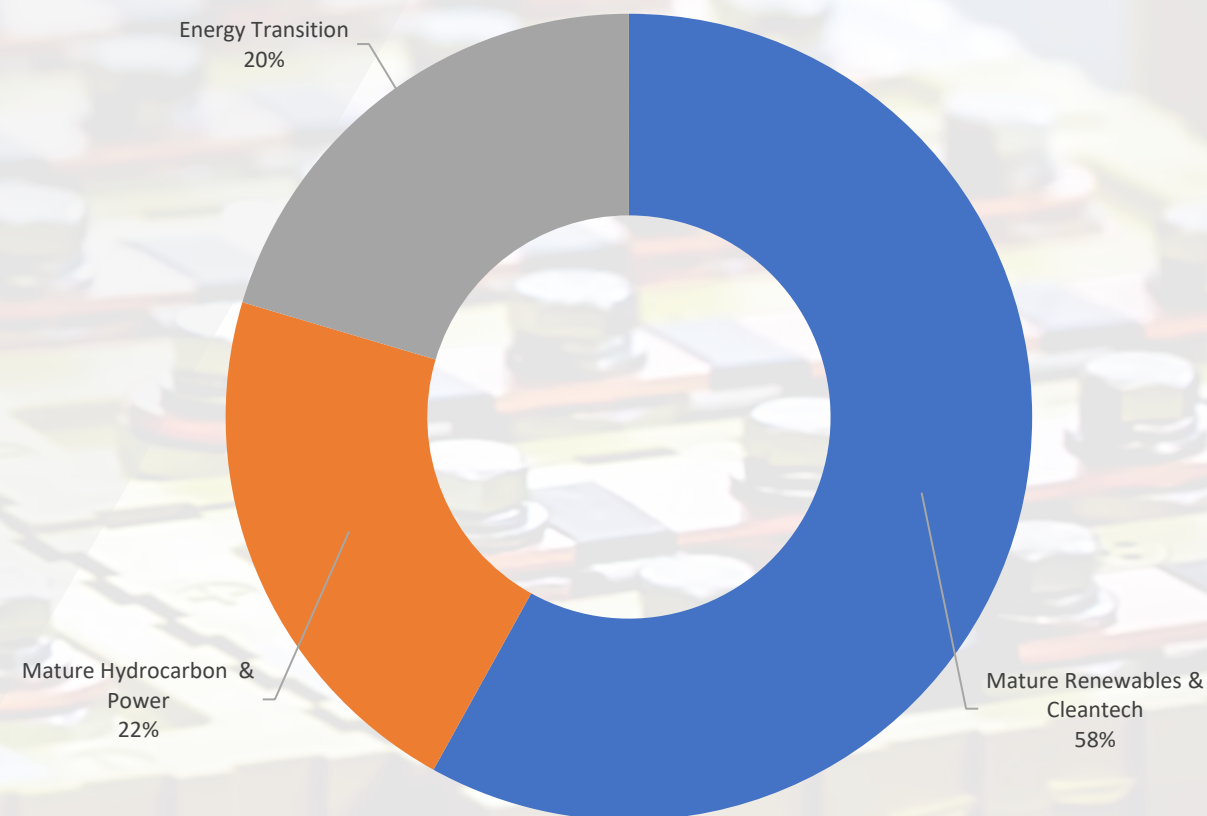
Energy Project Review

Total new development proposals globally - 2021

Quantity of projects announced in 2021



Quantity of projects announced in 2021

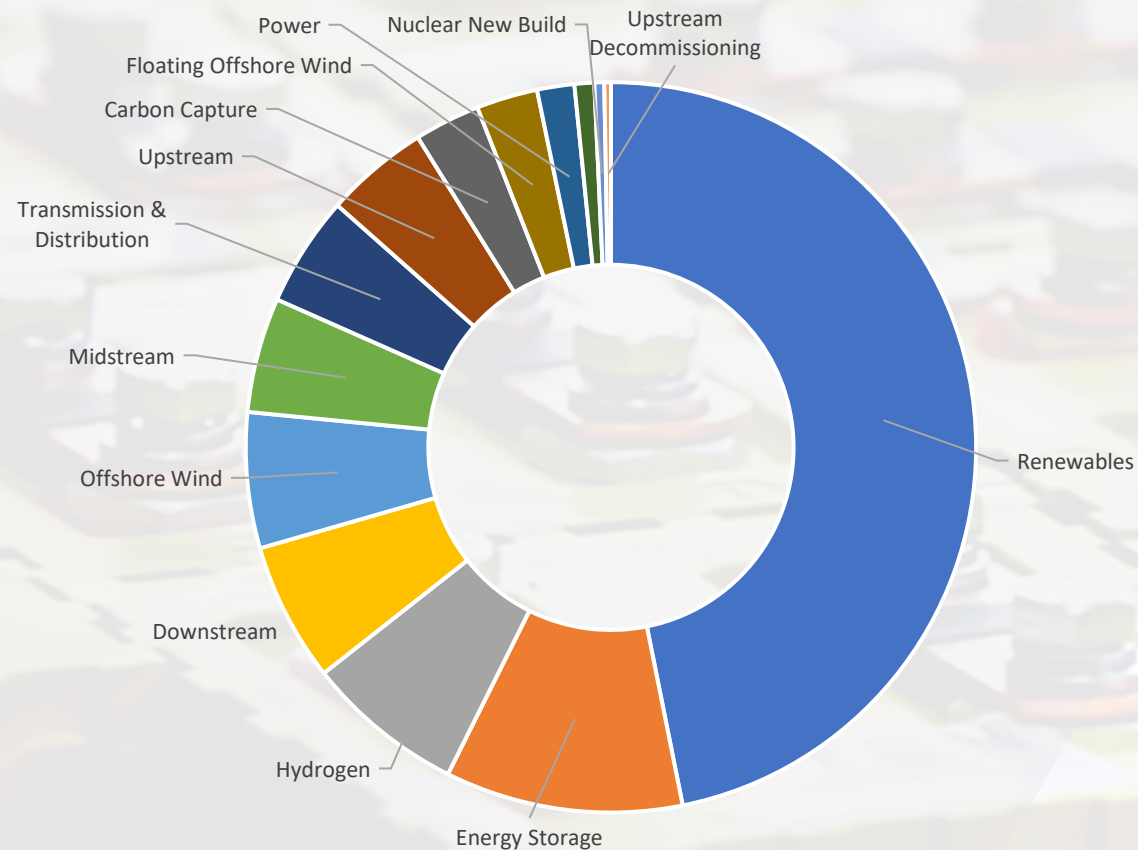




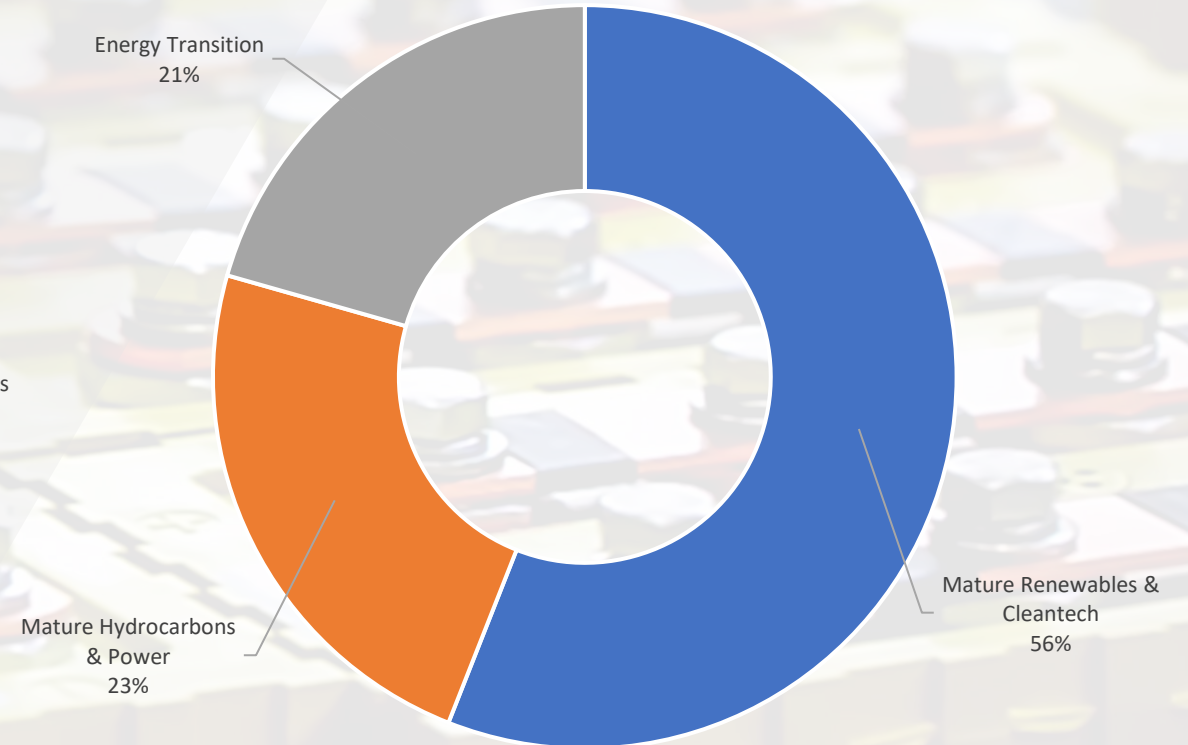
Energy Project Review

Total new development proposals globally – Up to September 2022

Quantity of projects announced in 2022 to date



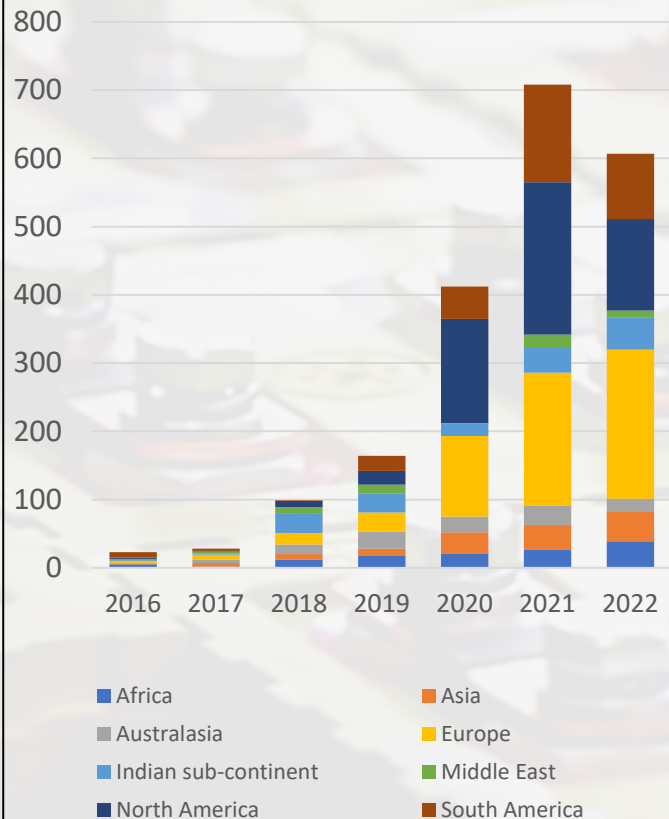
