



North Sea  
Transition  
Authority



# Operators ERAPs and NSTA Stewardship

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NSTA/ Technology

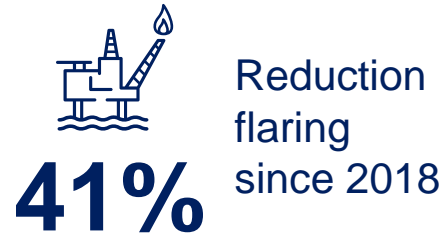
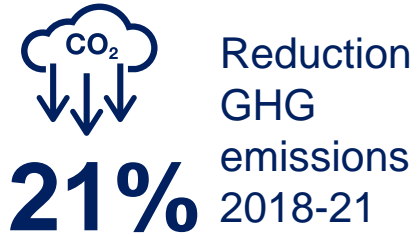
01/11/2022

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# Delivering the Deal: Emission Reductions



**NSTA expects targets to be met as absolute minimum**

**On track**

**Need industry  
to strive for 68%**

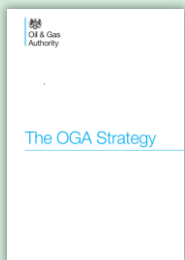
2021

2025

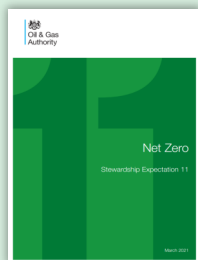
2027

2030

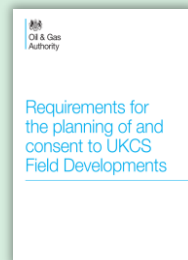
2050



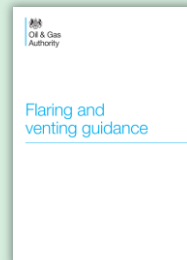
**OGA  
Strategy**



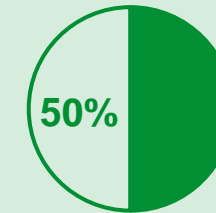
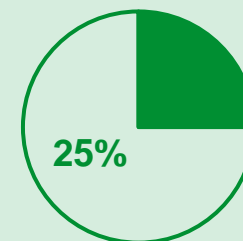
**Net Zero  
expectation**



