



North Sea  
Transition  
Authority

# The need to increase Well Intervention in the UKCS

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SPE ICoTA 28<sup>th</sup> European Well Intervention Conference

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# Role of the NSTA

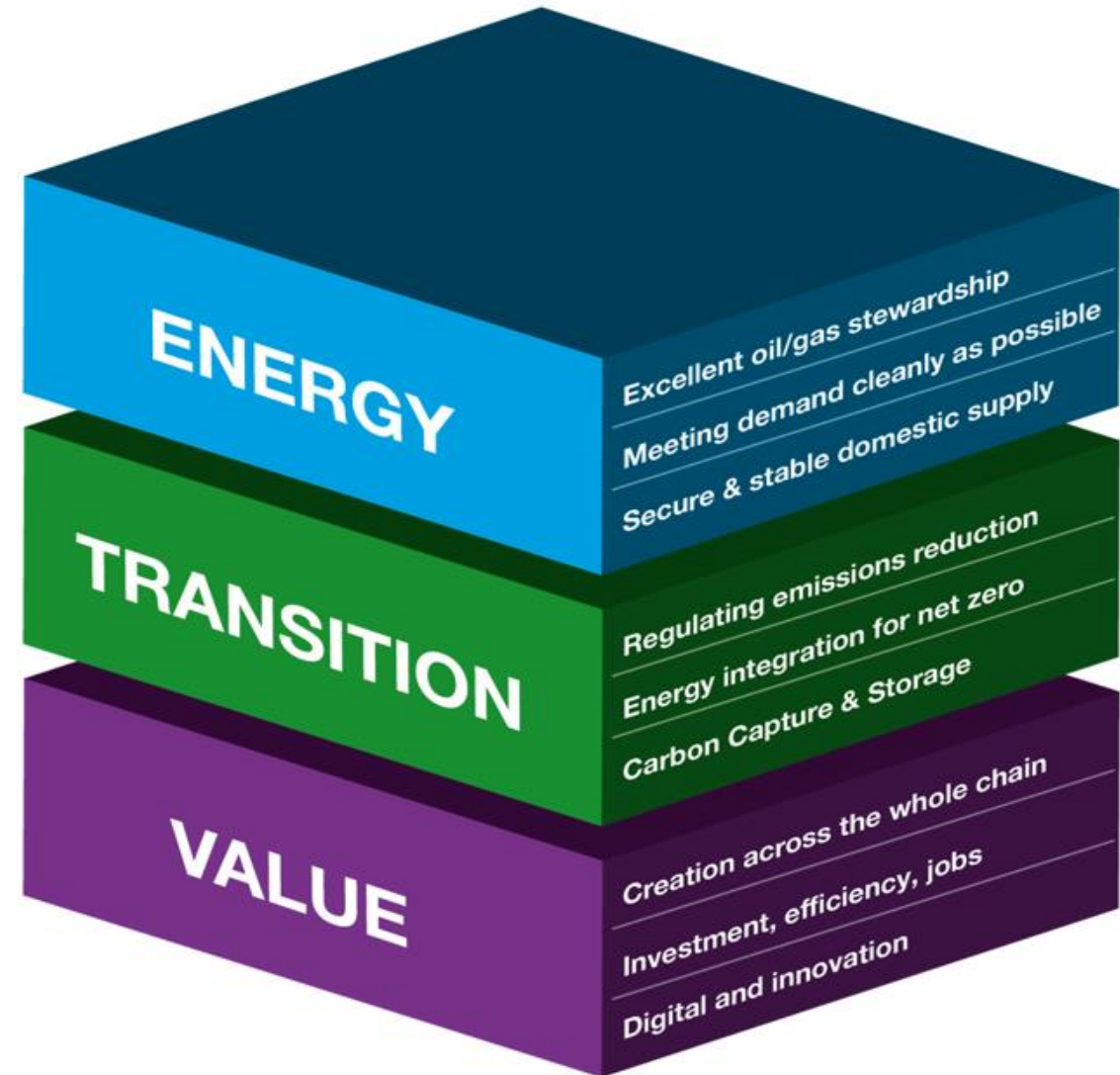
The NSTA has a broad remit that covers the transition to Net Zero while maximising the value of economically recoverable petroleum

Through asset stewardship we ensure Operators are meeting the NSTA strategy and the 12 stewardship expectations.

- Stewardship Expectation 4 – Well Activity Performance

**“The NSTA expects that operators will maximise the value of wells throughout the well lifecycle”**

## Mission Statement



# UK Stewardship Survey

Every year the NSTA receives data for newly drilled, producing and decommissioned wells in the UKCS.

This is used to produce the annual wells insight report and used to identify operators that require stewardship.

This data can then be utilised to provide valuable insights into well intervention trends over the last few years.