Quantity of projects announced in 2022 to date



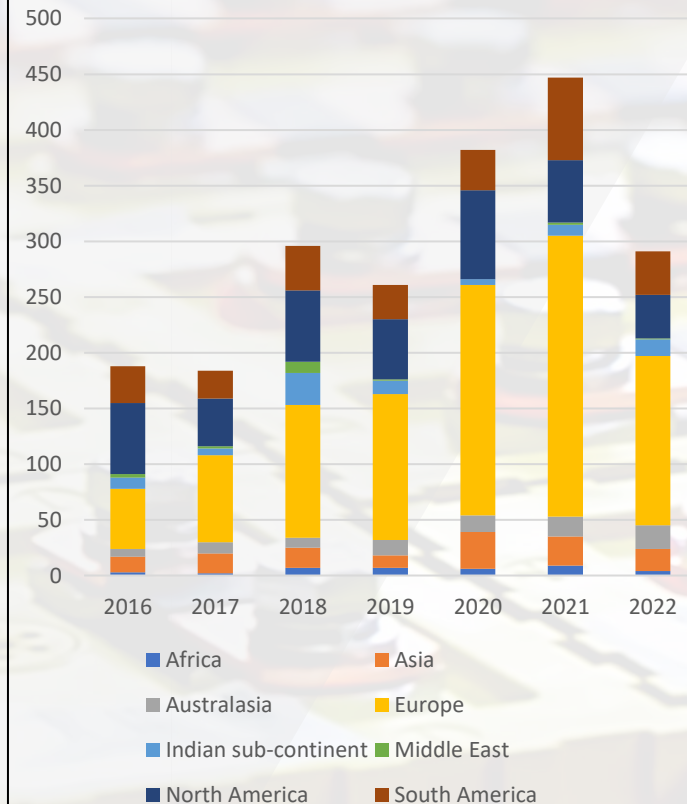
Energy Project Review

Project announcements – Renewables

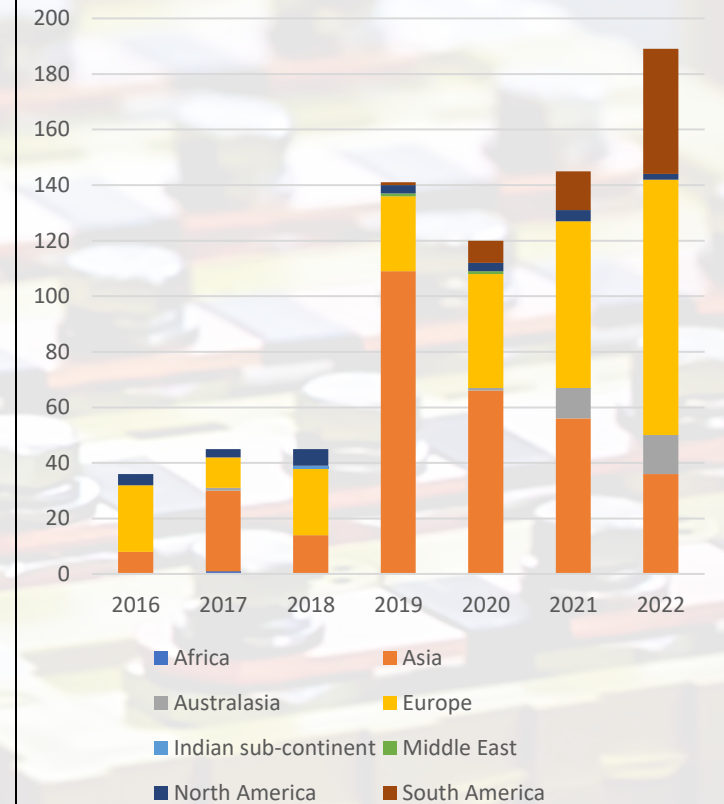
Number of projects announced 2016
- September 2022 (Solar PV)



Number of projects announced 2016
- September 2022 (Onshore Wind)



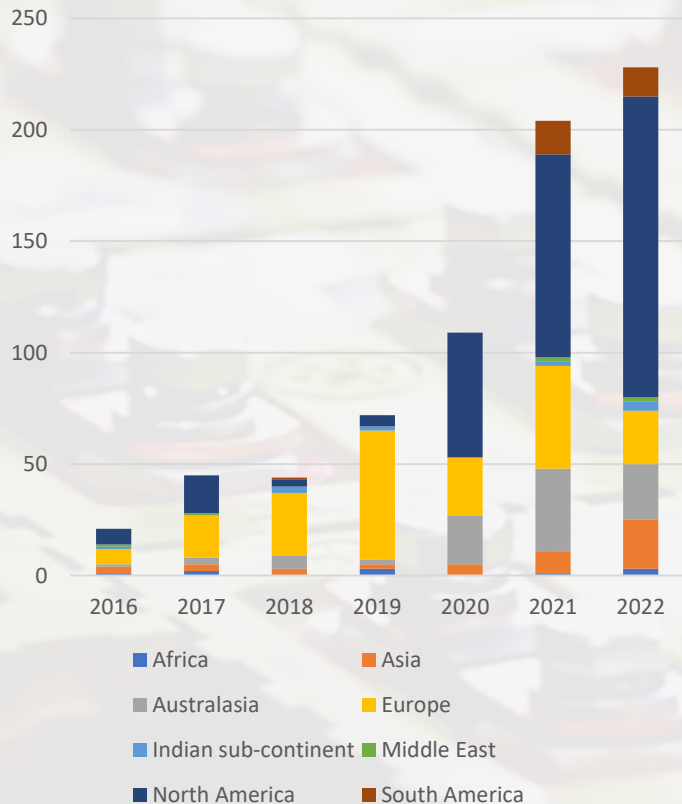
Number of projects announced 2016
- September 2022 (Offshore Wind)



