

# Capital Markets Day 2023

Oslo, January 26, 2023







- This presentation contains forward looking information
- Forward looking information is based on management assumptions and analyses
- Actual experience may differ, and those differences may be material
- Forward looking information is subject to significant uncertainties and risks as they relate to events and/or circumstances in the future
- This presentation must be read in conjunction with the Q4 and preliminary full year 2022 results and the disclosures therein



# **Agenda Q4 2022 Presentation and Capital Markets Day**

09:00	2022 review, seismic market outlook and PGS Strategy Rune Olav Pedersen, President & CEO
09:30	Q4 2022 results and CMD financials Gottfred Langseth, EVP & CFO
10:00	Q&A
10:15	Break
10:30	Sales & Services Nathan Oliver, EVP
10:50	New Energy Berit Osnes, EVP
11:05	Operations Rob Adams, EVP
11:20	Q&A
11:30	Lunch



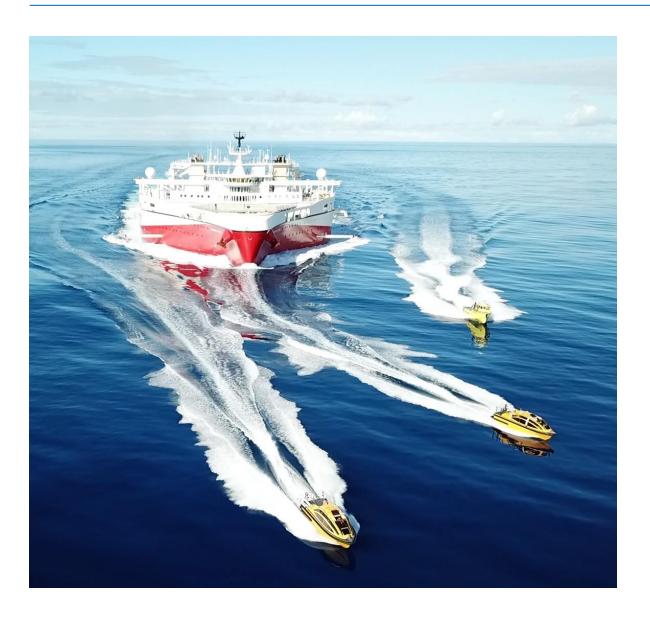
# 2022 Review, Seismic Market Outlook and PGS Strategy

Rune Olav Pedersen, President & CEO





### **Outline**



- 2022 Highlights
- Market outlook
- Seismic supply and demand
- PGS position and strategy
- Guidance
- Summary

### **2022 Highlights**





Significant contract price increase and margin expansion

- More than 35% increase vs. 2021
- Positive EBIT margin
- Large portion of 4D work



Second highest MultiClient late sales

- Increasing exploration interest
- Significant transfer fees



Strong order book

- Highest order book since Q3 2014
- Most of vessel capacity booked for Q1-Q3 '23
- High ongoing bidding activity



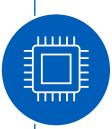
Improving financial position

- ~\$210 million cash flow before financing activities
- ~\$250 million new equity
- Well positioned to refinance



Market leading position in the Carbon Storage geoservices market

- Completed 4 CCS acquisition projects
- Revenues of ~\$30 million in 2022
- In process of entering offshore wind market



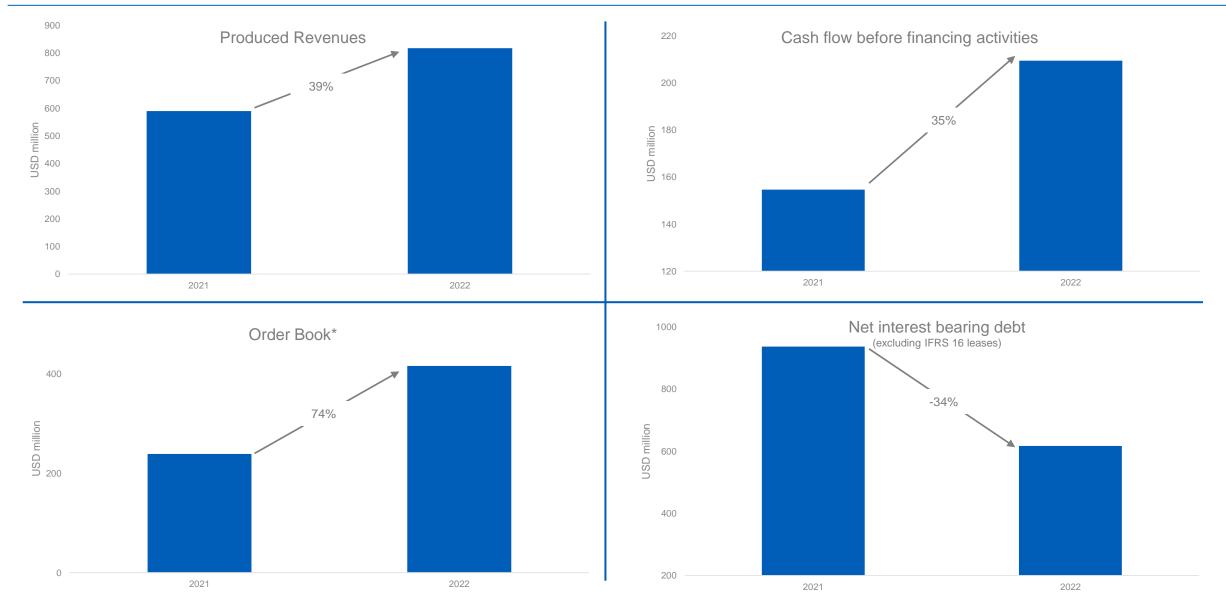
Strong progress on digital transformation