## North Sea Transition Authority Wells Insight Report 2022

### 1) Introduction

- Wells Insight Executive Summary
- UKCS New Well Trends

### 2) Exploration & Appraisal Wellbores

- E&A Wells: Activity Overview
- E&A Wells: Costs
- E&A Wells: Performance
- E&A Wells: Three Year Lookahead

### 3) New Development Wellbores

- Activity Overview
- New Development Wells and Infill
- Development Wellbore Investment
- Development Wellbore Cost Analysis
- NPT Cost Analysis
- Development wellbore lookahead

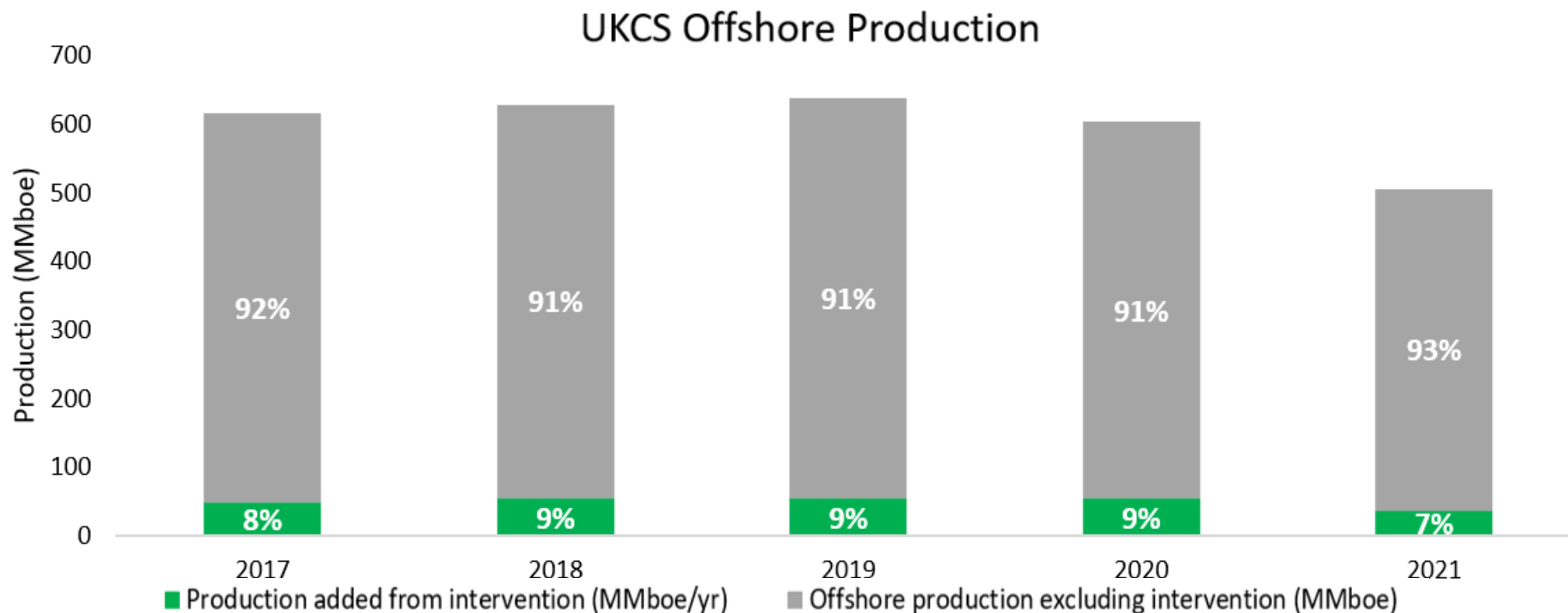
### 4) Well Stock

- Well Stock
- Well Stock Surveillance
- Well Stock Issues
- Well Stock Integrity Issues
- Intervention Overview
- Intervention Activity
- Intervention Costs
- Subsea Interventions
- Well Stock Losses
- Well Decommissioning

*This report displays performance and trends of exploration, appraisal and development wells in the UKCS across all regions and by various infrastructure type. If you would like to provide any feedback on the report we would be delighted to hear from you. Please follow the link below*

[Feedback form](#)