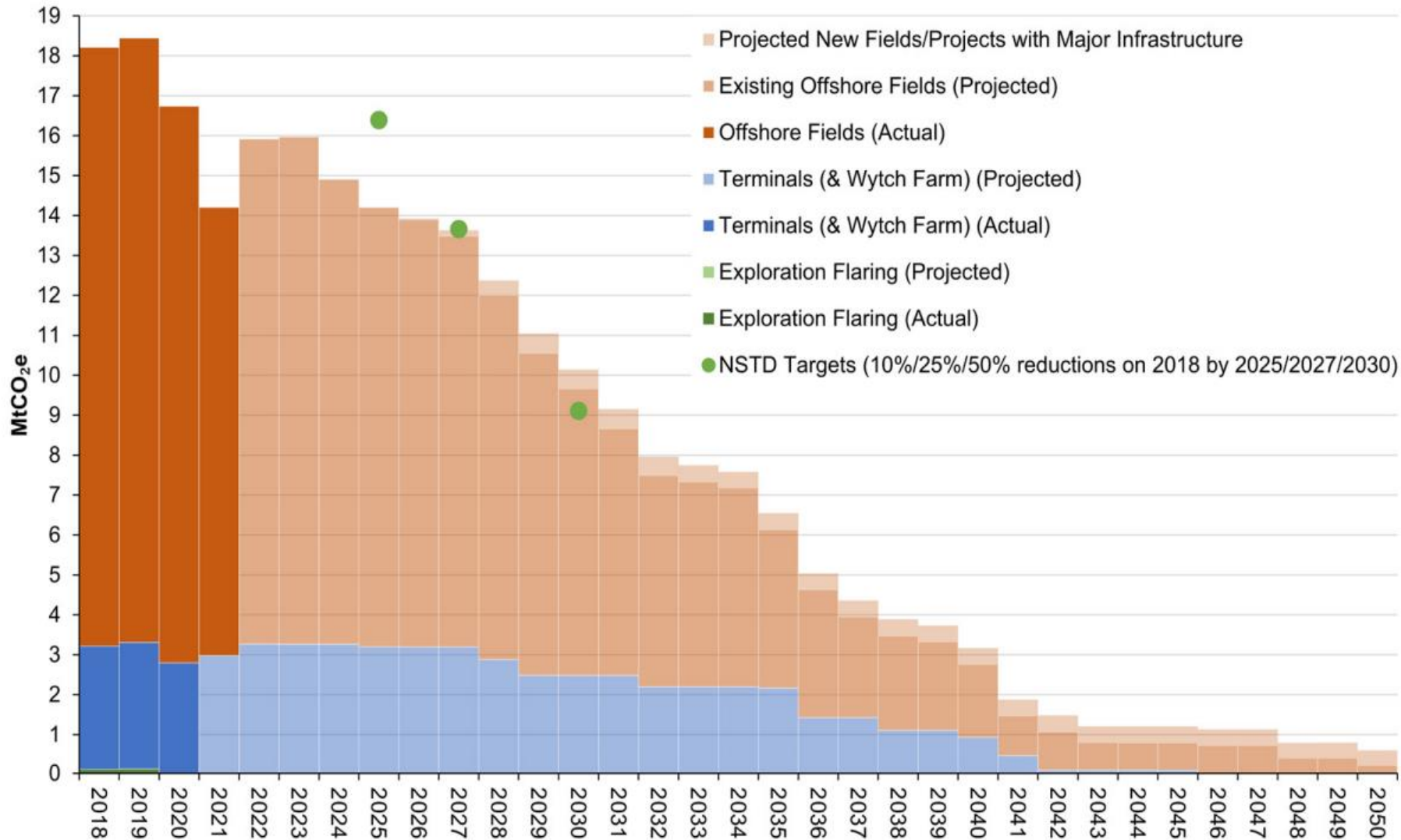
**New fields**



**Flaring  
& venting**



# North Sea Emission forecast & NSTD targets



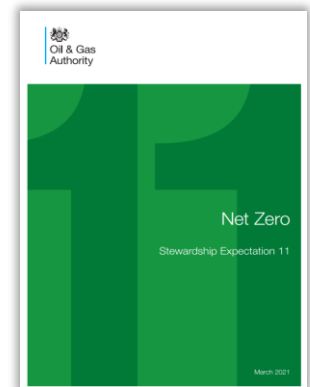
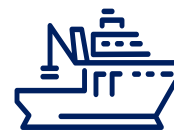
Source: Emissions Monitoring Report, 2022

Source: NAEI, EEMS, EU ETS, UK ETS, BEIS, NSTD.

Note: Business as usual projections, that is, excludes abatement and decarbonisation projects.

# Stewardship Expectation 11, Net Zero

- D9, Emissions Reduction Hopper
- D10, Associated SCAP
- D11, Zero routine flaring as future base case
- D12, Daily/ weekly asset reporting include emissions/ power
- D13, Power generation monitoring, regularly
- D14, Maintenance & inspection strategies utilise technologies to optimise downtime
- D15, Active flaring reduction strategy
- D16, Active vent reduction strategy
- D17, Logistics operations strategy to minimise emissions
- D18, Targets/ KPIs incorporated into Asset performance



## Context

NSTA asked for ERAPs to demonstrate Operators response to SE11

16 Operators covering 43 Assets have responded to-date, c.55% of total



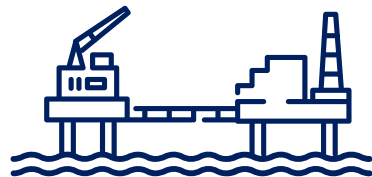
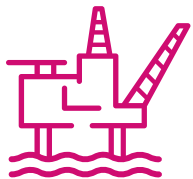
## Objectives

An on-going review coordinated with Area Teams to support future Operators' engagements on all ERAPs

Create awareness of the key reduction opportunities planned by Operator, by Hub/Asset, and share best practice

Develop an emission reduction Hopper, by Operator/theme/function/technology

Understanding ERAP impact and visibility in forward emissions forecasts, and NSTD targets



