

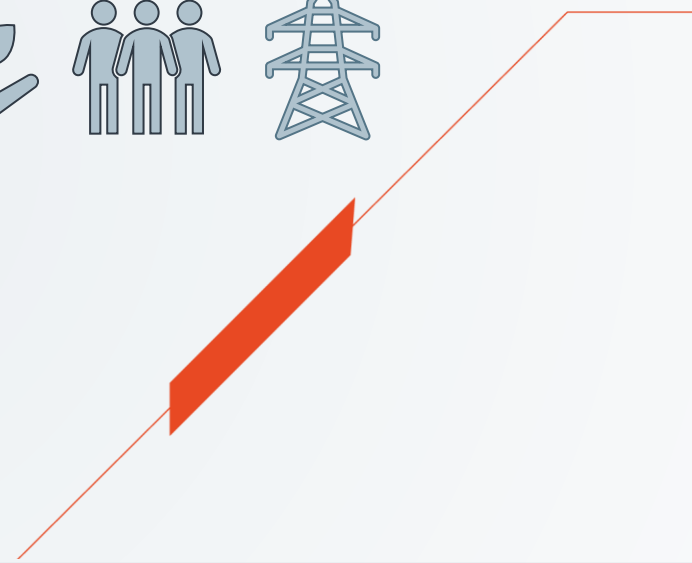
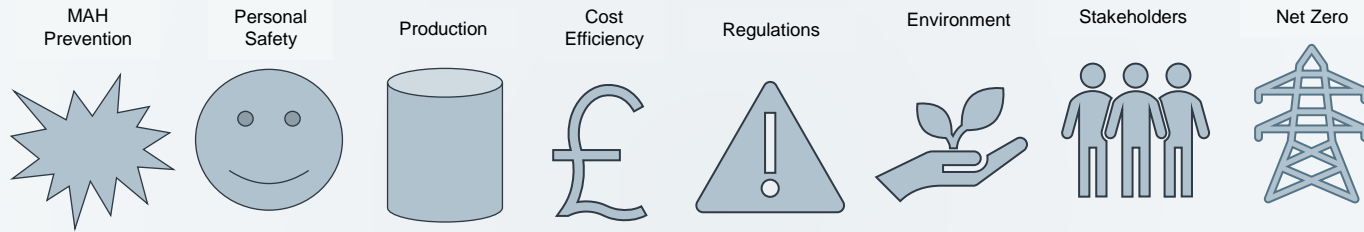


# Operated Asset CO2 reduction Journey

Rob Barrie -  
Technology Lead



# The Challenge - What are we balancing trying to reduce emissions on offshore assets?



# Emissions Context



~1.8t CO<sub>2</sub>eq / year

Avg. passenger car  
in Europe

5.3t CO<sub>2</sub>eq / year

UKGov 2019 UK  
emissions per  
person

~300kt CO<sub>2</sub>eq / year

Acorn CCS Phase 1

~1.2Mt  
CO<sub>2</sub>eq / year

Aberdeen  
City  
228k people

32.4Mt CO<sub>2</sub>eq / year

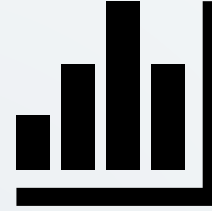
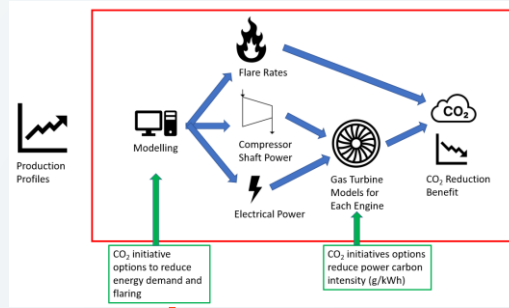
London Energy &  
Greenhouse Gas Inventory  
(LEGGI)