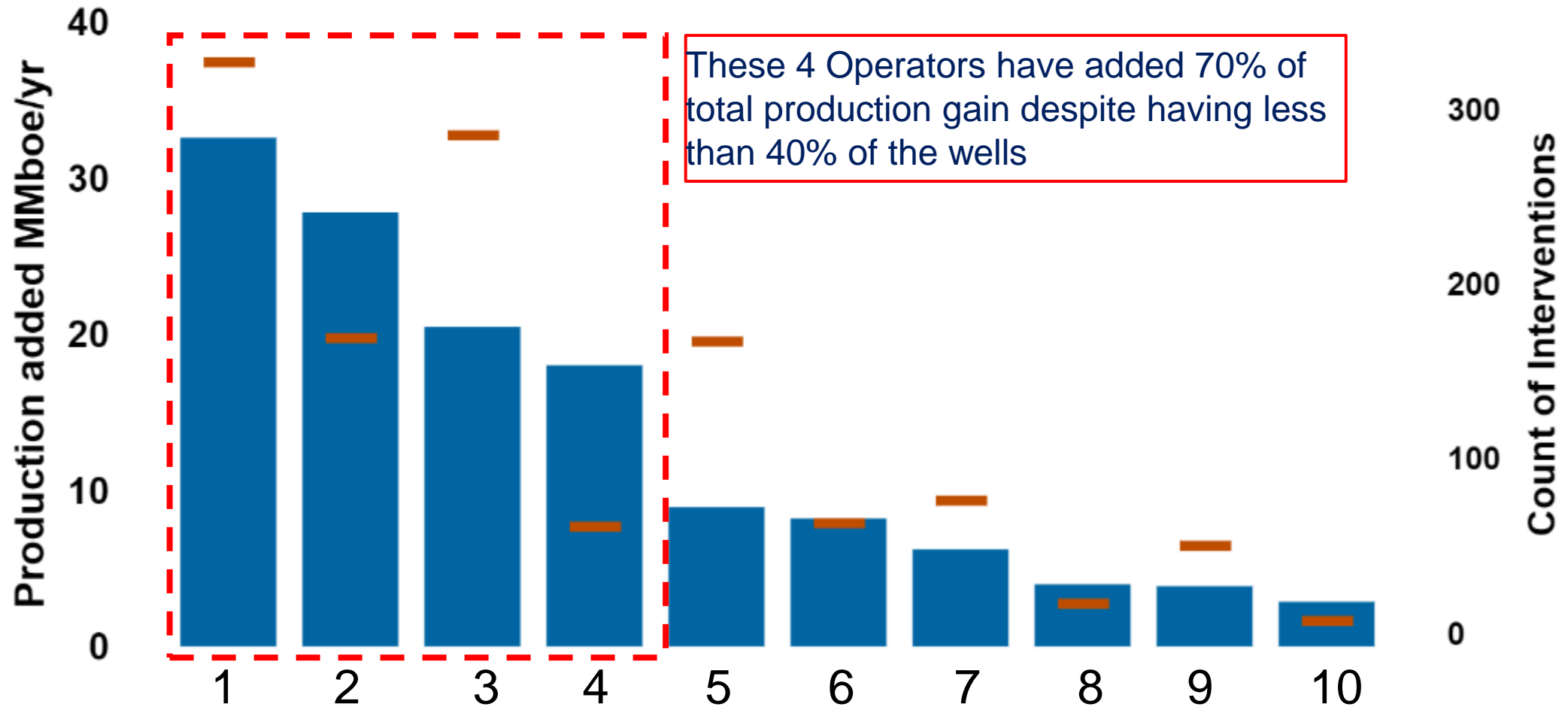
# Well Intervention Overview



- Last year well intervention accounted for 7% of total production (36.2MMboe/year).
- Assuming an approximately even split between Oil and Gas production this was worth over **£1.9 Billion**.
- Intervention spend in 2021 was just over **£300M** – great return on investment with an average cost per boe of **£5-10**

# Production added 2019-21

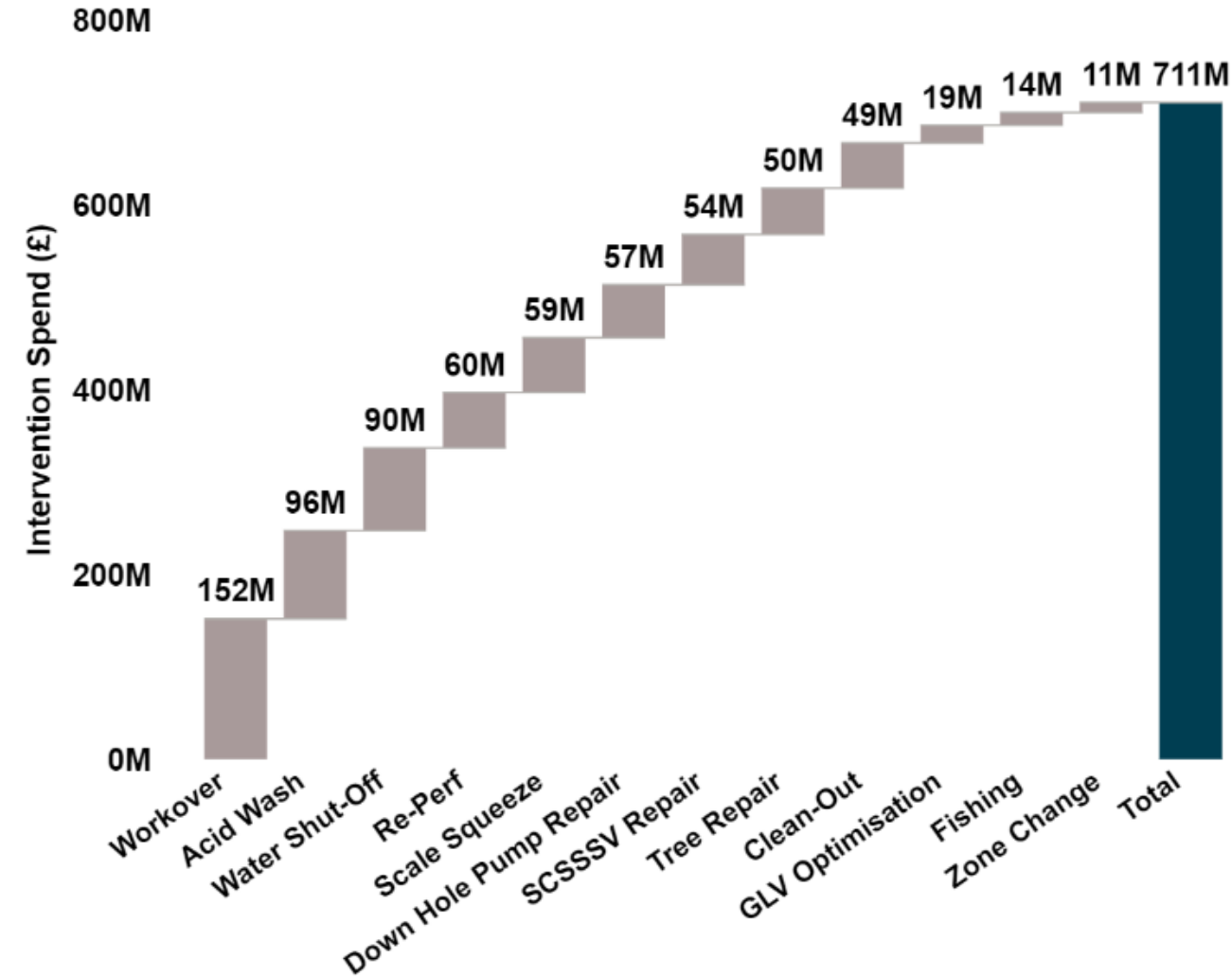
● Total Production over 1 year (MMboe) — Count of Interventions