## Data

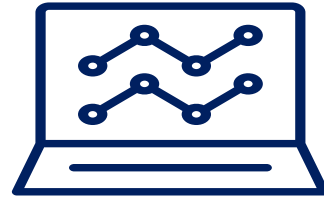


### Sources

An understanding of current emissions & future forecasts for all Hubs/ Assets

- *EEMS* reporting
- Central ERAP library
- *ETS Carbon Allocation*
- *Stewardship Survey* projections

## Analysis



### Operator ERAPs

A detailed, coordinated assessment of each Hub/ Asset ERAP submitted

- Integrating data into single tool
- Analysis & evaluation
- Prioritisation
- Characterisation

## Insights

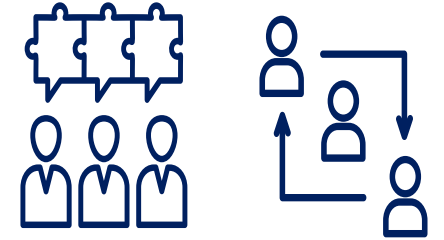


### Hopper & Forecasts

Develop opportunity hopper by theme/function/technology

- Opportunity Hopper focus areas
- Proportionate, robust
- Monitoring for PPM

## Collaboration

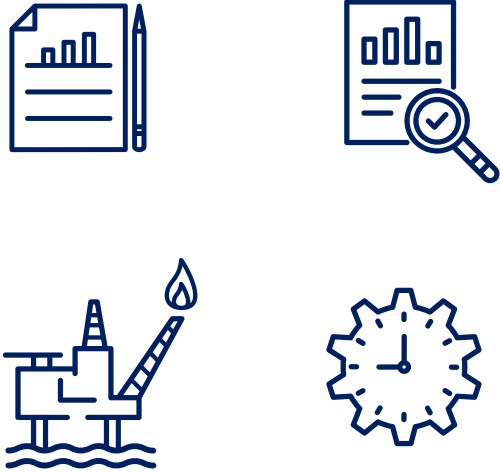


### SE11 Stewardship

Embrace the spirit of continuous improvement, progression best served

- Awareness
- Energise
- Share best practices

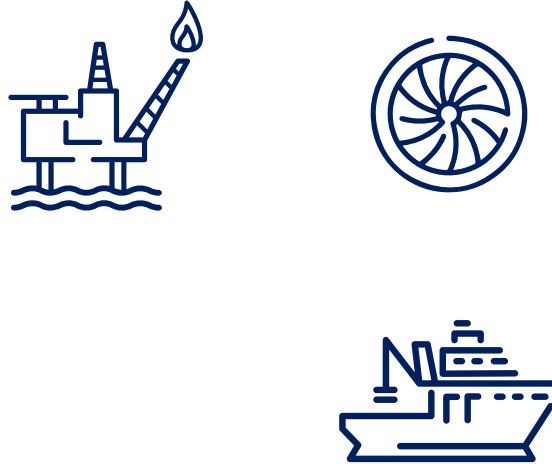
## Positive themes



**Expectations considered widely in-place, advanced and maturing**

- Emissions Reduction Hopper, D9
- Daily/ weekly asset reporting, D12
- Active flaring reduction strategy, D15
- Asset targets/ KPIs , D18

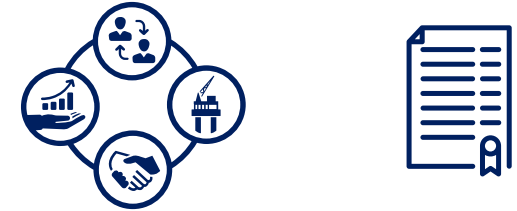
## Mixed



**Expectations considered partially in-place, though progressing**

- Zero routine flaring as future base case, D11
- Power generation monitoring, D13
- Active vent reduction strategy, D16
- Logistics operations strategy, D17