351.5Mt CO<sub>2</sub>eq / year

UKGov 2019 UK net  
emissions



# The Journey



Understand the Scope 1 Emissions on the Assets

Set a baseline year to Measure against

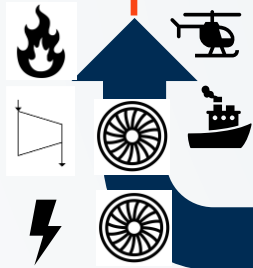
Build a Forecast model

Look for opportunities to reduce emissions for scope 1 emissions (needs to be evergreen)

Economically Screen the options

Deliver the CO<sub>2</sub> reduction scopes where economic + meets other factors

Measure & Track and set targets + enablers for delivery



Energy Demand Forecasting	Energy Demand Forecasting	Flaring and Venting
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SCOPE 1 NET CARBON ZERO

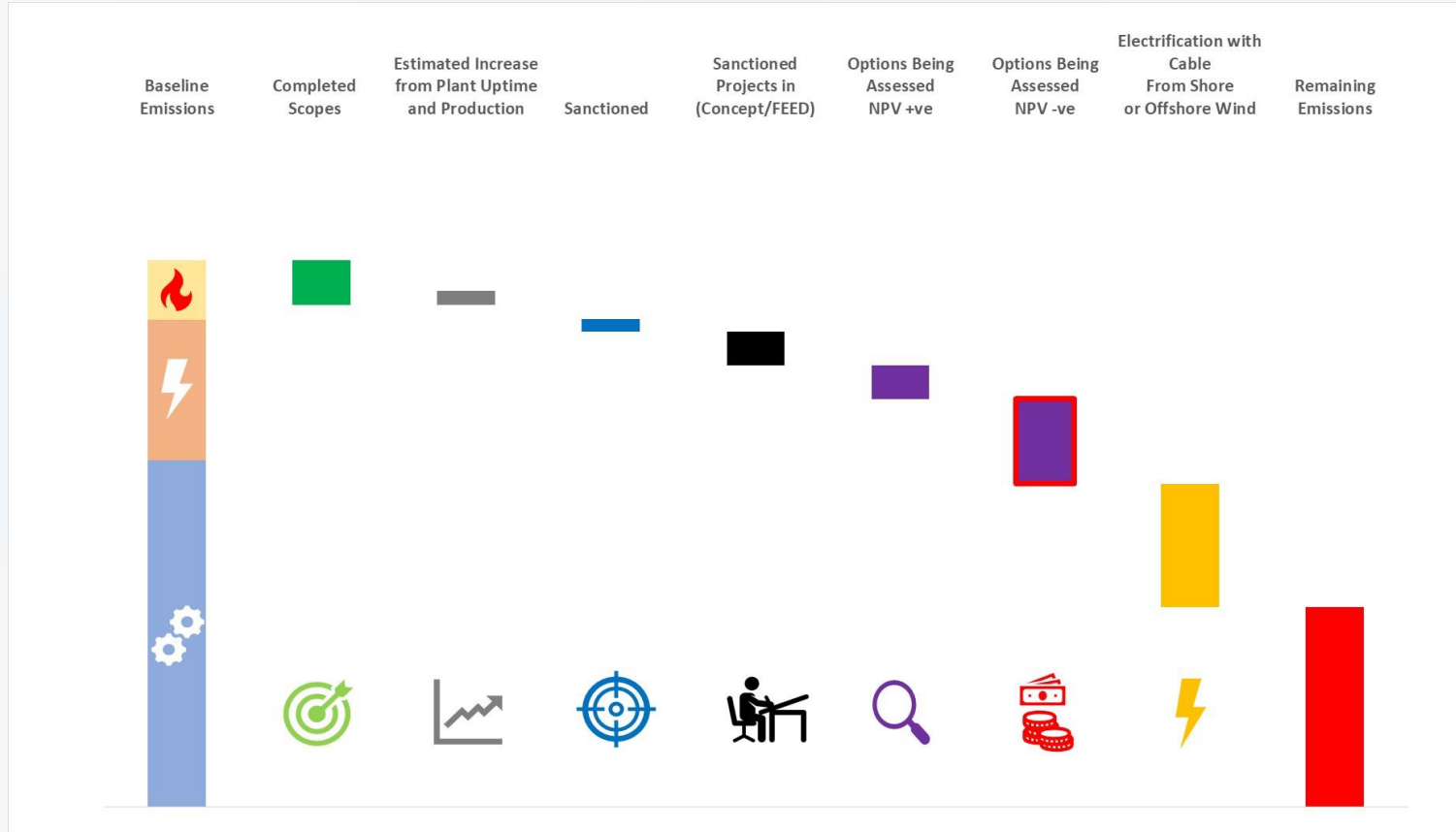


Learnings, Feedback and Update

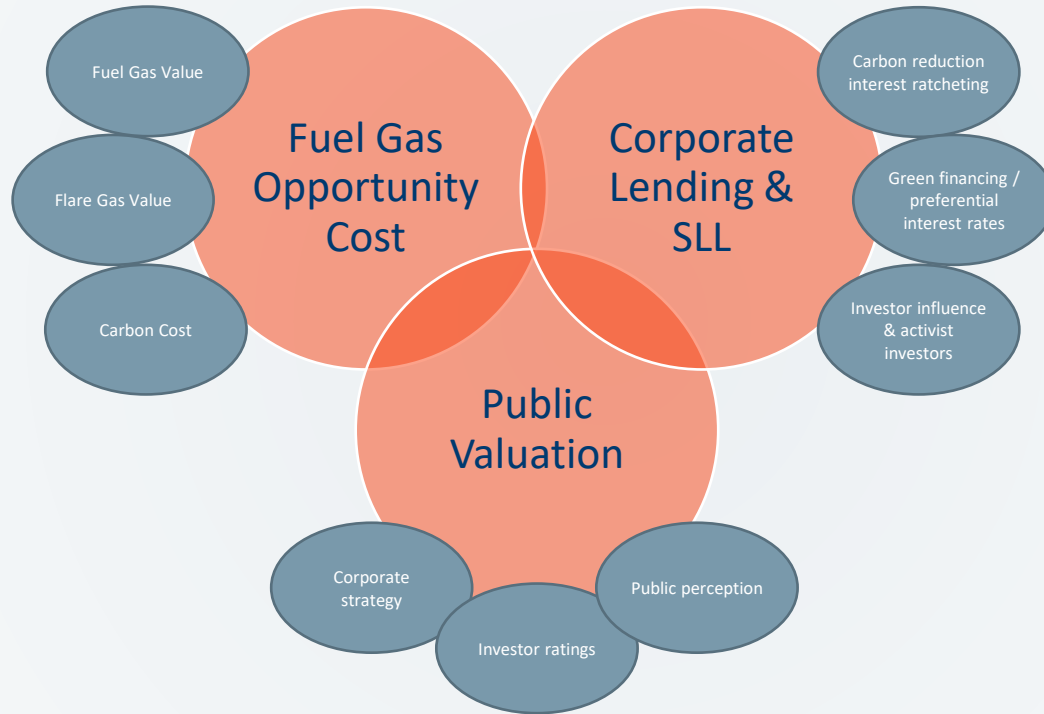
# The GHG Reduction Process In Detail



# CO<sub>2</sub> Reduction Waterfall



# Economics of Emissions



# THE INDUSTRY CHALLENGE



**People** – how do we promote behaviours to enable GHG reduction in similar style to safety (e.g. stopping energy waste, consumption, venting and flaring)



**Plant** – what plant modifications do we need to do on the facilities that helps drop GHG emissions safely and economically



**Process** – how we change how we operate, maintain, support the facilities and business that helps drop GHG emissions safely and economically

To achieve Industry, Government and Societal goals, we need to identify, assess, and execute the right actions, at the right time, for the right outcomes.

We need practical ideas from inside and outside our own companies, industry PEERs, outside industry and supply chain to support our GHG reduction journey.