- Imaging in the Cloud provides flexibility and scalability at a lower cost
- New MultiClient OnDemand business models
- Digital solutions improves operational efficiency

## Full year 2022 Performance:

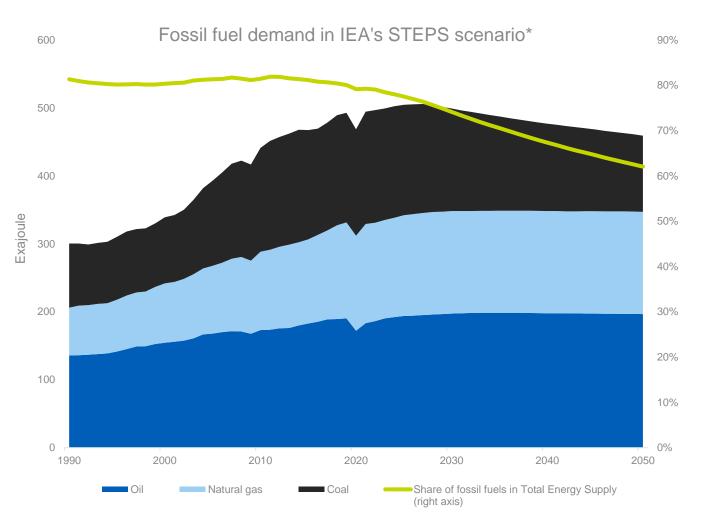
### **Improving Market Fundamentals Reflected in Financials**







## High Demand for Oil and Gas Likely to Continue to 2050 – Strong Growth of Renewables



- Fossil fuels will be an important part of future energy mix\*\*
  - ~80% of the energy mix today
  - ~75% of energy mix in 2030
  - Slightly above 60% of energy mix in 2050
- Oil and natural gas demand slightly higher in 2050 than today
  - Securing sufficient supply will require significant investments in oil & gas exploration and production
- Strong growth for renewable energy sources
  - ~40% of energy mix in 2050 are non-fossil fuels
  - Creating new business opportunities

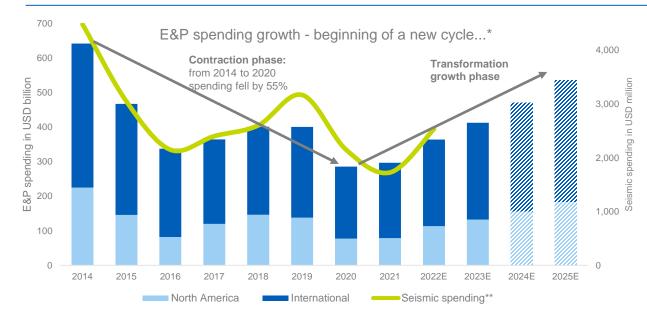
<sup>\*</sup>Graph based on IEA data from IEA's World Energy Outlook 2022, www.iea.org/statistics, All rights reserved; as modified by PGS.

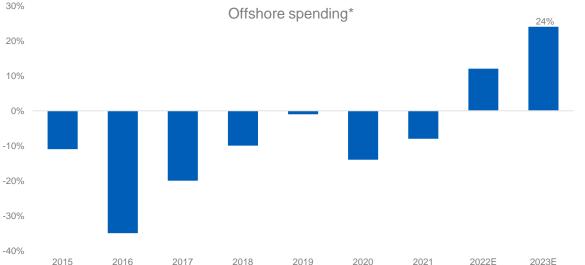
<sup>\*\*</sup>Fossil fuel demand in the Stated Policies Scenario (STEPS) in IEA's World Energy Outlook 2022 released on 27 October 2022. STEPS shows the trajectory implied by today's policy settings.

### E&P spending:

### **Kickstart in 2022 Continues in 2023**







- Global E&P spending increased in excess of 20% in 2022
- Double digit spending growth expected in 2023
  - Likely to continue in '24 and '25
- Offshore spending expected to increase 24% in 2023\*
  - Following a 12% spending growth in 2022

<sup>\*</sup>Both graphs from Barclays 38th E&P Spending Survey published 20 December 2022.

<sup>\*\*</sup>Revenues for PGS, TGS (including SPU), Polarcus, Shearwater and CGG.



### Energy Majors' Cash Flow Break-even Around USD 50/boe (including dividend, excluding buy backs)



- Energy companies generate record cash flows
- Break-even level around USD 50/boe
- Client feedback indicates resilient seismic spending with an oil price in excess of approximately USD 60/boe





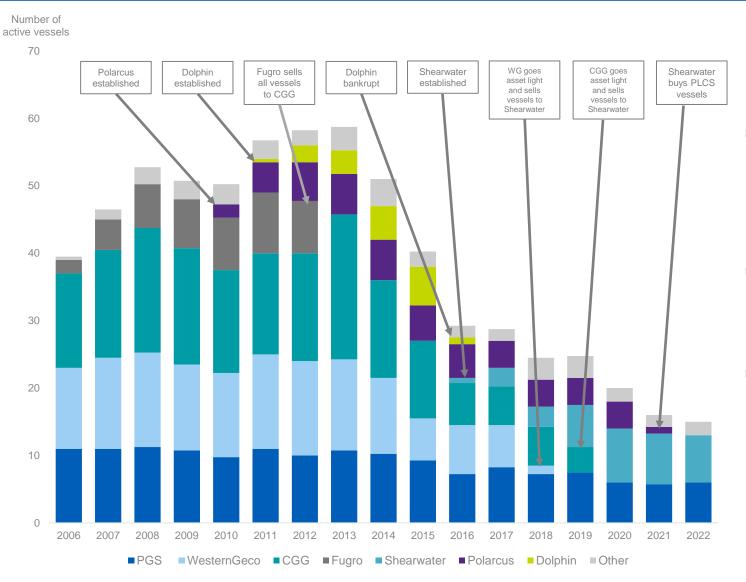


- Client 1: Continued high activity level. Will reactivate "real" exploration with a global remit scanning for opportunities
- Client 2: Increasing international activity level with Namibia recently added to the portfolio
- Client 3: The exploration budget will be kept high over the next years, and we see increased activity level in 2023
- Client 4: Exploration budget will increase in 2023
- Client 5: Will continue with similar activity level as recent years, still pursuing frontier exploration in certain countries