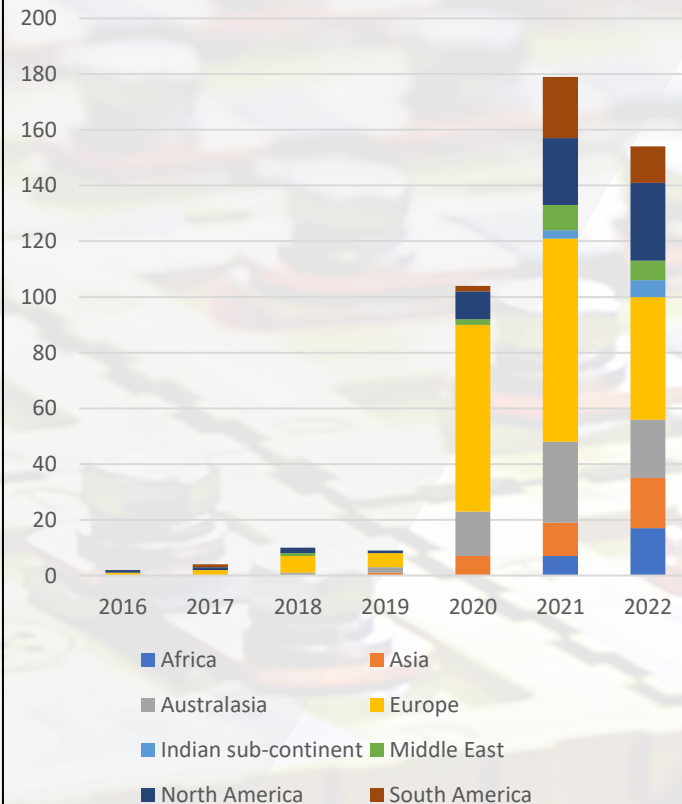
Energy Project Review

Project announcement – Energy Transition

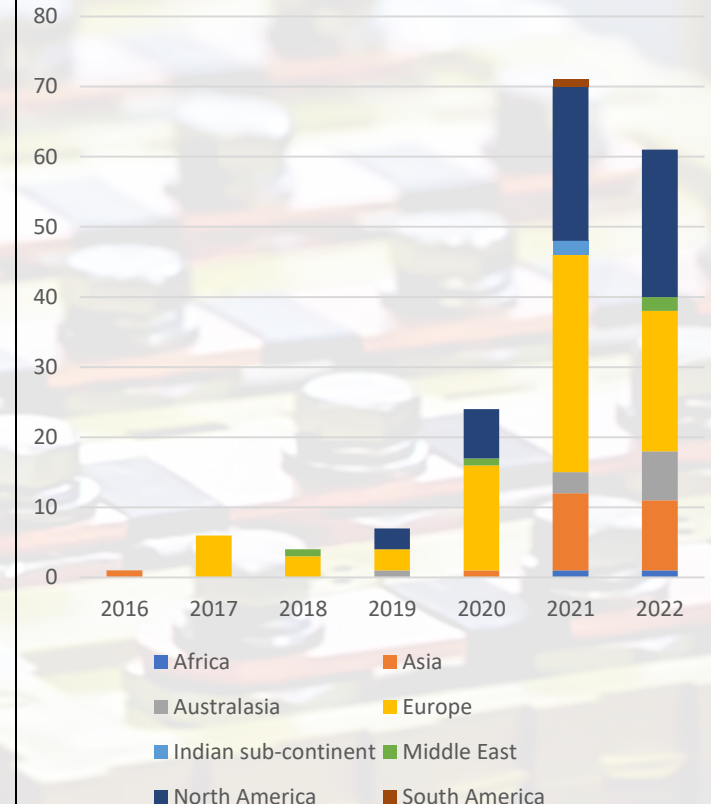
Number of projects announced 2016 - September 2022 (Energy Storage)



Number of projects announced 2016 - September 2022 (Hydrogen)

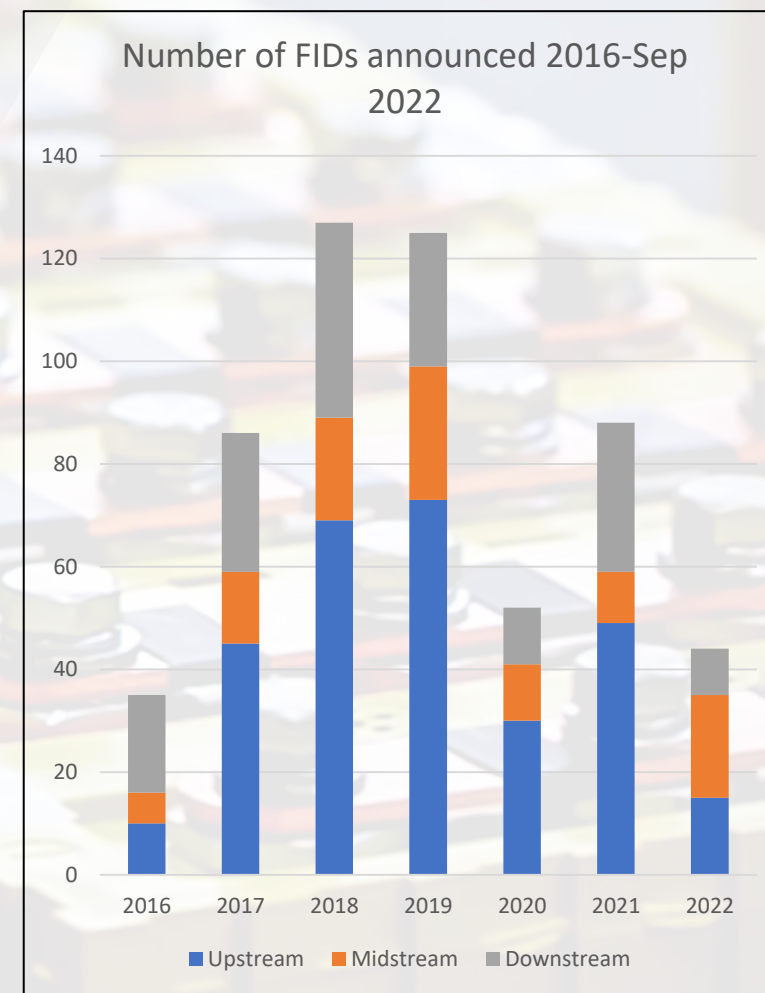
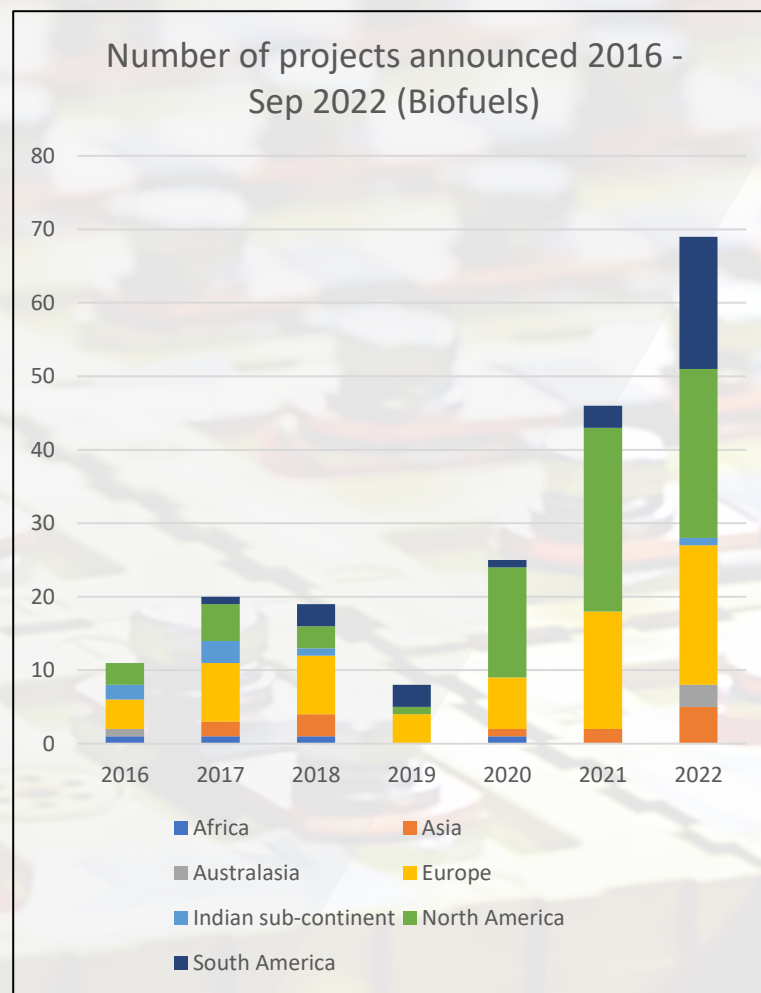
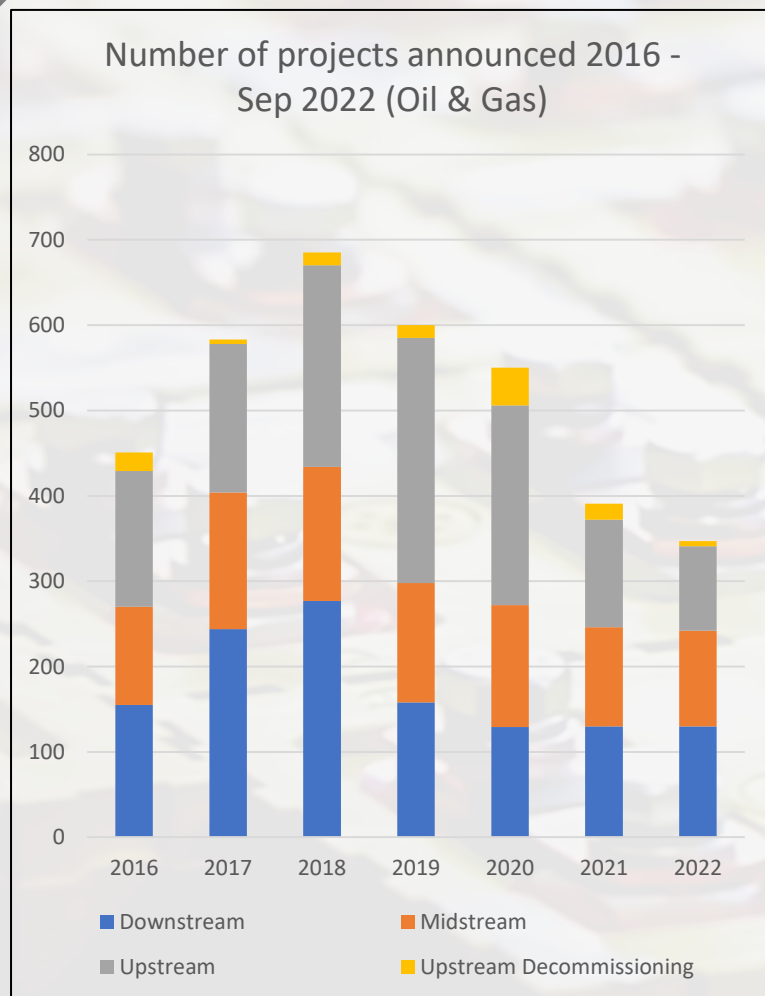