## Challenging



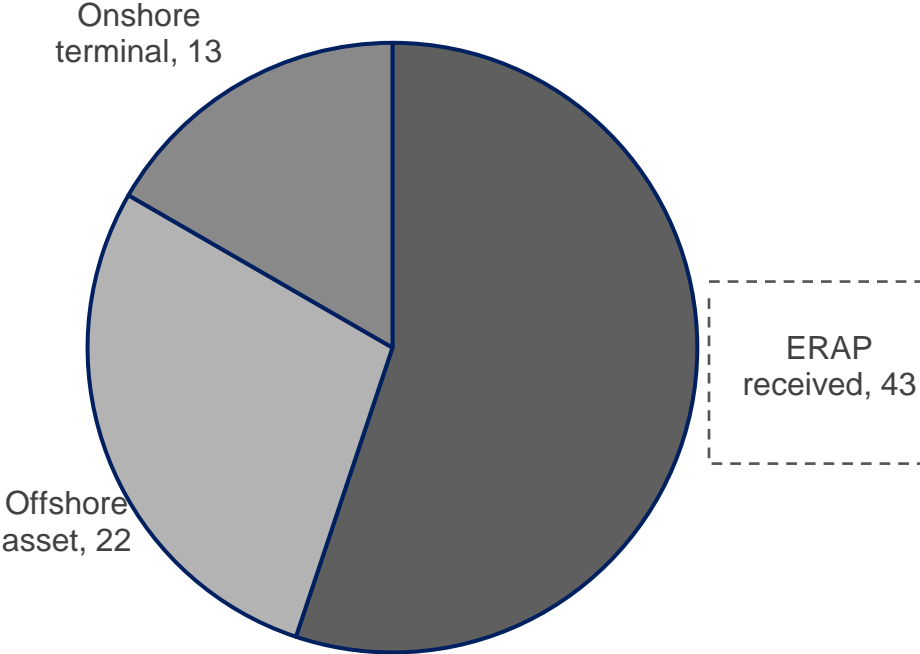
**Expectations largely not covered/assessed**

- Associated SCAP, D10
- Maintenance & inspection strategies, D14

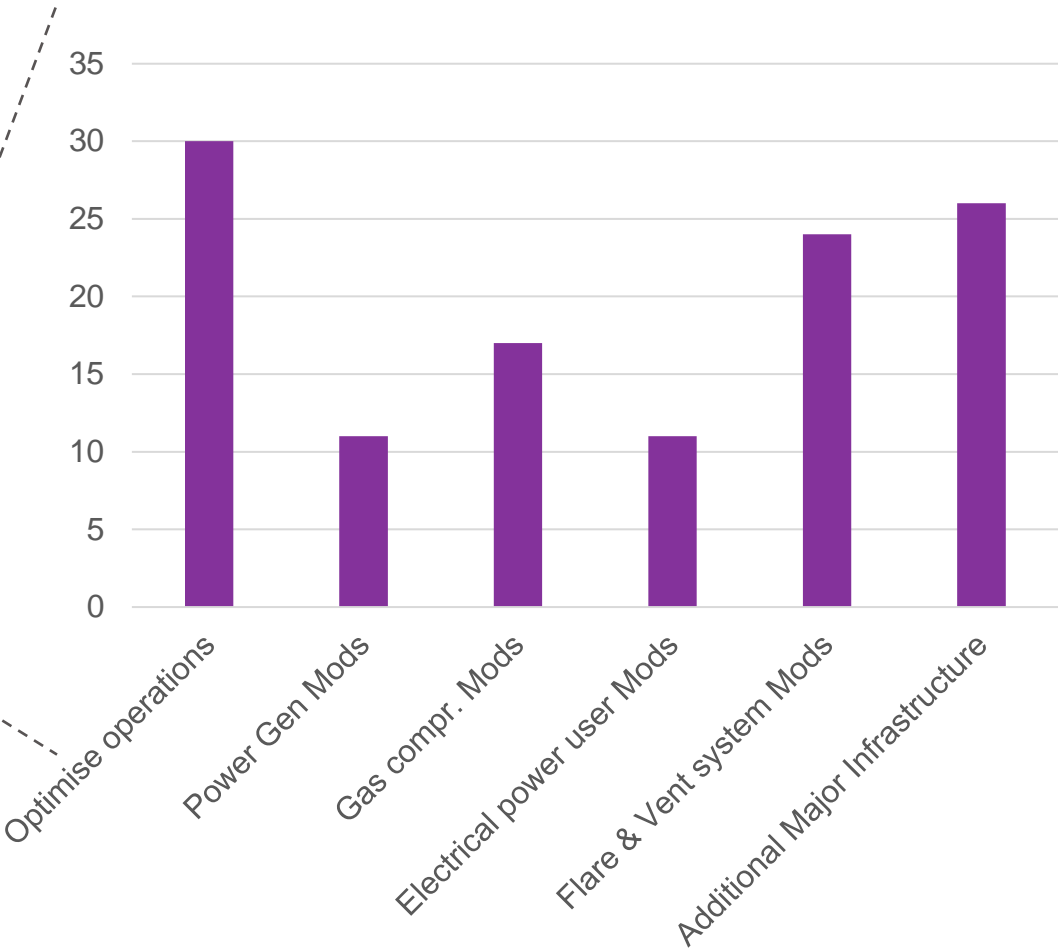
# ERAP responses to date... *at a glance*