Clients confirm seismic spending increase in 2023



### **Historically Low Supply in a Consolidated Vessel Market**



- Seismic vessel supply reduced from almost 60 3D vessels in 2013 to ~15 in today's market
- Seismic vessel supply in 2019 was ~25
   3D vessels
- Majority of vessel capacity controlled by PGS and Shearwater
  - PGS currently operates 6 3D vessels
  - Will add Ramform Victory in Q2 2023 to acquire large Petrobras 4D contract

Source: PGS internal estimates



### **Markets Trends & PGS Position**

#### Market trends:

# Strengthening contract market

- Sales leads and active tenders at healthy levels
- 4D activity remains high and expected to increase

# Increasing exploration activity

- Drives demand for 3D contract work and new MultiClient acquisition
- Strong late sales

### Recovering MultiClient acquisition market

- Easier to secure strong prefunding
- Activity increase driven both by emerging basins and ILX

# Improving visibility

- Clients more proactive to secure capacity
- Increasing industry order books

### PGS position:

# Increasing revenues

- Strong 4D market share and attractive MultiClient library
- Reintroducing Ramform Victory

# Improving financial position

- Strong liquidity position, reduced debt and increasing cash flows
- Positioned to refinance in 2023

# Accelerating digital transformation

- MultiClient OnDemand business models
- Improving efficiency from digital solutions

# Fully integrated service provider

- Leveraging integration across business units and disciplines
- Strong foundation for new businesses in New Energy

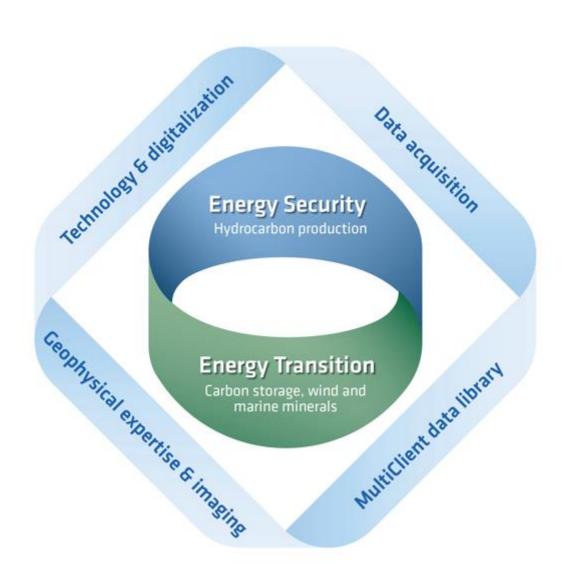


## Marine Seismic Market Leadership Through Integrated Service Offering

Financial Strategy	PGS Business Strategy
Cook Flour before grounts	Leverage integration across the PGS value chain
Cash Flow before growth	Leading provider of high-resolution seismic for near field exploration, production (4D) and CCS
Deturn on Conital Employed	Develop New Energy into a significant business unit
Return on Capital Employed	Increase speed and penetration of digitalization
Establish a sustainable capital	Reduce operating cost & increase efficiency
structure	Reduce environmental footprint and set path for net-zero in 2050







- Flexible business models
  - MultiClient and Contract is increasingly overlapping
  - Attractive joint venture partner with high quality assets
  - Utilization optimization
- Grow New Energy
  - Develop new businesses from core expertise and assets
- Reliable data library
  - High quality data with strong sales performance well suited for G&G and New Energy objectives

### **Recruiting Beyond Attrition Rate**





- Increased employee base by ~3% in 2022, plan to increase further in 2023
  - Strengthening a diverse and skilled work force
- Incremental recruitment of geologist, geophysicists and software engineers
  - Increased activity for PGS core business
  - Digital transformation and digital product offering
- Further strengthening New Energy business
- High focus on avoiding a proportionate cost increase as we scale up our business

### **New ESG Targets From 2023**



NET-ZERO

**CARBON FOOTPRINT** 

75 %

**REDUCTION IN MARITIME EMISSIONS** 

100 %

RENEWABLE ENERGY ONSHORE

2050





	Group cash cost	MultiClient cash investment	Active 3D vessel time allocated to Contract	Capital expenditures
2023 Guidance	~\$550 million	~\$160 million	~60%	~\$100 million