Number of projects announced 2016 - September 2022 (Carbon Capture)



Energy Project Review

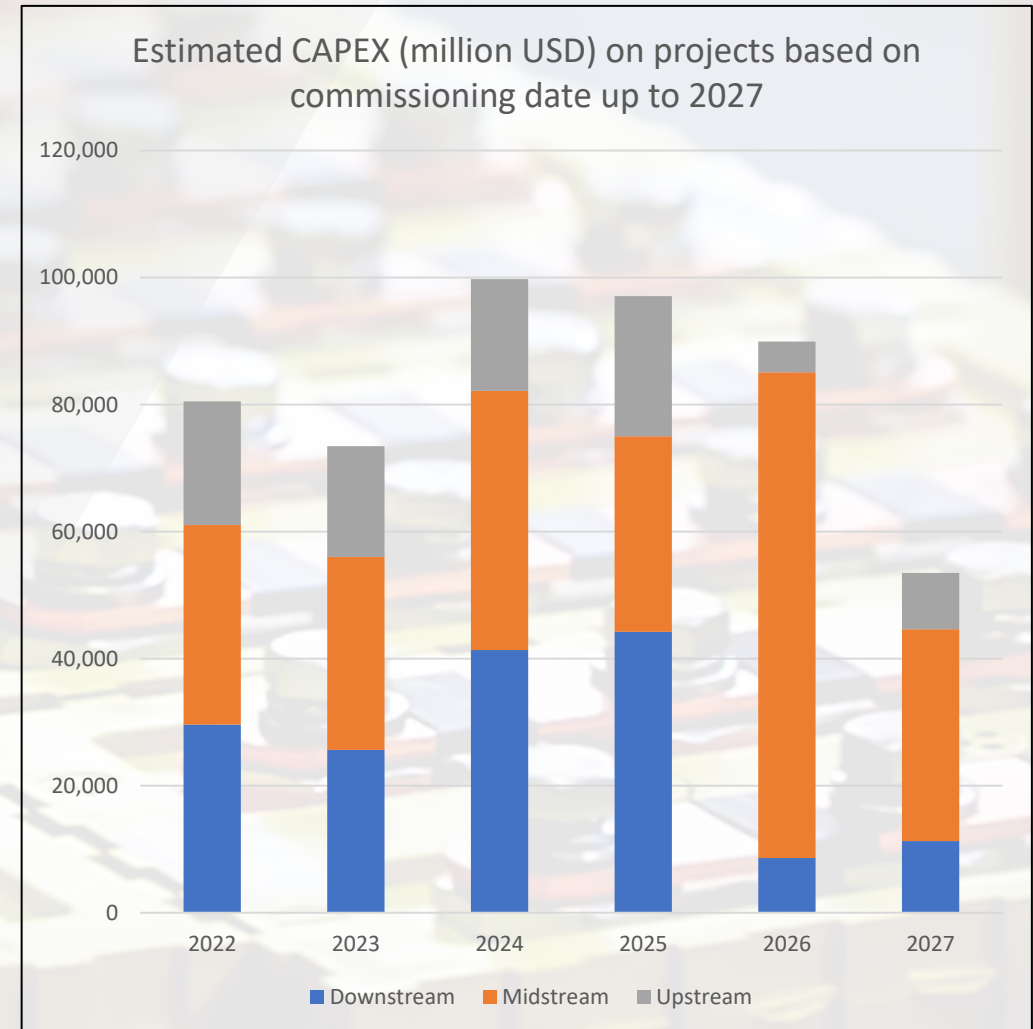
Project announcements / FIDs reached – Oil & Gas



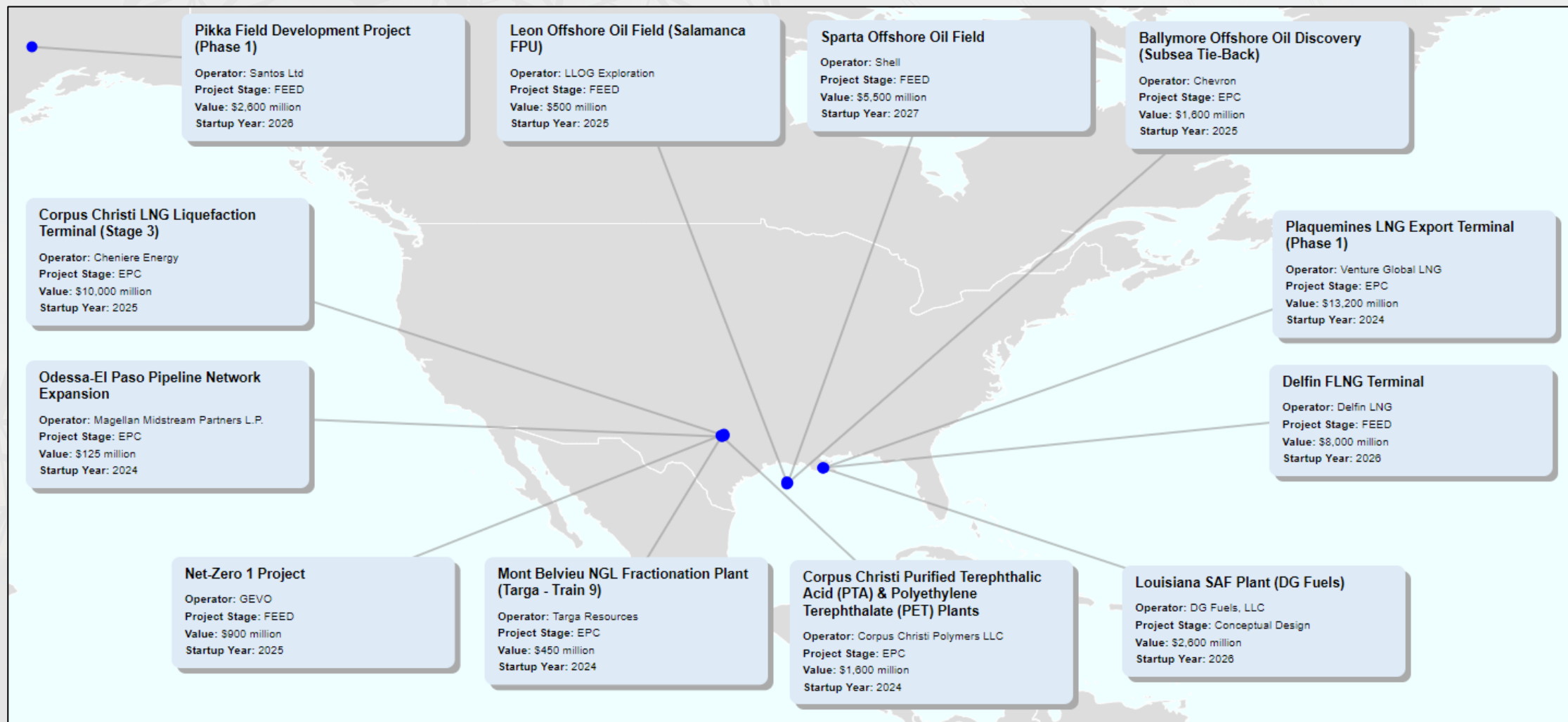


US 2022 and beyond | Oil and Gas

- Lease sale 257 results reinstated by BOEM, as required by Inflation Reduction Act
- Investment in new transport capacity as production from Permian and Haynesville increases
- Great opportunity for LNG new export terminals and expansion projects supported by increased European demand
- Uptick in number of biofuel plants, including renewable diesel and sustainable aviation fuel (SAF)