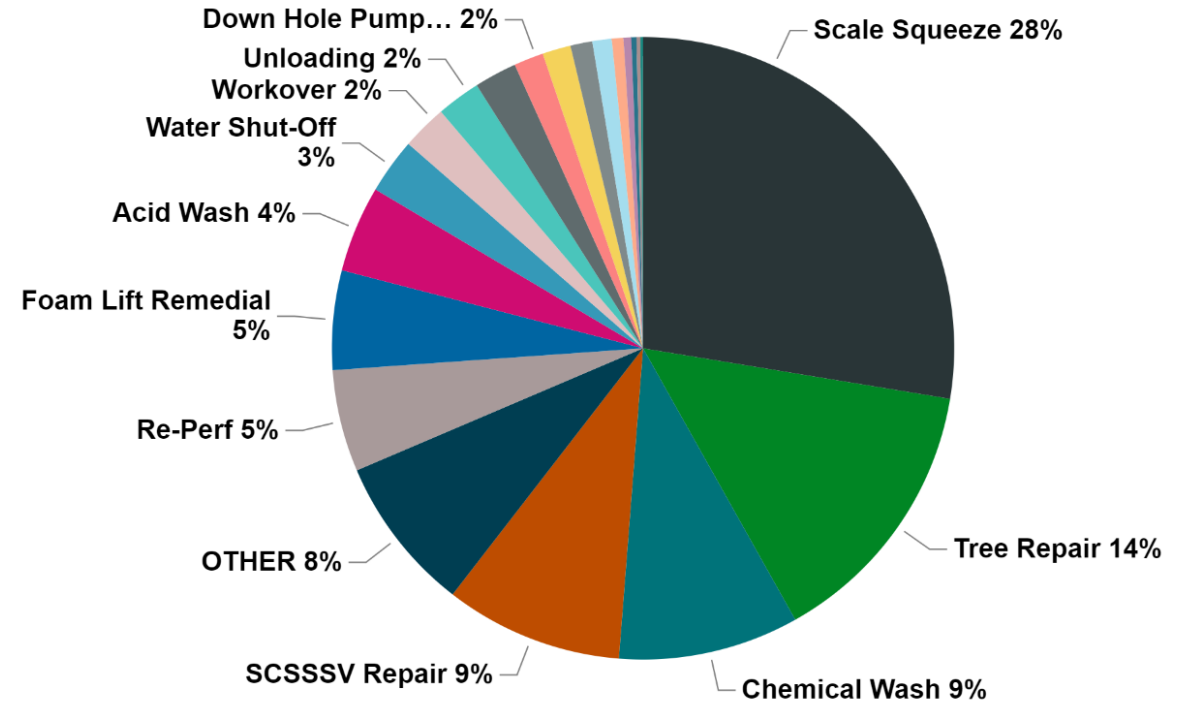
Operators seeing great results with a clear relationship between the number of interventions and the volume of production added

# Intervention Activity 2019-21

Intervention Spend by type (top 12, min 10 interventions)



