

UKCS Production Efficiency

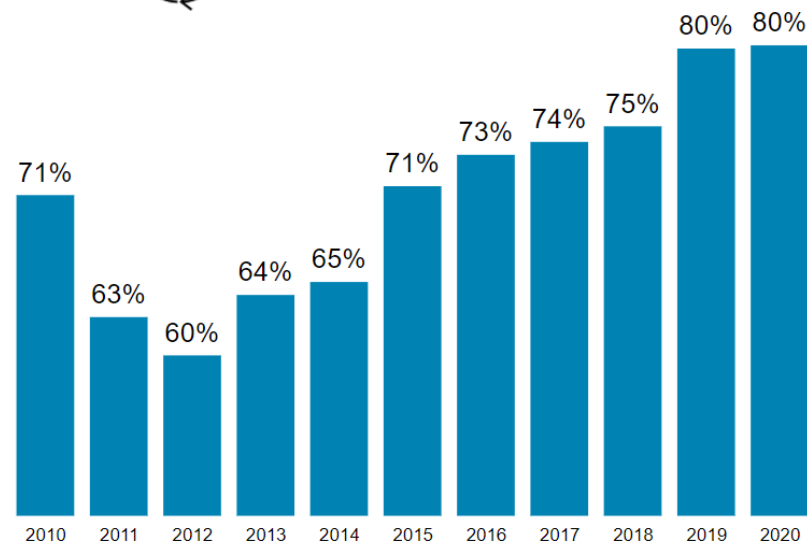
The 2020 UKCS Production Efficiency (PE) was maintained at 80%, an eleven year high and reaching the OGA Key Performance Indicator (KPI) PE target for a second consecutive year. Production Losses reduced by 4% to 141 million barrels of oil equivalent (mboe), with the largest decrease in the Export loss category. Given the challenges of the pandemic and the consequent disruption to operations, sustaining production efficiency is a remarkable achievement.

Production and production potential both fell in 2020, with Actual Well Production (AWP) at 612 mboe, a 4% drop from the previous year and Economic Maximum Production Potential (EMPP) falling by 5% to 763 mboe.

In 2020, PE was largely influenced by major producers with substantial production potential retaining high production efficiencies. In addition, the delayed Forties Pipeline System maintenance which led to a significant increase in deferred shutdown days contributed a boost to achieving the PE KPI target.



UKCS Production Efficiency



This interactive report shows the performance and trends of production efficiency and production losses for the UKCS across regions and by infrastructure type. For detailed information on hub and operator level performance, operators can request their bespoke production efficiency benchmarking pack from the OGA via ppr.team@ogauthority.co.uk.

For information on the methodology used in this report, visit our [UKCS Production Efficiency guidance](#) page.

UKCS Production Efficiency - Overview

Production Efficiency

80.20%

PE



0.21%

Point Difference

1.31

PE AWP Increase (mmboe)

Losses



-3.7%

Percentage Change

-5.4

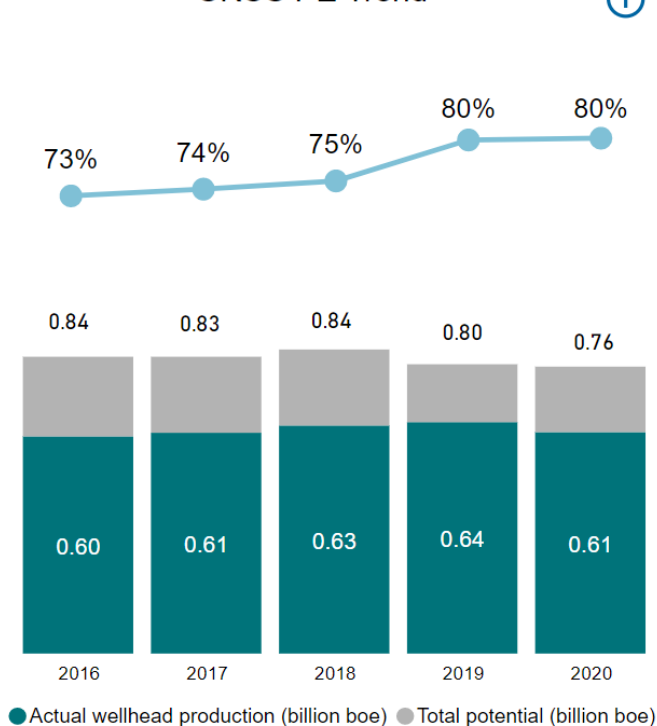
Point Difference (mmboe)