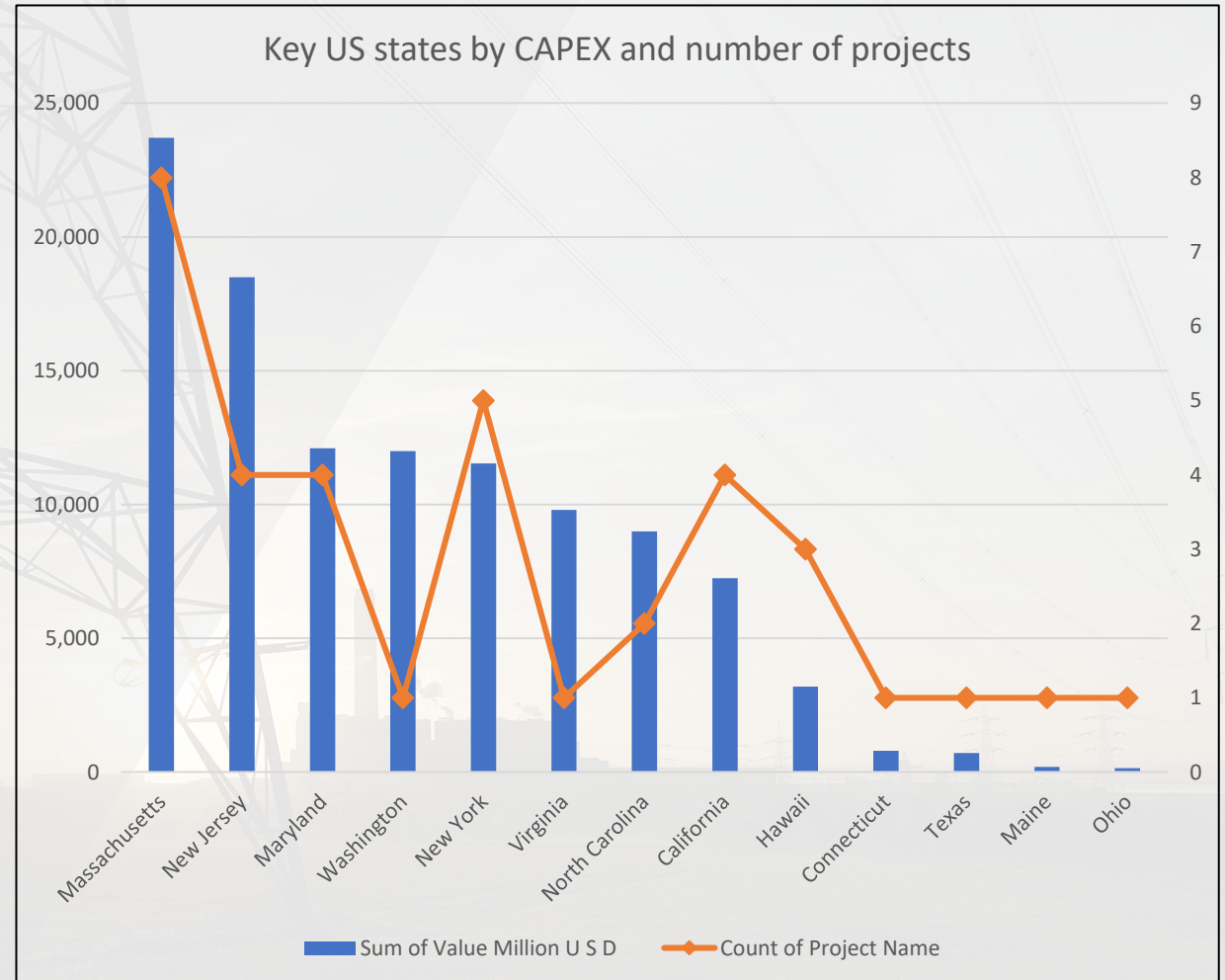
Projects of interest | Oil and Gas



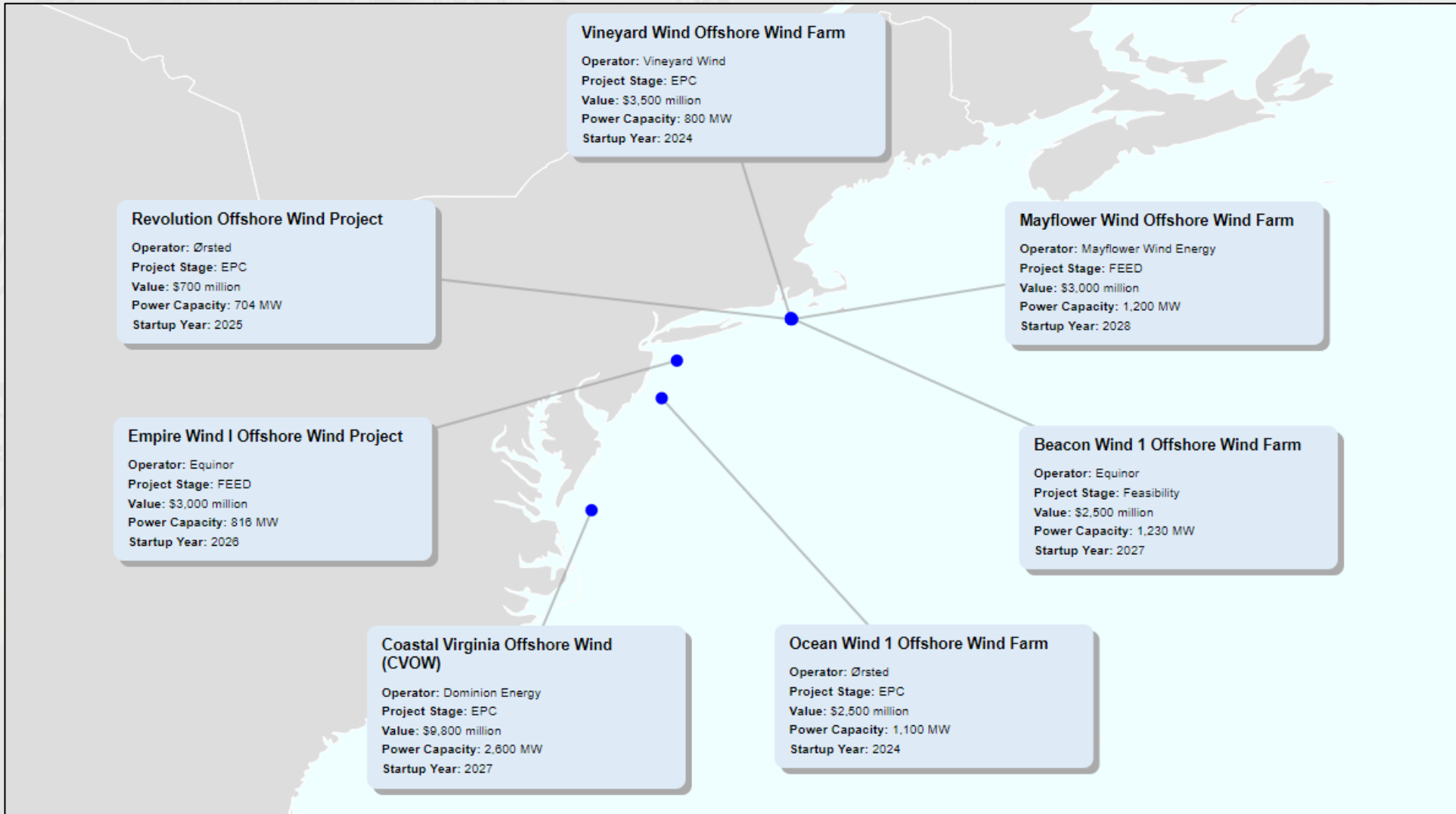


2022 and beyond | Offshore Wind

- 30GW by 2030; 15GW of FOW by 2035
- Carolina Long Bay lease sale awarded areas to Duke Energy and TotalEnergies
- California lease sale expected in Q4 2022, GoM lease sale in early 2023
- IRA tie-in to O&G lease sales
- Skanska awarded US\$232m contract for redevelopment of Portsmouth Marine Terminal
- NYSERDA has launched its 3rd offshore wind solicitation. Proposals expected in 2early 2023