Seismic market improved in 2022 – expect continued improvement in 2023



Increasingly leveraging the integrated approach



Healthy order book with good visibility



Significant reduction of net debt – well positioned to refinance in 2023



Progressing well with New Energy business development



**Q4 and Preliminary Full Year 2022 Presentation** 

Gottfred Langseth, EVP & CFO

Oslo, January 26, 2023



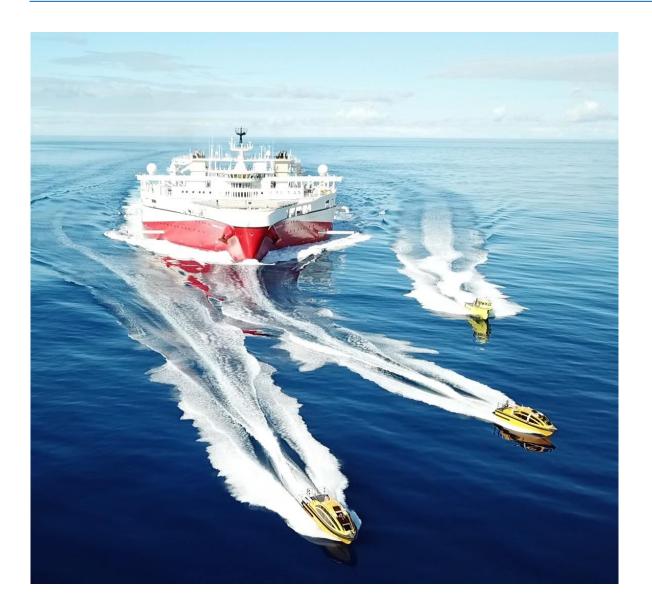




- This presentation contains forward looking information
- Forward looking information is based on management assumptions and analyses
- Actual experience may differ, and those differences may be material
- Forward looking information is subject to significant uncertainties and risks as they relate to events and/or circumstances in the future
- This presentation must be read in conjunction with the Q4 2022 earnings release and the disclosures therein







- Introducing new APMs
- Q4 financial review
- Financial position & refinancing
- Cost development
- Capex and depreciation
- MultiClient financials
- Summary and Q&A
- Appendix (Tax, lease liability and sensitivities)



# **Q4 2022 Financial Review**

Oslo, January 26, 2023



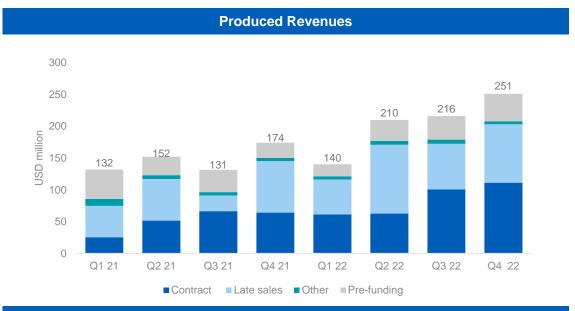


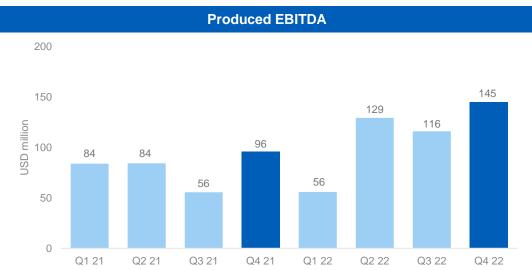
## **Changes in Financial Reporting - New APMs Introduced – Segment Reporting**

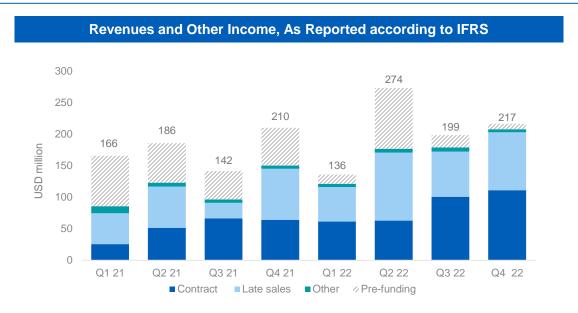
Percentage-of-completion (POC) based Alternative Performance Measures:	
Produced Revenues	Revenues based on recognition of MultiClient pre-funding revenues on a POC basis (Produced MultiClient pre-funding Revenues)
Produced EBITDA	Reported EBITDA adjusted for the difference between Produced Revenues and Reported Revenues (IFRS)
Pre-funding as a percentage of MultiClient cash investments (or "pre-funding level")	Produced MultiClient pre-funding Revenues as a percentage of capitalized MultiClient cash investments
Order book	Estimated revenue value of secured work relating to future production. Exact definition in Q4 Earning Release. As comparison, the IFRS order book includes in addition deferred revenues relating to production already performed on MultiClient surveys where final data is not delivered