## Number of action plans by status

Total number of offshore Assets & onshore Terminals = 78



## ERAP content by category





# Key Hub/ Asset insights...so far



**ERAP total expected: c.78**

**ERAPs received & reviewed: 43**

**Varying detail: document or summary slides or activity schedule**



**85% of the received ERAPs demonstrate a robust understanding of each GHG emission, source, historical trend**



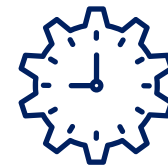
**80% of ERAPs provide Hopper details, and reveal cost-benefit opportunity-bias for prioritisation**



**70% outlined ERAP activity integration into Operators business planning cycle**

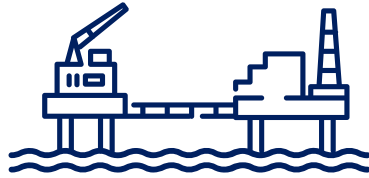


**Only 40% of ERAPs provided details on asset execution schedules**



**As yet unclear means to track future implementation and resultant emission reductions being accomplished**

# Key Hub/ Asset insights...so far II



**70% of ERAPs identified opportunities to continue optimising existing Operations**

- Power Generation: reduce unit ops, fuelling [10]
- Gas Compression: reduce unit ops/ restore availability/ control mapping [6]
- Liquid Pump: Oil/ PWR/ SWLP reduce unit ops, [6]
- F&V: VRU reinstatement, lower purge rates [4]



**25% are planning Projects or studying modifying Power Generation**

- Up-grade existing unit efficiency [3]
- Right size units [2]
- Recovered energy generation [4]



**40% are planning Projects or studying modifying Gas Compression**

- Right size units: rewheels/ revamp [12]
- Change to motor-driven [1]
- Train reinstatement [1]

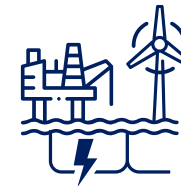
**25% are planning Projects or studying modifying users of Electrical power**

- Right size pump units/ VFDs [12]



**55% are planning Projects or studying modifying Flare & Vent systems**

- New Flare Gas Recovery facilities [15]
- Routing existing vents into flare systems [4]
- New Flare tips [2]



**60% are participating in or evaluating Infrastructure Projects**

- Hub Electrification: CNS, OMF, WoS, [10]
- WTG, NZTC WINTOG program Ph2 [7]
- Power sharing/ import [2]
- CCS: [3]
- Adding gas export: [1]

# Next Steps

1. Received the outstanding ERAPs [onshore Terminals & offshore Assets] and complete the Review
2. Support on-going Stewardship with NSTA Area Teams and Operators on the basis of the analysis
3. Continue wider-Industry engagement:
  - Collaboration thru' existing *Asset Stewardship Task Force [ASTF]*
    - Cross-Industry workshop planned for November with *OEUK*
  - Contribute to *Technology Leadership Board/* North Sea Transition workstream
  - Share with *NZTC* to potentially shape future emerging technologies opportunity programs
  - Share with *ETZ* to potentially shape future existing technologies opportunity programs