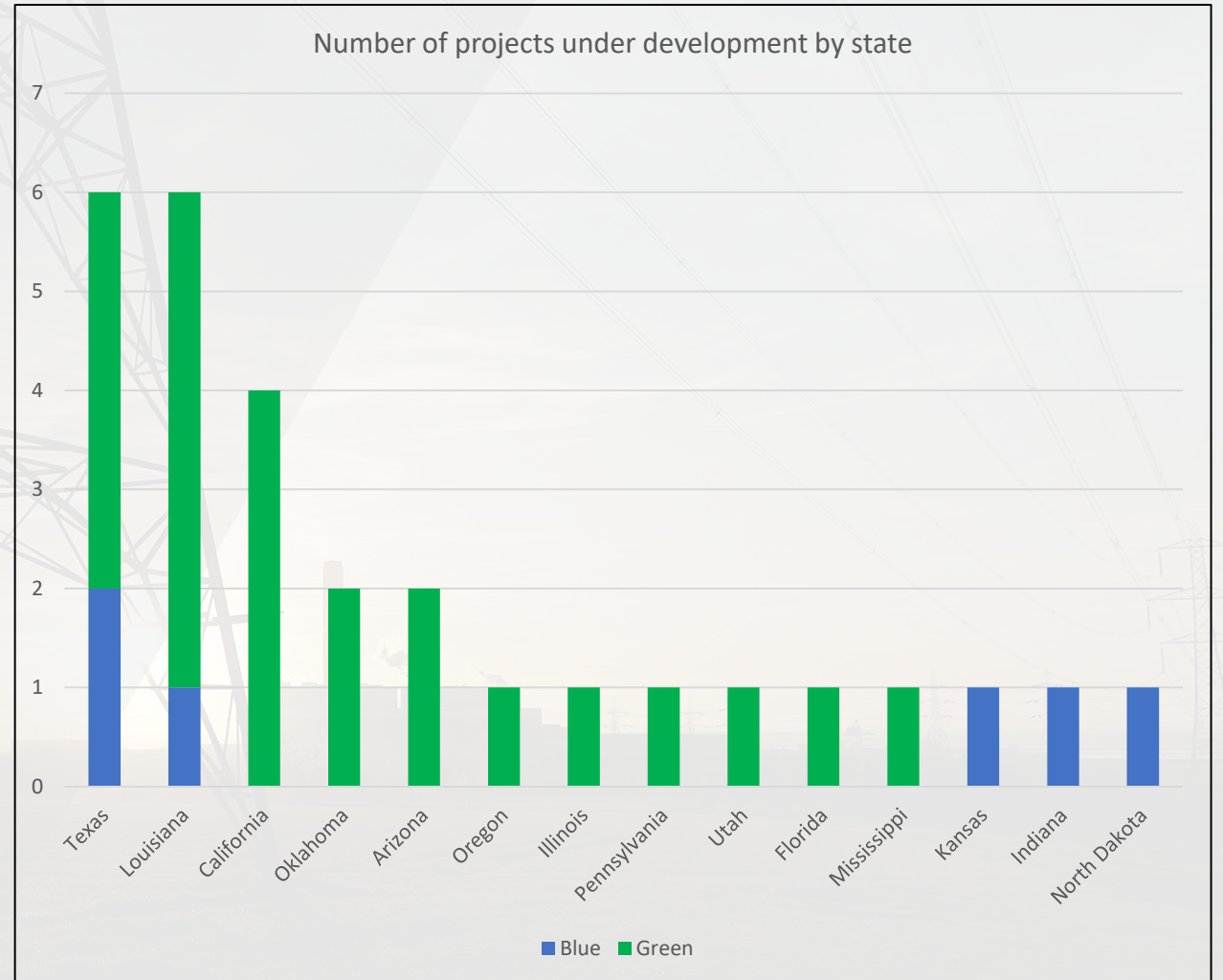
Project opportunities | Offshore Wind





2022 and beyond | Hydrogen

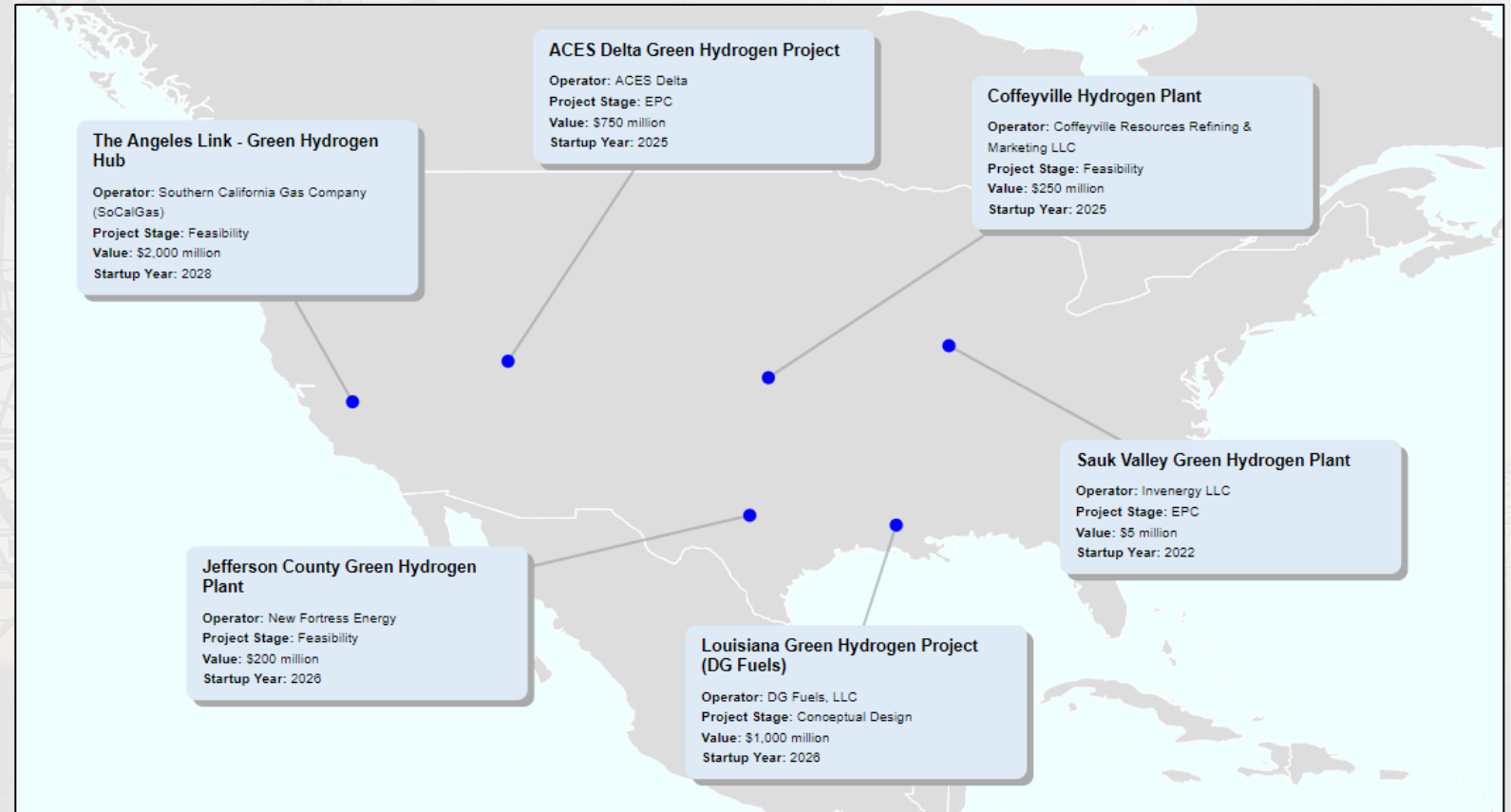
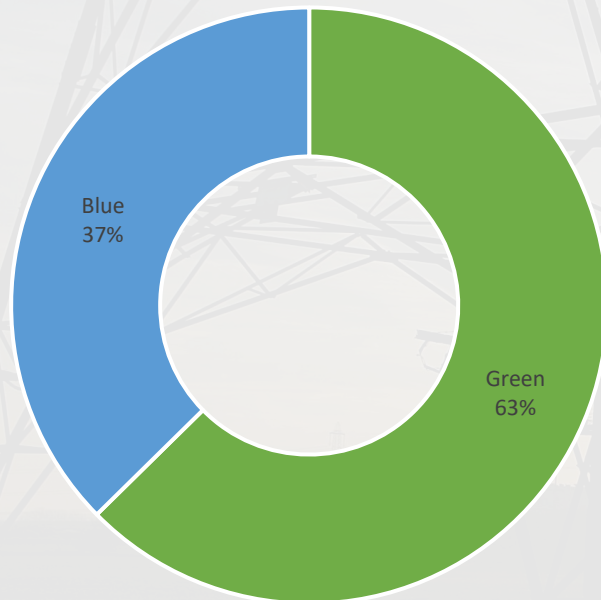
- Inflation Reduction Act and the production tax credits to clean hydrogen:
 - Up to US\$3/kg of green H₂
 - Depends on levels of lifecycle emissions and staff wages
 - Estimates for blue H₂ at US\$0.75/kg
- Massive market for electrolyzer manufacturers
- Great opportunity to decarbonize sectors such as steel and fertilizers