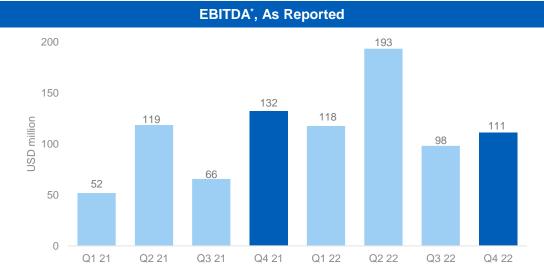
# PGS

## **Financial Summary - Revenues and EBITDA**



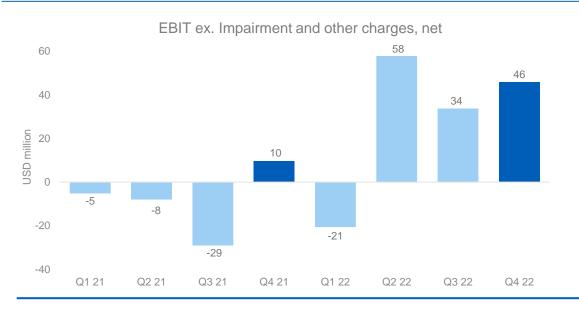


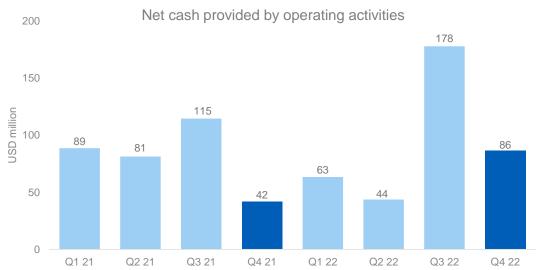






### **Financial Summary - EBIT and Cash Flow from Operations**

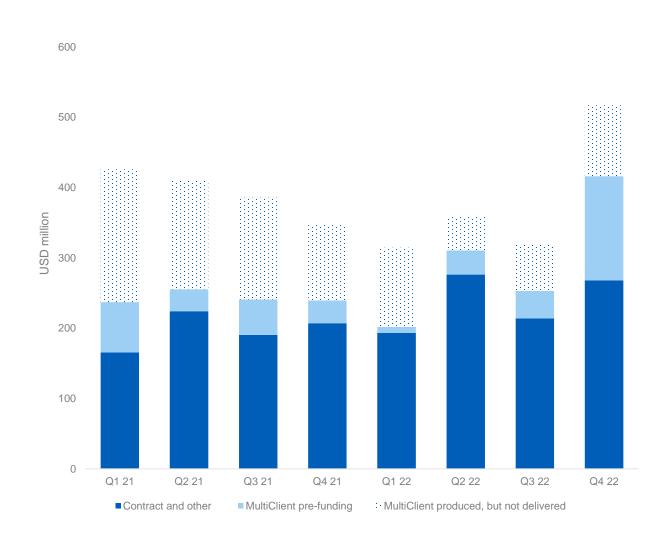




- Third consecutive quarter with solid EBIT reflecting an improving marine seismic market
  - EBIT is only reported on As Reported/IFRS basis
- Cash flow generation progressing
  - Q4 impacted by working capital build as revenues in the quarter are back-end loaded for both vessel revenues and MultiClient sales
  - Expect a net working capital release in Q1 '23







- Order book of \$416 million relating to future production
  - Up 74% from Q4 2021
  - Highest order book since Q3 2014
  - IFRS order book of \$517 million (includes deferred revenues relating to production already performed)
- Strong booking through Q3 2023\*
  - Q1 23: 17 vessel months
  - Q2 23: 16 vessel months
  - Q3 23: 12 vessel months
- Expect to operate seven 3D vessels from midyear 2023 following activation of Ramform Victory



## **Consolidated Key Financial Figures**

	Q4 Q4		Year ended December 31,		
(In millions of US dollars, except per share data)	2022	2021	2022	2021	
Segment Reporting					
Produced Revenues	250.7	174.3	817.2	590.0	
Produced EBITDA	145.2	96.1	446.7	320.2	
Profit and loss numbers, As Reported					
Revenues and Other Income	216.7	210.4	825.1	703.8	
EBITDA	111.2	132.2	454.6	434.0	
EBIT ex. Impairment and other charges, net	45.9	9.7	117.0	(32.0)	
Net financial items	(31.2)	(18.5)	(112.7)	(97.6)	
Income (loss) before income tax expense	2.1	(45.0)	(6.7)	(163.8)	
Income tax expense	(7.0)	(8.5)	(26.1)	(15.6)	
Net income (loss) to equity holders	(4.9)	(53.5)	(32.8)	(179.4)	
Basic earnings per share (\$ per share)	(\$0.01)	(\$0.13)	(\$0.06)	(\$0.45)	
Other key numbers					
Net cash provided by operating activities	86.4	42.0	371.3	326.6	
Cash Investment in MultiClient library	25.0	23.3	106.4	127.2	
Capital expenditures (whether paid or not)	10.7	9.7	50.2	33.4	
Total assets	1,953.3	1,792.8	1,953.3	1,792.8	
Cash and cash equivalents	363.8	170.0	363.8	170.0	
Net interest bearing debt	616.7	936.4	616.7	936.4	
Net interest bearing debt, including lease liabilities following IFRS 16	703.9	1,051.3	703.9	1,051.3	

#### Segment Reporting

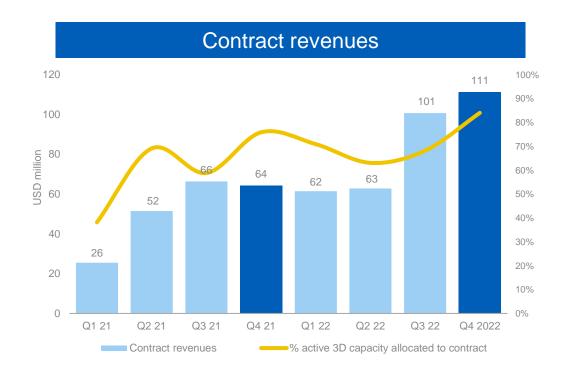
- Produced Revenues up 44% in Q4 and 39% full year
- Produced EBITDA increased51% in Q4 and 40% full year

#### As Reported numbers

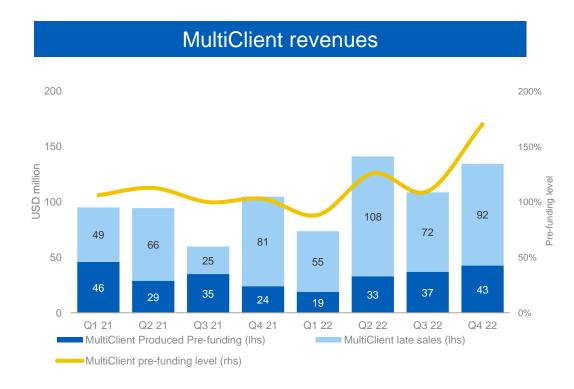
- IFRS Revenues and EBITDA with less growth due to high volume of MultiClient surveys completed and delivered to customers in 2021
- Strong EBIT improvement from significant contract margin recovery as well as lower MultiClient amortization