PE reached the UKCS PE target for the 2nd consecutive year. This was a slight increase of 0.21% from 2019 and the equivalent of gaining 1.31 mmboe as a result of improved efficiency.

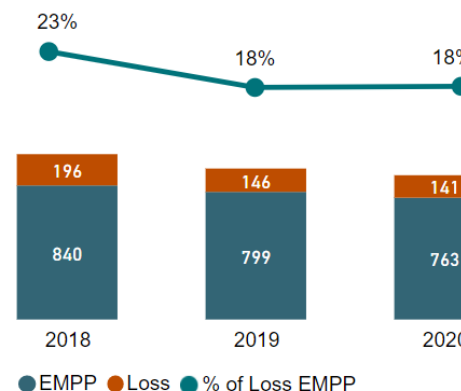
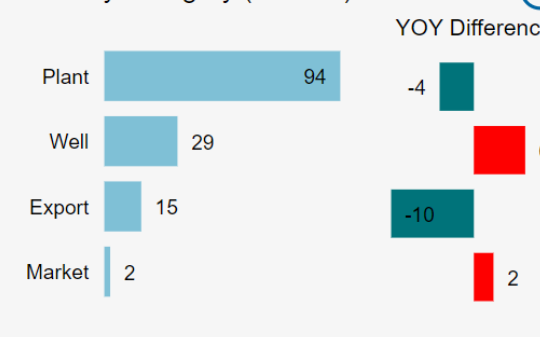
Continuing the trend from the previous years, total production losses reduced marginally by 5.4 mmboe, a 3.69% decrease from the previous year and a 32% decrease in the past 3 years. Largest changes were seen in reduced Export losses and increased Well losses.

Losses as a percentage of potential (EMPP) remained at 18%, the same as in 2019.

UKCS PE Trend



Loss by Category (mmboe)



Select Filter

- CNS
- NNS & WoS
- SNS & EIS
- 2020
- 2019
- 2018

Reset Filter

UKSC PE Trend - "Production has reduced considerably in 2020, however, it is still higher than 2016 levels. Potential is at an all-time lowest."

Loss by Category - "Exports losses have reduced considerably by 10 mmboe, this is likely due to less demand for Oil and Gas in 2020."

To access full functionality visit our live [UKCS Production Efficiency Report 2020](#)

UKCS Regional Split

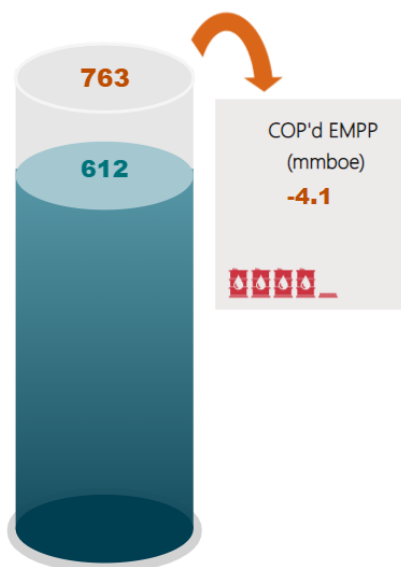
All regions saw a decrease in AWP and EMPP. Both decreased by a similar percentage.

The Central North Sea (CNS) region was the only region to achieve the 80% PE target, with a PE of 83%. PE in the EIS region decreased by 14 percentage-points. Although PE in most regions was below 80%, high PE from CNS and sustained high efficiencies from hubs with significant potential, led to the total UKCS PE of 80%.

Production reduced by 4%, equivalent to 28 mmboe, while production potential decreased by 5%, a 36 mmboe reduction from 2019.