Project opportunities | Hydrogen

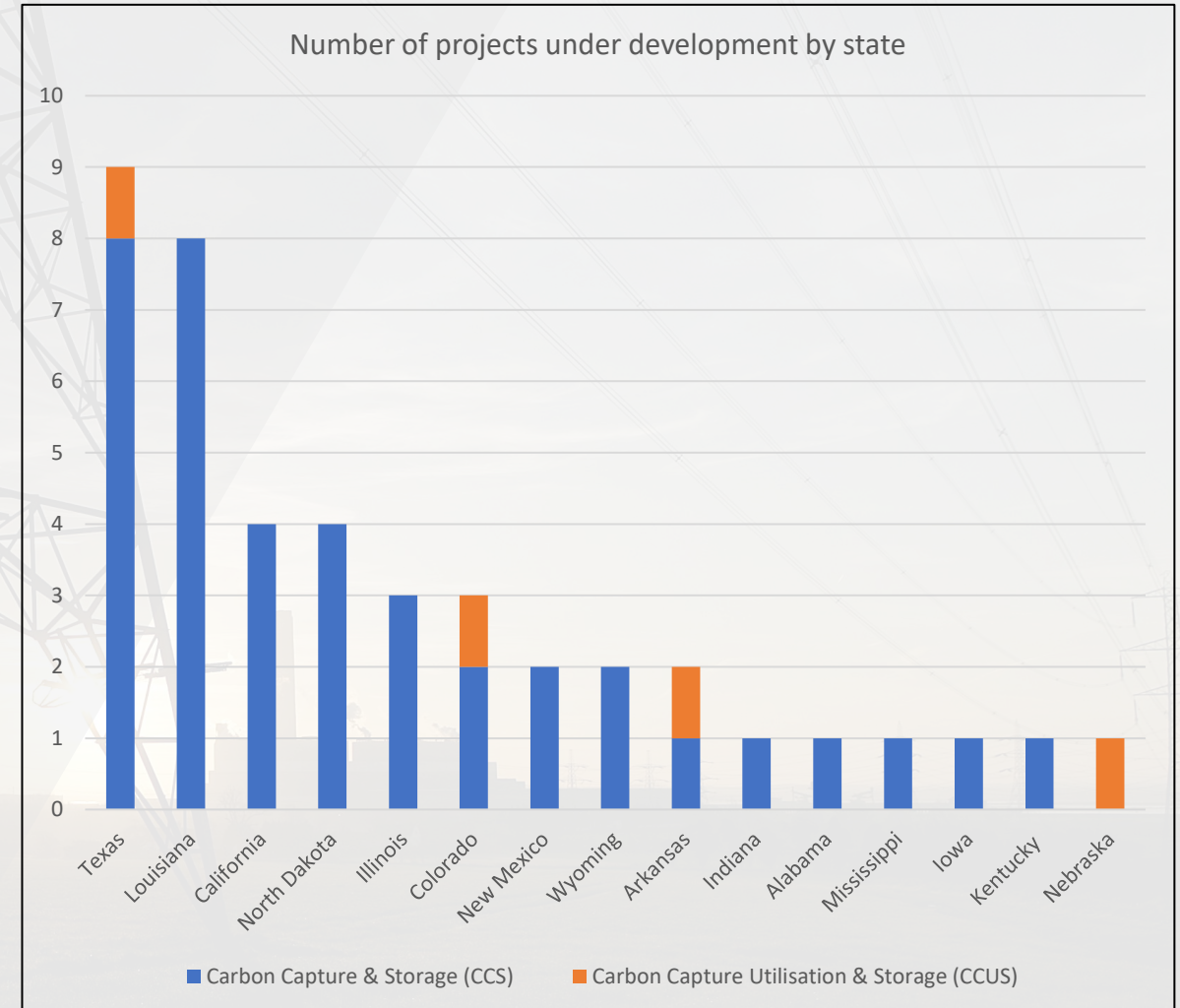
CAPEX comparison for commercial scale H2 projects proposed in the US





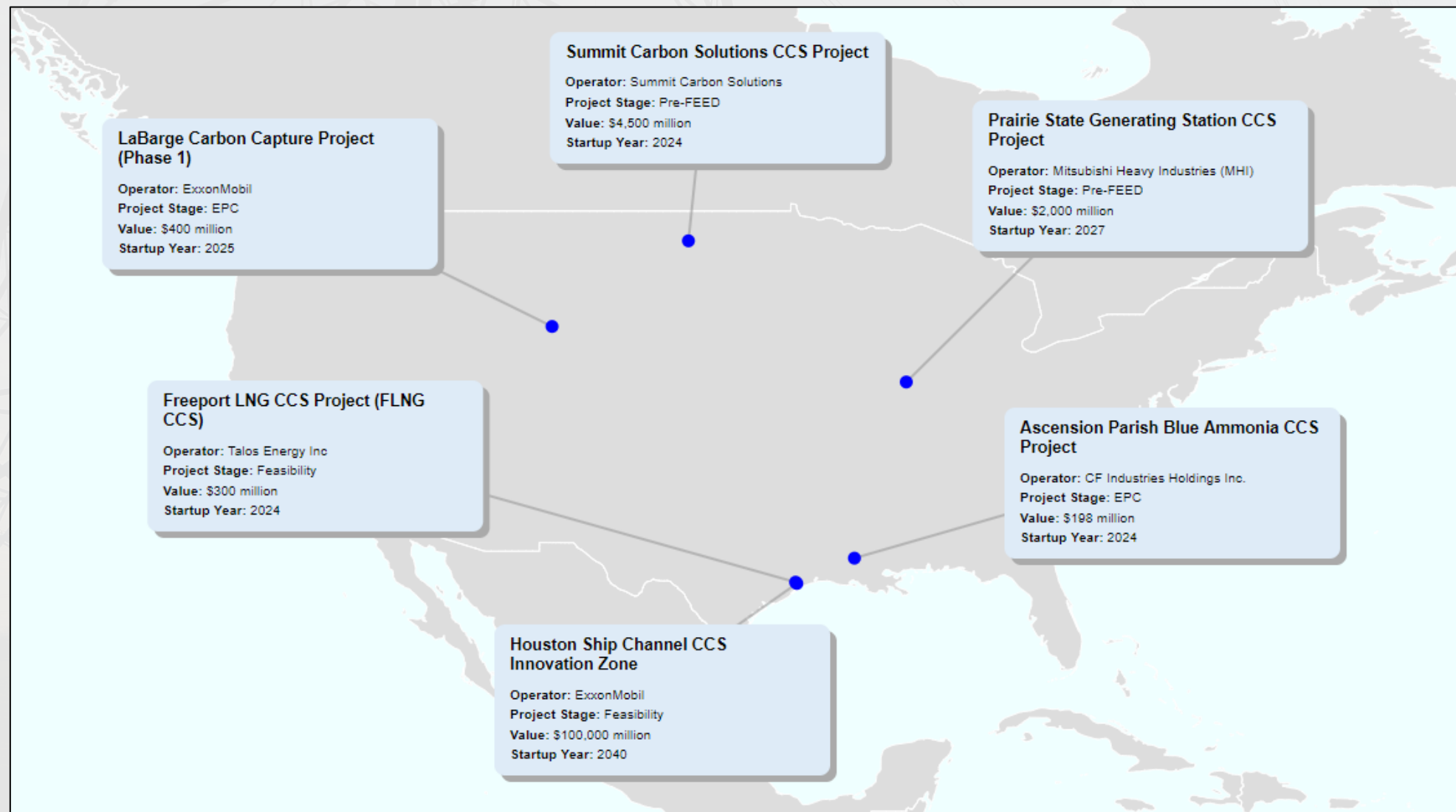
2022 and beyond | Carbon Capture

- IRA provides tax credits to CO₂ sequestration and EOR – US\$85 and US\$60 per metric ton, respectively
- Additional funding via Carbon Capture Demonstration Projects Program – US\$2.54bn
- US\$100bn CCS hub in Houston Ship Channel announced ExxonMobil