### **Q4 2022 Operational Highlights**



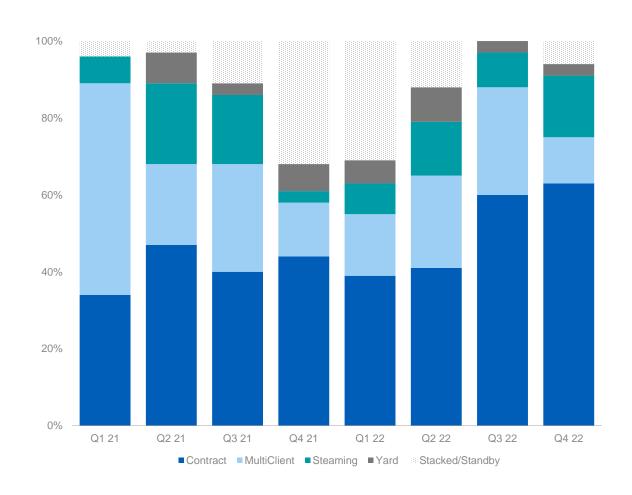
- Contract revenues of \$111.2 million
  - 84% of active time used for contract acquisition
  - Improving pricing and EBIT margin



- Produced MultiClient revenues of \$134.6 million
  - Strong late sales from a geographically diverse
     MultiClient library
  - Sales from surveys in processing phase contributed to 170% pre-funding rate
  - Cash investment in MultiClient library of \$25.0 million

### **Seismic Vessel Allocation\* and Utilization**



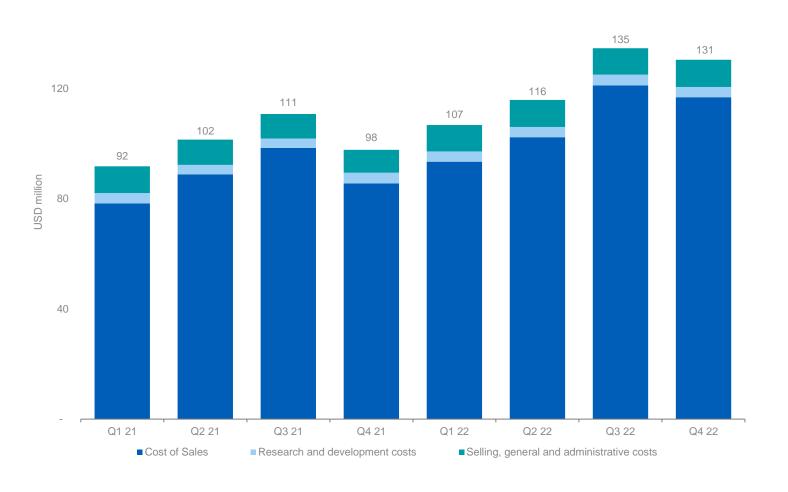


- 75% active vessel time in Q4 2022
- Significant relocation of vessels before winter season caused high steaming time
- Active vessel time will increase in Q1 2023
  - Expect some standby in transition from winter to summer season

<sup>\*</sup> The vessel allocation excludes cold-stacked vessels and was in Q4 2022 based on 6 vessels and a total of 90 streamers

### **Gross Cash Cost\* Development**





- Sequential cash cost decrease due to less production time and somewhat lower fuel prices
- Both Sanco Swift (2D) and PGS Apollo (source) operated for the full quarter
- Delivered lower gross cash cost full year
   2022 compared to guidance

<sup>\*</sup>Gross cash cost are defined as the sum of reported net operating expenses (excluding depreciation, amortization, impairments, deferred steaming and Other charges) and the cash operating costs capitalized as investments in the MultiClient library as well as capitalized development costs.



## **Balance Sheet Key Numbers**

In millions of US dollars	December 31 2022	December 31 2021
Total assets	1,953.3	1,792.8
MultiClient Library	300.3	415.6
Shareholders' equity	510.3	245.1
Cash and cash equivalents (unrestricted)	363.8	170.0
Restricted cash	70.8	73.7
Gross interest bearing debt	1,051.3	1,180.1
Gross interest bearing debt, including lease liabilities following IFRS 16	1,138.5	1,295.0
Net interest bearing debt	616.7	936.4
Net interest bearing debt, including lease liabilities following IFRS 16	703.9	1,051.3

- Cash and cash equivalents (unrestricted) of \$363.8 million
- Net debt (excluding lease liabilities) reduced by \$319.7 million



### **Consolidated Statements of Cash Flow**

	Q4	Q4	Full year	Full year
In millions of US dollars	2022	2021	2022	2021
Net cash provided by operating activities	86.4	42.0	371.3	326.6
Investment in MultiClient library	(25.0)	(23.3)	(106.4)	(127.3
Investment in property and equipment	(8.6)	(9.0)	(48.6)	(35.4)
Other investing activities	(0.4)	(2.4)	(6.8)	(9.2)
Net cash flow before financing activities	52.4	7.3	209.5	154.7
Debt repayment and proceeds, net of deferred loan costs, from issuance of non-current debt/net cash payment for debt amendment*	20.8	(0.1)	(123.0)	(19.5)
Interest paid on interest bearing debt	(24.0)	(20.2)	(90.5)	(80.8)
Proceeds from share issue and share buy back	144.7	-	241.0	-
Payment of lease liabilities and related interest (recognized under IFRS 16)	(10.3)	(12.6)	(42.5)	(49.2)
Decrease (increase) in non-current restricted cash related to debt service	1.1	2.6	(0.7)	8.1
Net increase (decr.) in cash and cash equiv.	184.7	(23.0)	193.8	13.3
Cash and cash equiv. at beginning of period	179.1	193.0	170.0	156.7
Cash and cash equiv. at end of period	363.8	170.0	363.8	170.0
** 2022 the second of the foundation of the second of the				