Losses stayed relatively the same apart from the CNS and EIS areas, which saw a 5 mmboe decrease and 3 mmboe increase respectively.

Production & Potential (mmboe)
EMPP AWP



-4%

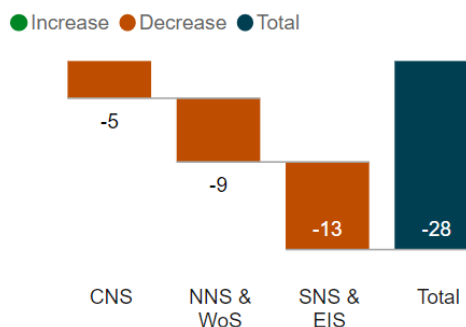
AWP Percentage change



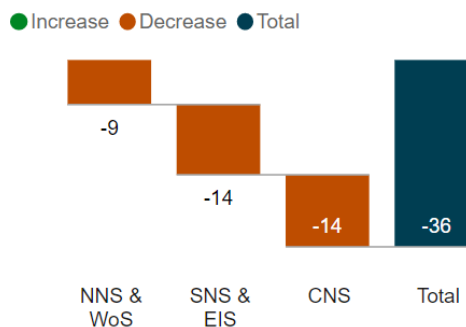
-5%

EMPP Percentage change

AWP Change (mmboe)

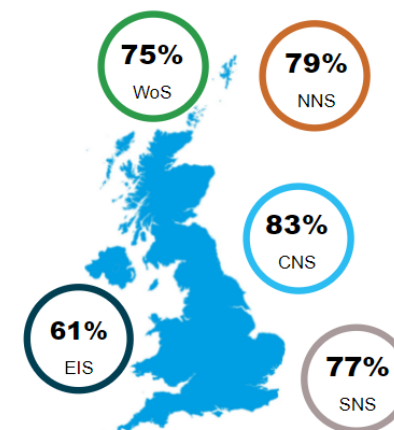


EMPP Change (mmboe)



PE by Region

Loss by Region



Select Filter

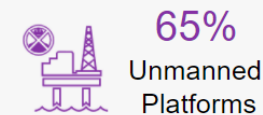
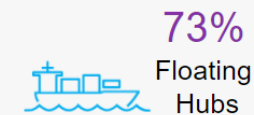
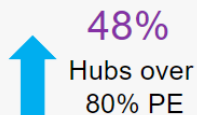
- CNS
- NNS & WoS
- SNS & EIS
- 2020
- 2019
- 2018

Reset Filter

EMPP Change (mmboe) - "CNS alone has a 14 mmboe reduction in 2020."

Hubs efficiency

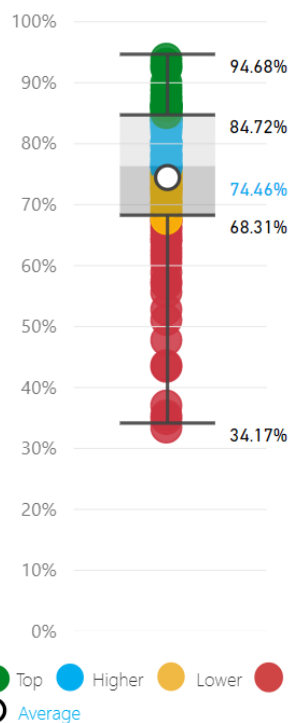
Production efficiency target was reached in 48% of hubs, 5% more than in 2019.