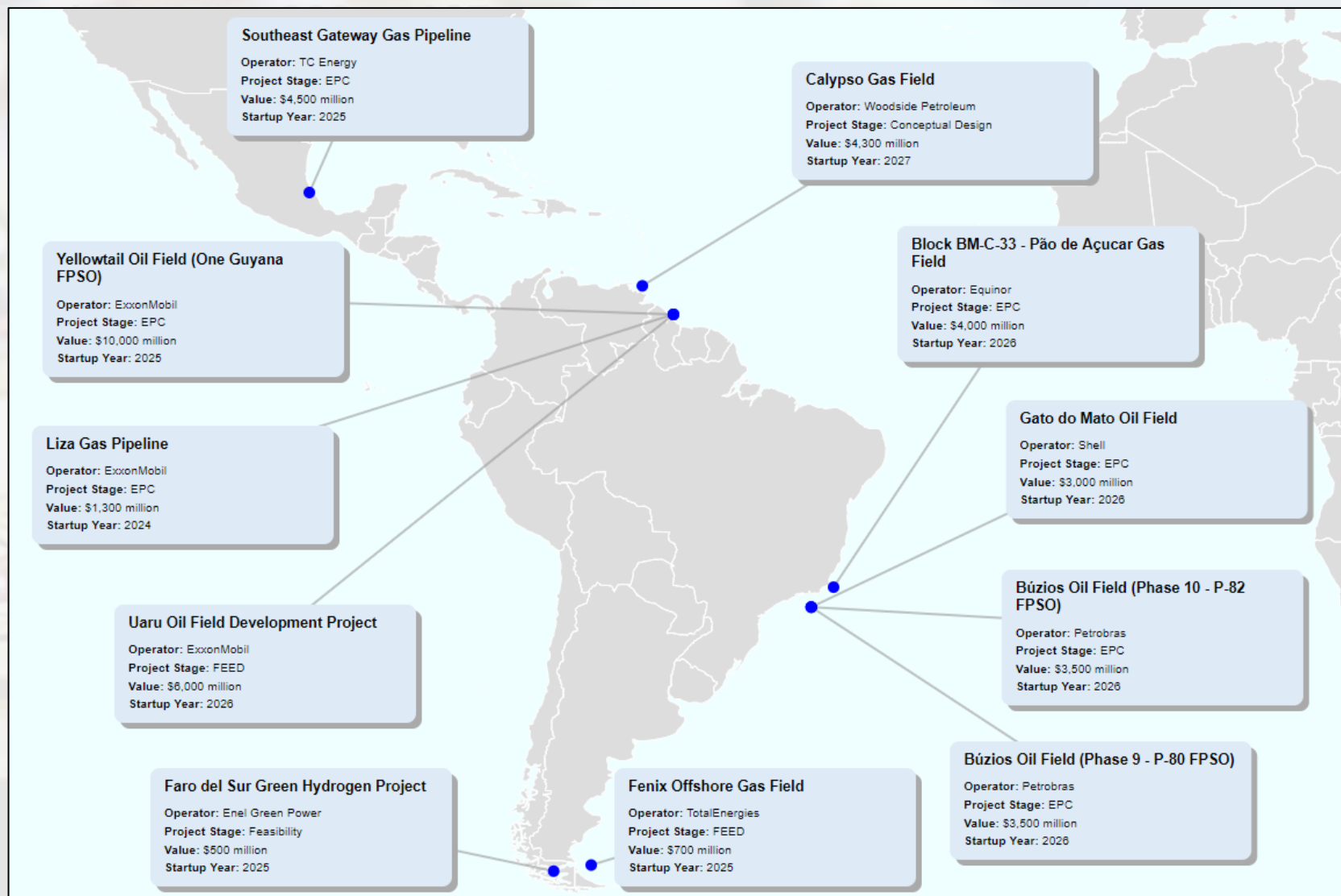




Project opportunities | Carbon Capture



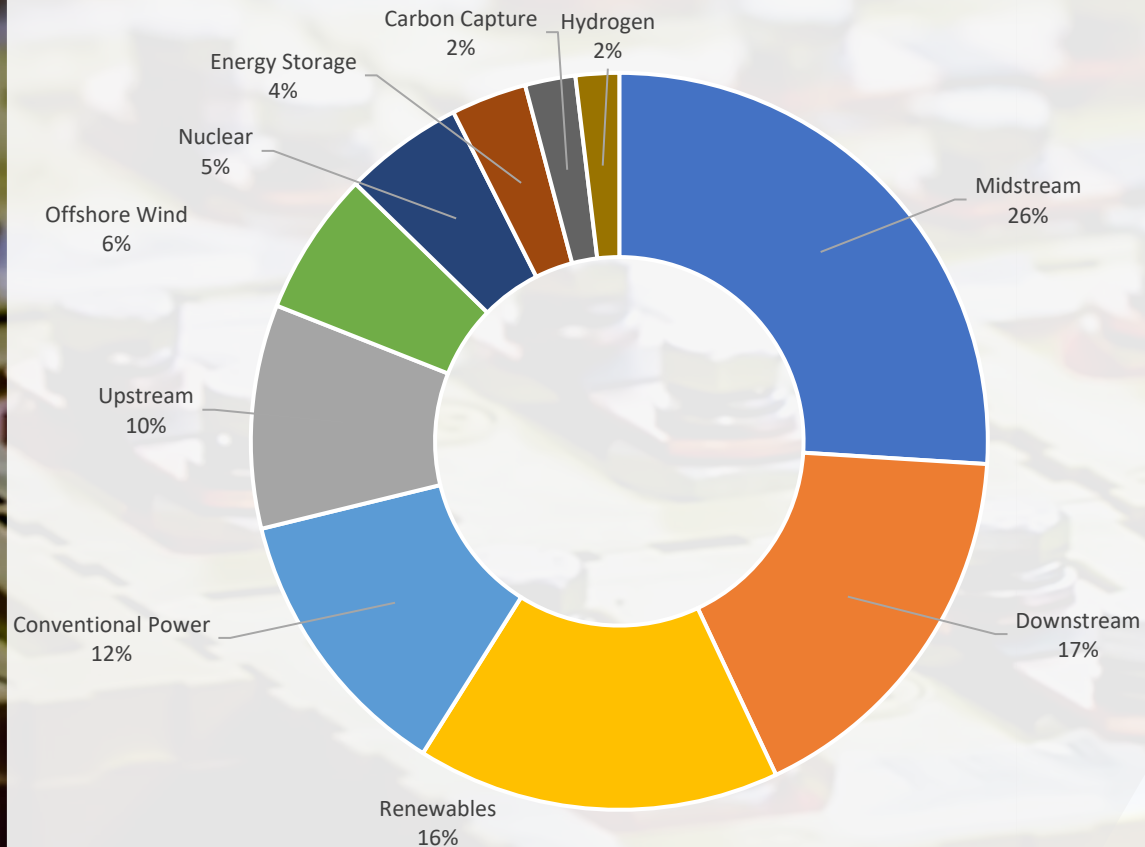
Opportunities across Latin America and Caribbean



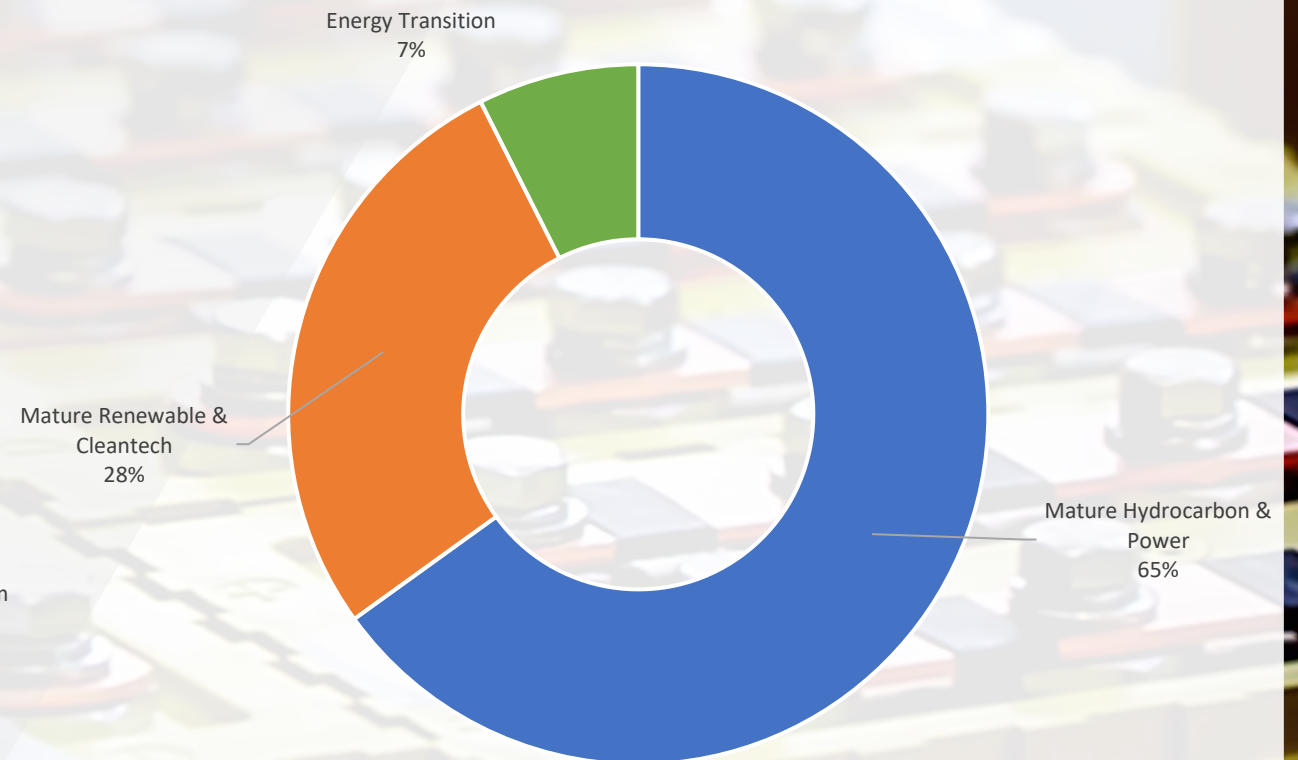
Summary remarks: near-term opportunities

Total CAPEX = 2022-2027

CAPEX of projects with start-up by 2027 (by sector)



CAPEX of projects with start-up by 2027 (by group)





Thank you.

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