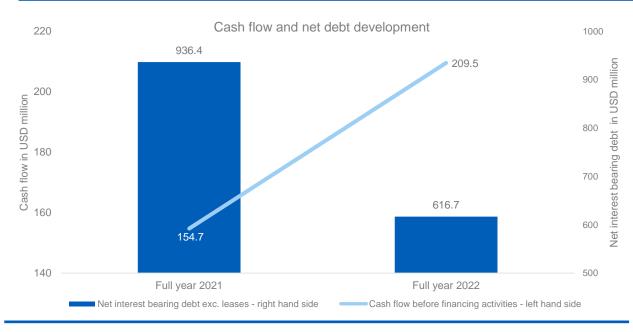
<sup>\*</sup>In 2022, the amount represent the fees and expenses relating to the amendment of debt maturities offset by cash proceeds from the convertible bond issue

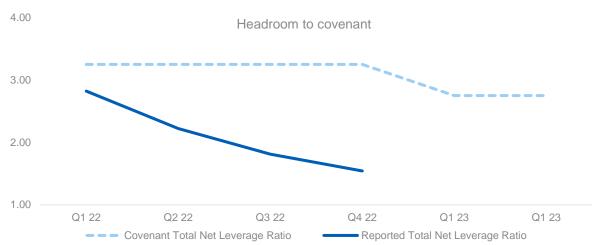
- Q4 cash flow impacted by revenue related working capital build
  - Increasing revenues
  - Q4 revenues typically back-end loaded due to vessel relocation early in the quarter and significant MultiClient sales
  - Expect working capital release in Q1 2023
- Net proceeds from equity raise of \$144.7 million









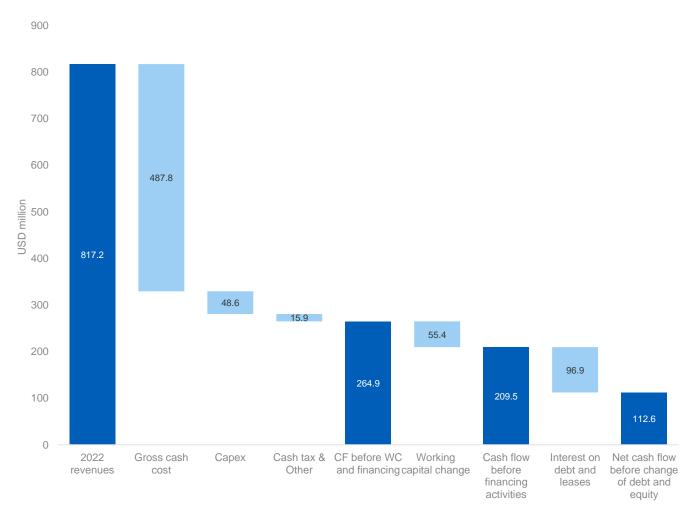


- Increasing cash flow as contract margins and MultiClient sales recover
- Some delay of "realized" cash flow due to increase of working capital from increased revenues
- 2022 cash flow before financing activities of \$209.5 million
- Net debt\* reduced by \$319.7 million in 2022
- Sharp reduction of leverage ratio
  - Lower debt and improving results
  - Substantial headroom to maintenance covenant

\*Excluding lease liabilities 35



### **2022 Cash Flow Generation**

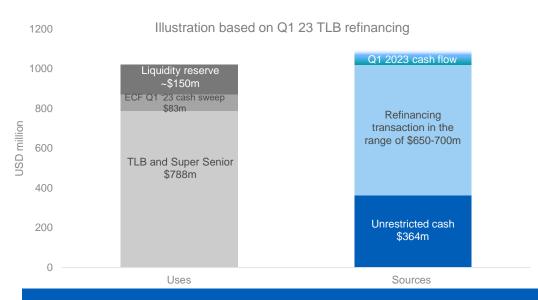


- Cash flow generation of \$264.9 million before working capital change and financing activities
- Net cash flow before change of debt and equity of \$112.6 million
  - Working capital increase of \$55 million driven
     by 44% growth of Q4 Produced Revenues
  - Mainly accounts receivable and accrued revenues typically collected within two months from balance sheet date
  - Q4 22 Produced Revenues \$76 million higher
     than Q4 21

# PGS

### **Refinancing Status – Ready to Access the Market**





### Runway to end Q1 2024

- Liquidity reserve and cash flow to manage 2023 debt amortization
- Plan to refinance the TLB in H1 2023 if adequate debt markets
- Transaction likely to be \$650-700 million, including a new RCF
- Preparations done and ready to execute on short notice

#### 2023 debt amortization

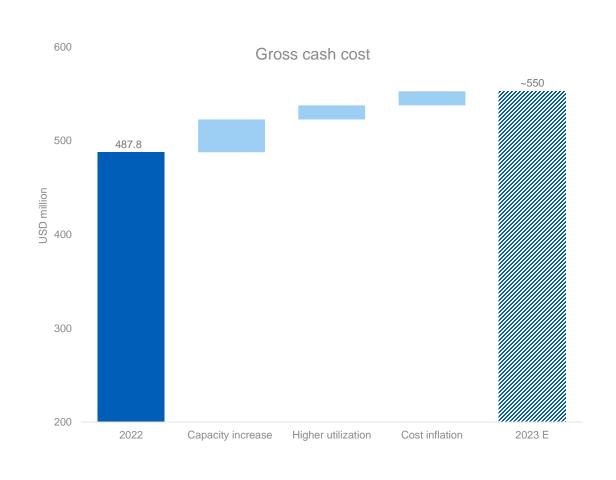
- Total scheduled amortization of \$367 million
- TLB ~\$9 million per quarter + \$200 million September 2023
- ECF \$130 million (including repayment of the \$83 million remaining deferred amount from the 2020/21 debt rescheduling, initially \$106 million)