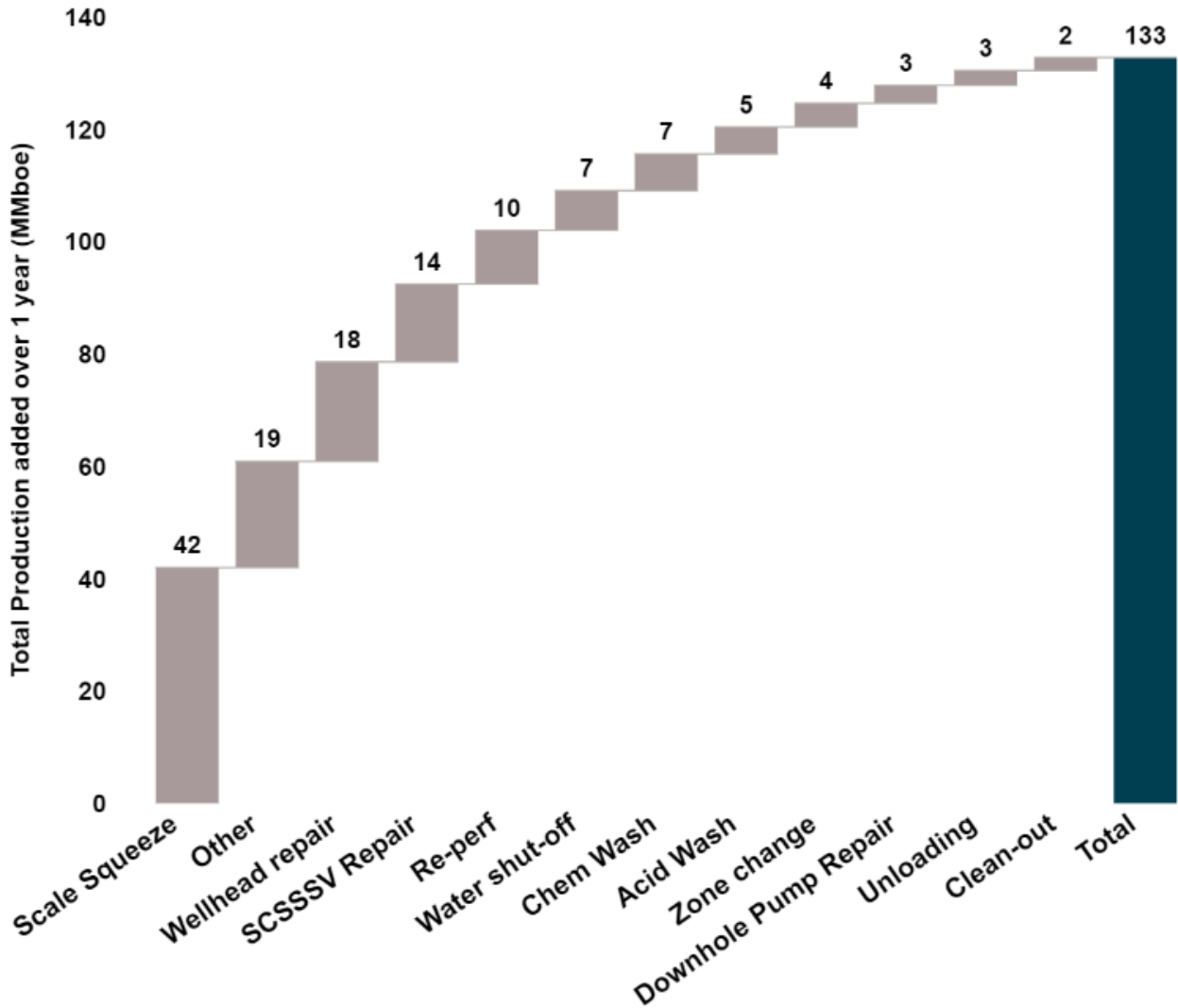
Count of Interventions 2019 -21



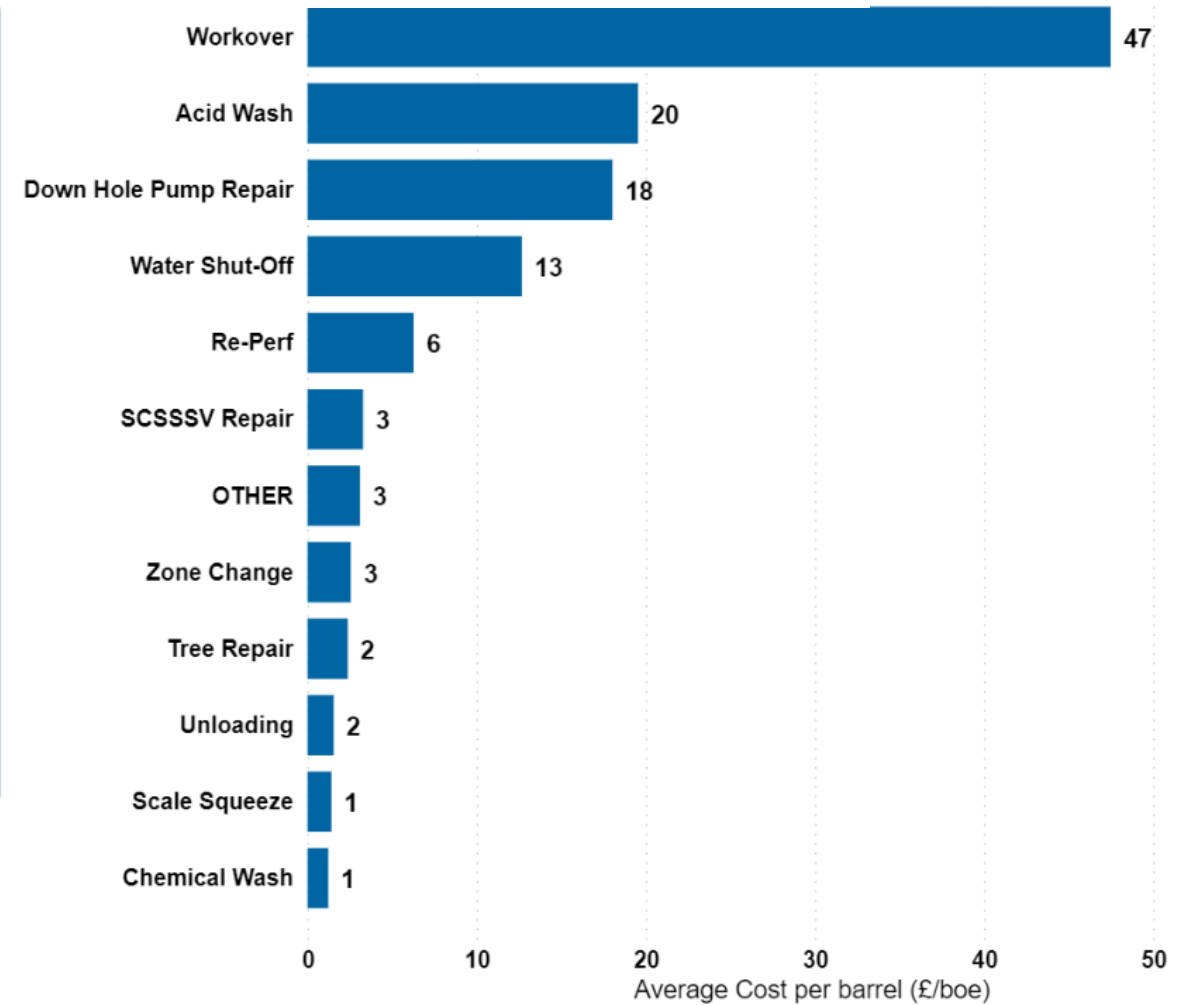
Complex basin with different challenges has resulted in a large spend across a wide range of interventions over the past 3 years