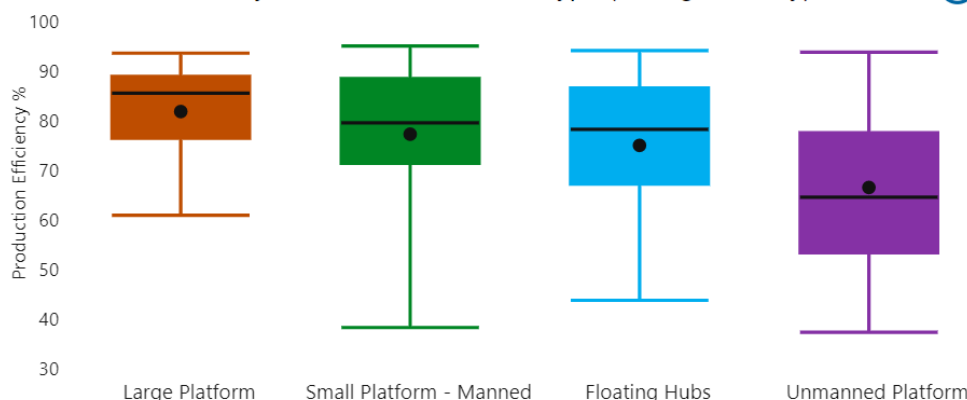
Though the average hub efficiency remained the same as 2019, the distribution is a lot more dispersed with the Interquartile Range (difference between the bottom and higher quartile) rising from 14% to 20% in 2020. This means that at the hub level, efficiencies of more hubs were lower and higher than in 2019. Efficiencies of Unmanned platforms were the most dispersed.

A significant number of shutdown days were deferred as a result of the postponed Forties Pipelines System (FPS) maintenance. Operators reported that 37% of those days were due to this delay and 38% was due to Covid-19. Had the FPS maintenance gone ahead, hubs would not have produced at the same rate counting towards Turnaround (TAR) losses and reducing the overall PE.

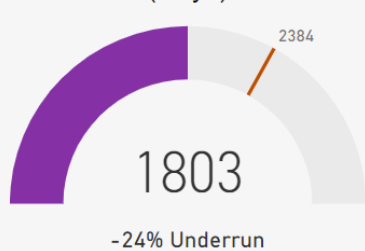
Total Hub PE distribution



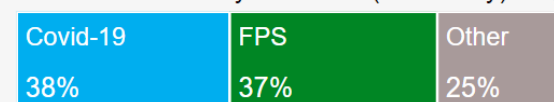
PE by Hubs & Infrastructure Type (All regions only)



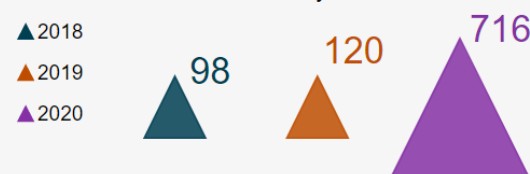
Actual vs Planned Shutdown (Days)



Deferred Days Reason (2020 only)



Deferred Days Trend



Select Filter

- CNS
- NNS & WoS
- SNS & EIS
- 2020
- 2019
- 2018

Reset Filter

Efficiencies for all hub types were widely distributed. Efficiencies on Unmanned platforms were the most dispersed, followed by Floating hubs, then efficiencies on Small manned and Large platforms with the least dispersion.

Unmanned platforms have a high Interquartile Range (IQR) of 25% but a small sample size of 12, thus reducing the overall effect.

Floating hubs have a sample size of 19 and an IQR of 19%, 8% points higher than in 2019. Many hubs of this type are at lower efficiencies in 2020.

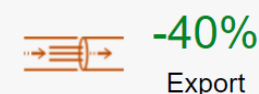
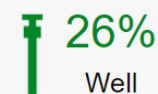
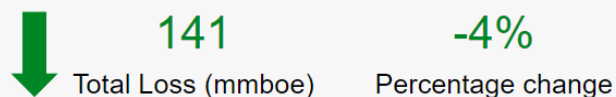
Small platforms have the highest sample size of 30 and IQR of 17%, 3% points higher than in 2019. Some small platforms have efficiencies in the higher quartile and some at the lower in 2020.

Large platforms have a sample size of 29 and an IQR of 13% which is slightly lower than in 2019. Many hubs of this type have efficiencies in the higher quartile in 2020.

Deferred Days Reason (2020 only) – “There are 273 deferred days attributed to Covid-19 and 266 days to FPS. However, it is worth noting that some of the deferrals attributed to Covid-19 could also be linked to the FPS maintenance delay. 177 days are classified as "Other" that is still 57 days more than in 2019, meaning without Covid-19 and the FPS deferral, there could have been more deferred days regardless.”

Losses

Total losses saw a 4% decrease from the previous year to 141 mmboe in 2020.