# Intervention Results 2019 – 21

Total Production added over 1 year (MMboe) by Intervention Type 2019-21



Average cost per barrel 2019-21



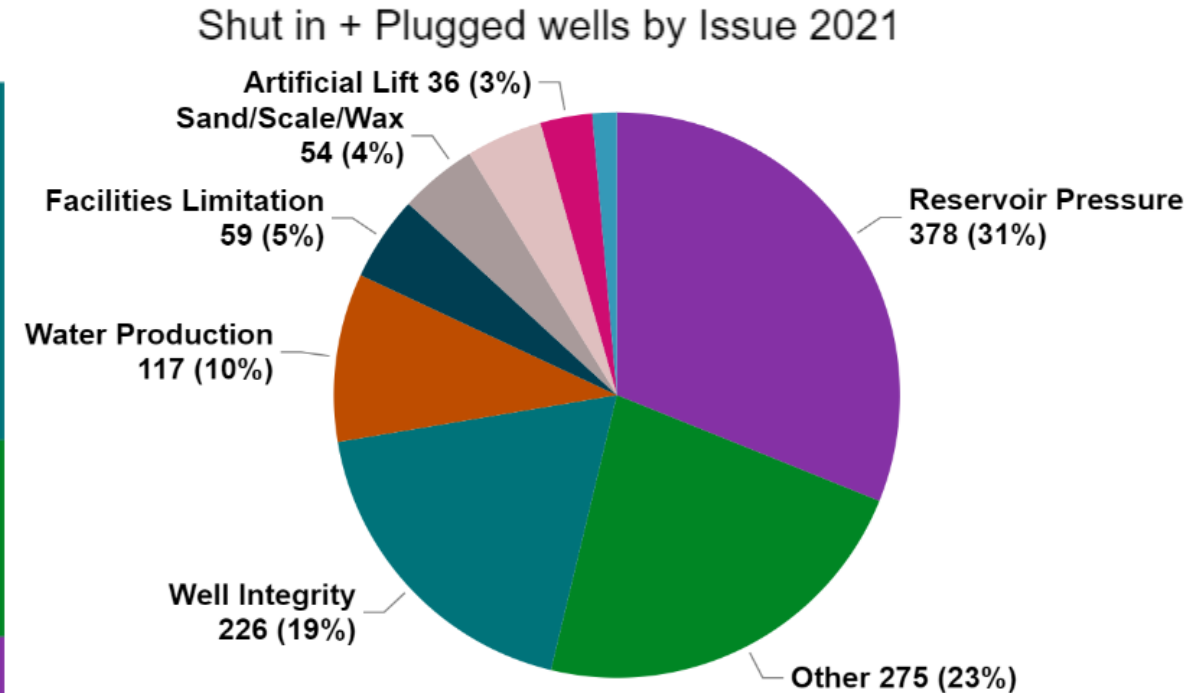
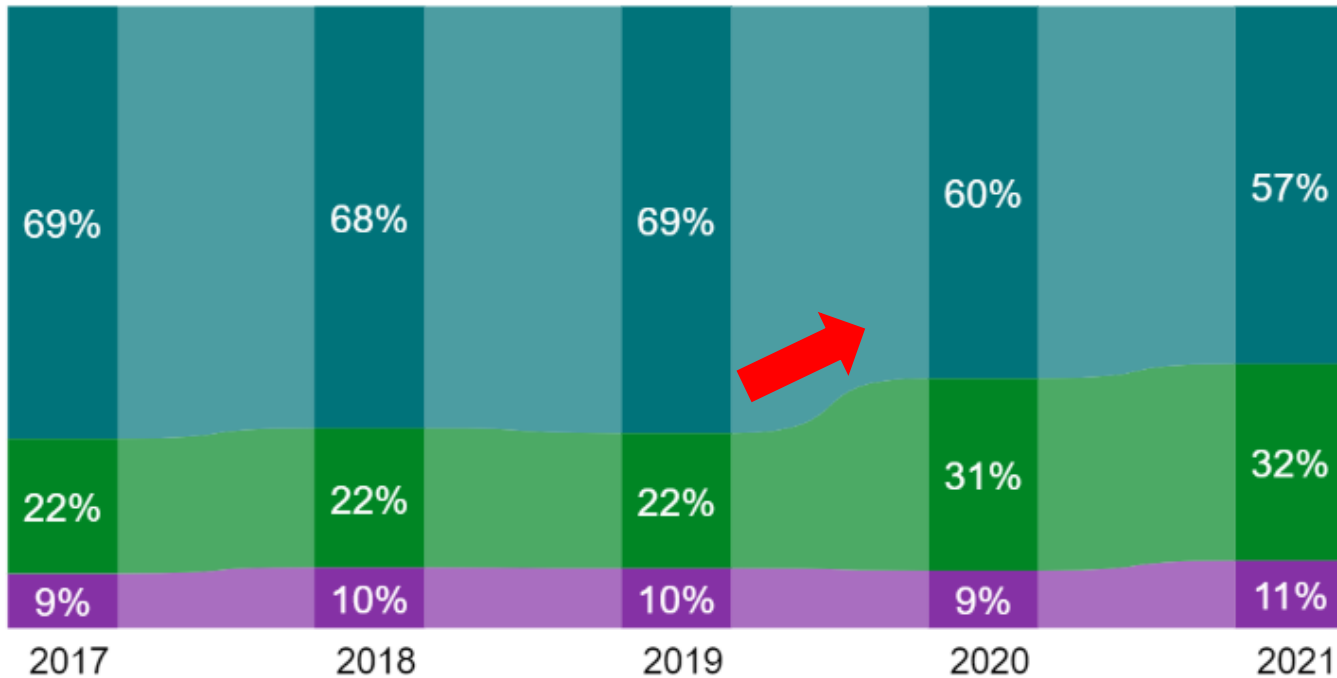
Large volume of barrels added at a low cost per boe



# Well Stock

Active well stock in UKCS

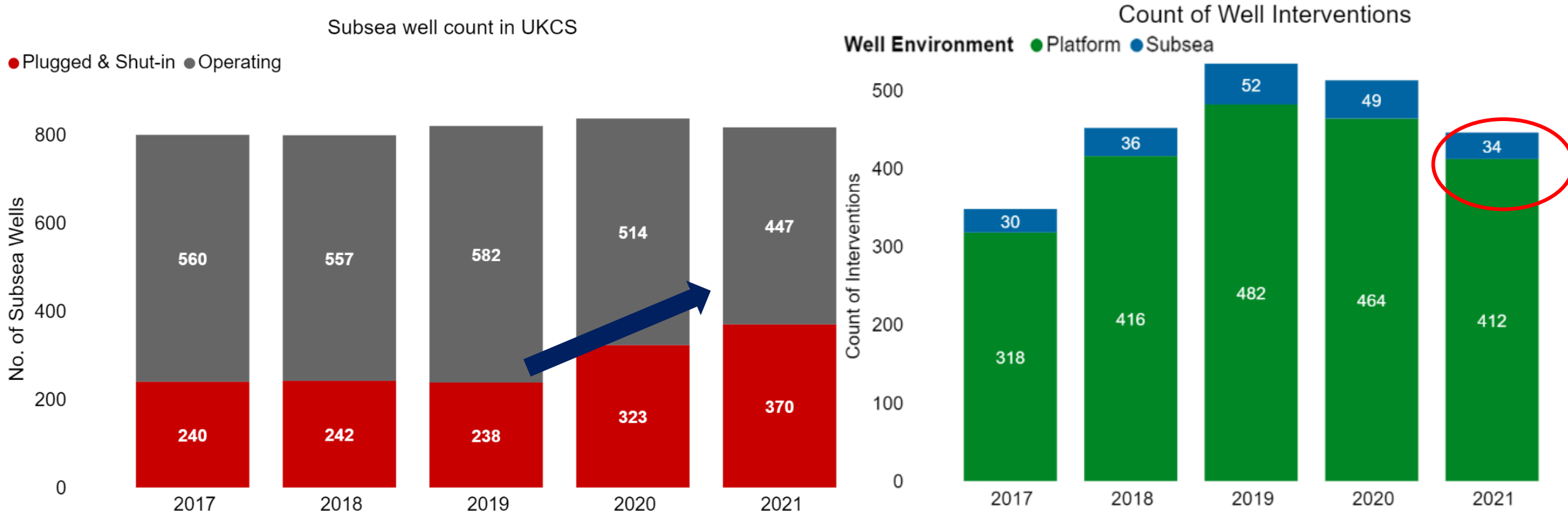
● Plugged % ● Shut in % ● Operating %



- Increasing shut in and temporarily plugged well stock.
- Over 200 wells not producing due to well integrity issues.
- Total well stock of over 2,500 wells with great intervention opportunities