Losses due to TAR/planned shutdown, Gas systems and Reservoir make up 41% of total losses.

There was a considerable reduction in Export losses, 40% less than in 2019. Pipeline export losses, the main driver, reduced from 7 mmboe to 3 mmboe.

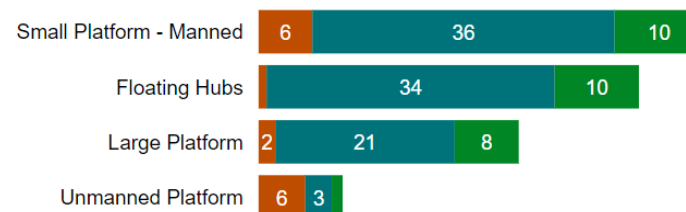
Plant losses decreased by 4%, driven by TAR/Planned shutdowns and Oil Systems.

Well losses increased by 26%, mainly from reservoir losses of 14 mmboe, a 3 mmboe increase from 2019.

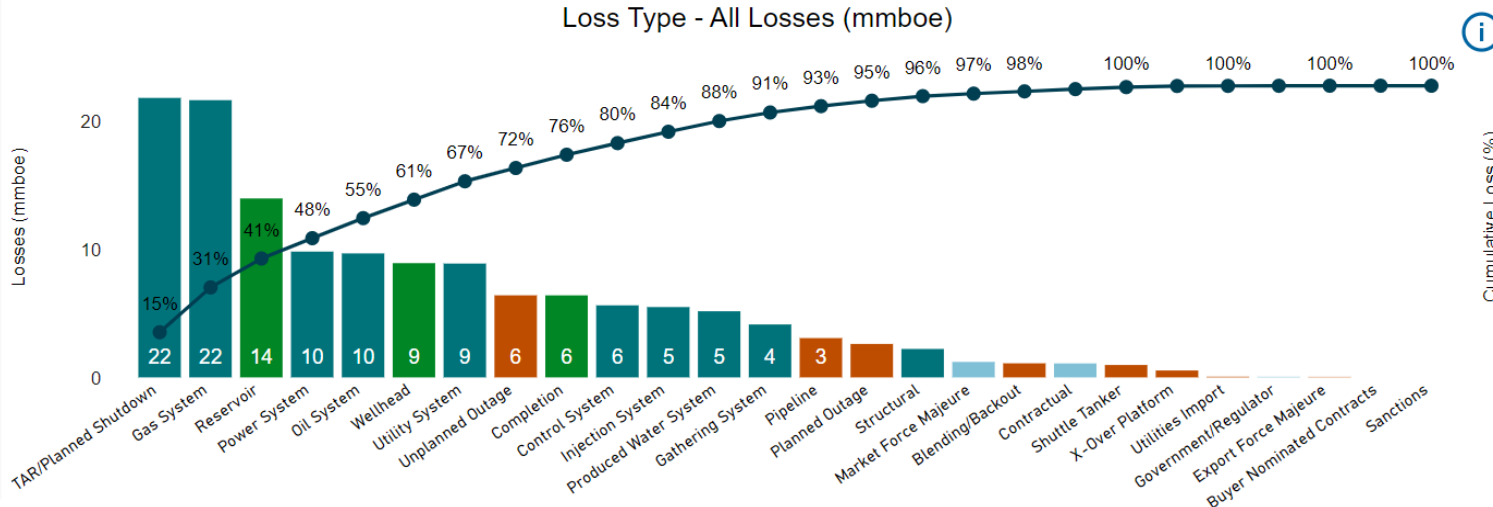
Loss categories (mmboe)



Losses by Infrastructure Type (mmboe)



Loss Type - All Losses (mmboe)



Select Filter

- CNS
- NNS & WoS
- SNS & EIS

- 2020
- 2019
- 2018

Reset Filter

Loss Type - All Losses (mmboe) - "Power and Utility systems saw a high increase of 4 mmboe each this year. Oil system had the best improvement, loss reduced by 5 mmboe. Tar/Planned shutdowns and Pipelines reduced by 4 mmboe each.

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