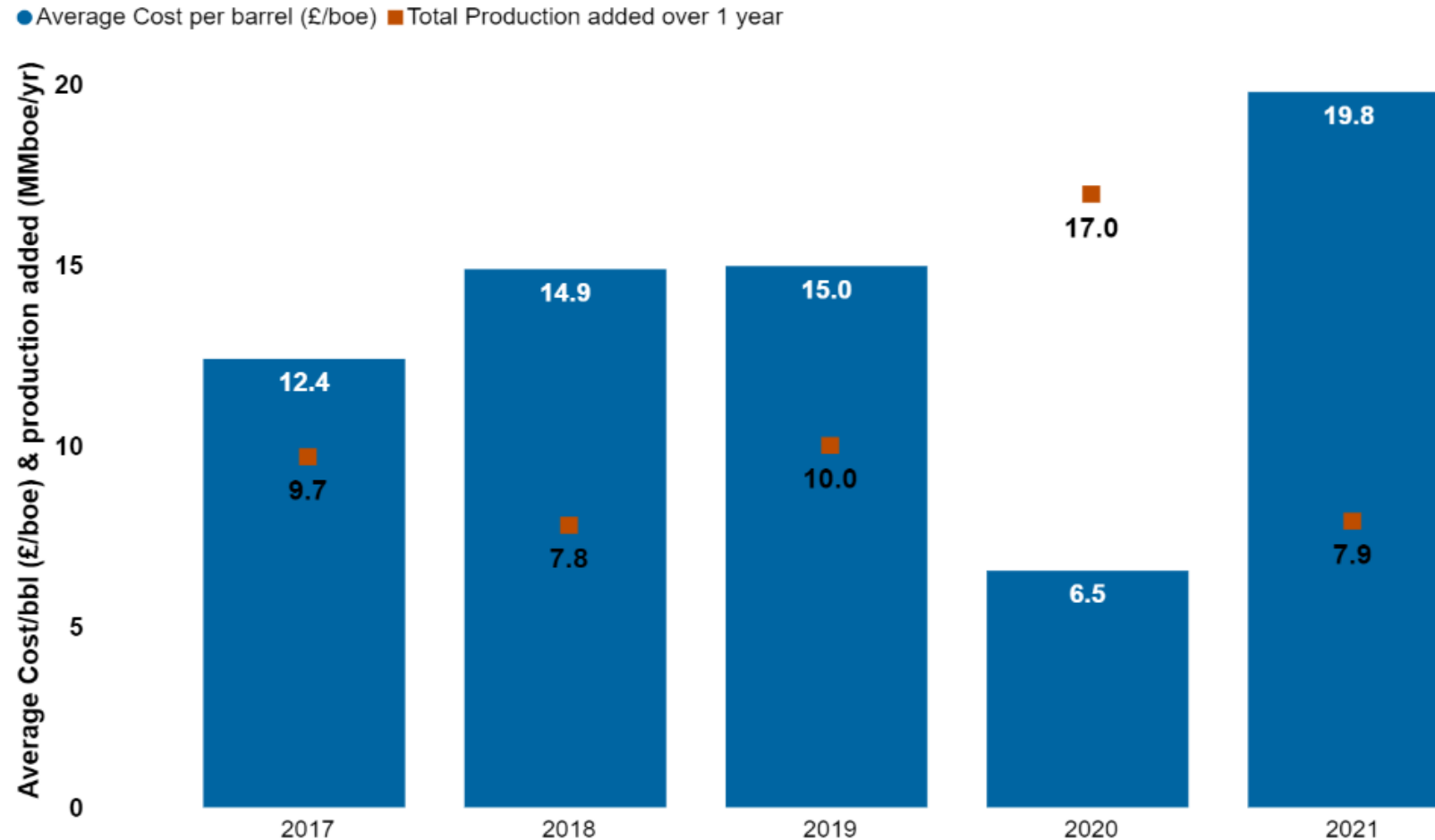
# Subsea Wells



- Steep increase in number of shut in subsea wells, now 45% of subsea wells are shut in
- Despite this volume of shut in wells, the subsea intervention rate remains below 5%
- There is an opportunity to add barrels from subsea wells, especially on assets where CoP is being pushed back

# Subsea Well Intervention

Average Cost per barrel (£/boe) & Production added for Subsea Interventions



- Subsea Well Intervention can be done cost effectively (<£20/bbl)
- Operators need to collaborate to keep vessels in the basin and maximise usage
- Technology improvements required to make subsea intervention cheaper

## How do we move forward?

- 2 months ago the NSTA surveyed Operators around Security of Supply.
- Well Intervention recognised as key method of increasing production in the short term.
  
- But...
  - Only a few Operators showed pro-active management of well stock with intervention hoppers through to 2025.
  - Many mentioned cost challenges and competition for budget with other regions.
  - Many mentioned supply chain constraints (Personnel, Equipment).
  - Only a handful of Operators mentioned they had secured LWIVs for 2024 and beyond.
  - The Energy Profits Levy allows many well interventions to be offset against profits – very few Operators recognised this as an opportunity.

## What are the NSTA doing?

- Wells task Force – engaging with industry
- Energy Pathfinder – platform for collaboration
- Stewardship – challenge Operators on work plans

## What should Operators do?

- Challenge for investment– Well Intervention providing great returns
- Collaborate with other Operators and Supply Chain
- Utilise new technologies

## What should the Supply Chain do?

- Continue to make great technologies
- Cross train personnel to minimise POB
- Work with Operators to fill out 2023/24 work plan

If we can collaborate across industry to overcome the challenges that face us, then we can meet the NSTA's target of Maximising Economic Recovery as we transition to Net Zero.



**SHOW ME THE MONEY!**