### Liquidity sweep will not impact total 2023 amortization

- Q4 liquidity sweep of \$83 million (to be paid Q1 2023) repays remaining ECF deferred amount. Will reduce 2023 scheduled amortization
- Liquidity sweep from Q1 2023 above \$175 million to the TLB always applied against nearest scheduled amortization

### **Gross Cash Cost Development**





 2022 gross cash cost of \$487.8 million, below the guided level

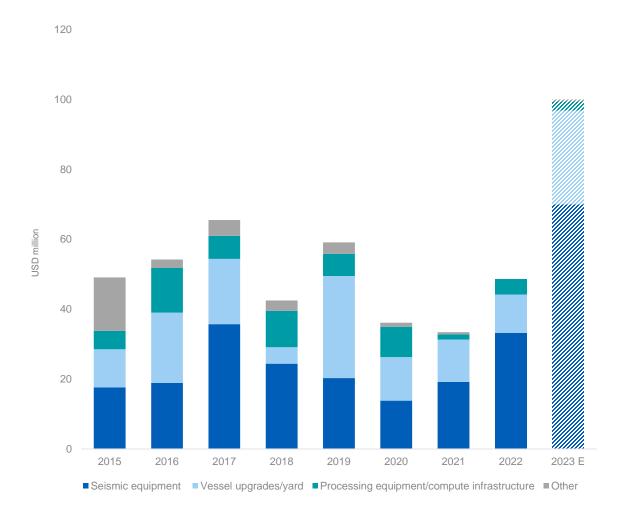
- 2023 gross cash of ~\$550 million
  - More capacity in operation including Ramform Victory
  - Higher vessel utilization
  - General price increases including salary adjustments

Cost is a key priority

The 2023 gross cash cost estimate is based on operating the currently 6 active vessels and introduction of the Ramform Victory from mid-year 2023.





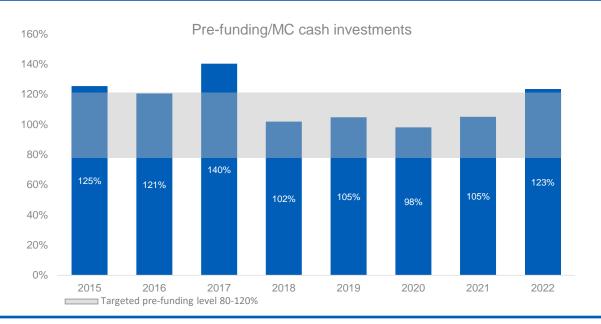


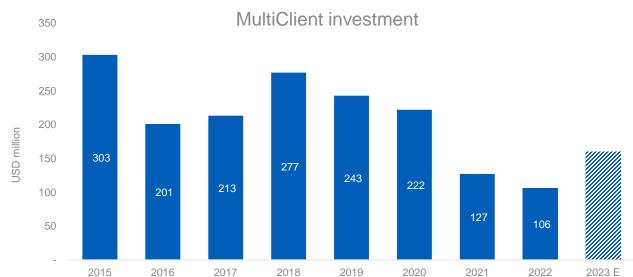
- Full year 2022 CAPEX of \$48.6 million
- 2023 CAPEX plan of ~\$100 million\*
  - ~\$50 million in streamer investments
- Gross depreciation in 2022 ended at \$122.2 million
- Gross depreciation expected to be ~\$110 million in
   2023
  - ~ \$40 million to be capitalized as part of MultiClient investments

<sup>\*</sup> CAPEX guidance excludes any capitalized asset as a result of new or extended lease arrangements recognized in accordance with IFRS 16. As of today, no material changes are committed or planned.



### **MultiClient Financials**





- Pre-funding (as a percent of MultiClient cash investments) targeted to be 80-120%
- 2022 MultiClient cash investments of \$106.4
   million with a pre-funding level of 123%
- MultiClient cash investments in 2023 expected to be approximately \$160 million with prefunding level around top end of targeted interval
- Approximately 40% of 2023 active 3D fleet capacity currently planned for MultiClient







Marine seismic market improving for all product lines



Strong order book growth and visibility



Strong cash flow generation



Substantial net debt reduction



Well positioned to refinance in 2023 – prepared to execute early

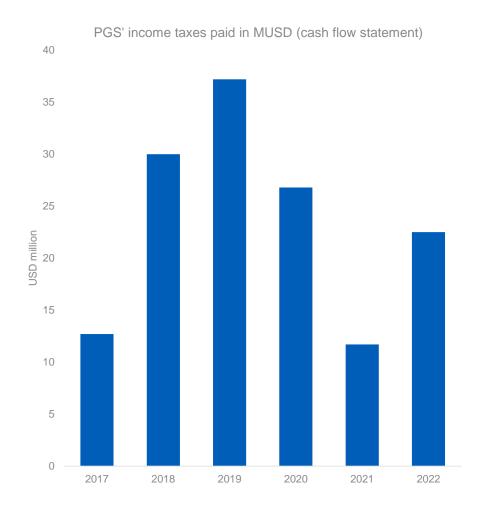




## Appendix:

### **Tax Position**





- Tonnage Tax regimes
  - PGS' Ramform Titan-class vessels are operated within the Norwegian tonnage tax regime
- Cash tax mainly withholding taxes and local taxation in countries where PGS operates
  - Tax cost level will vary depending on area of operation
  - Average cash tax in 2017-2022 is \$23 million
- Substantial deferred tax assets
  - 100% valuation allowance

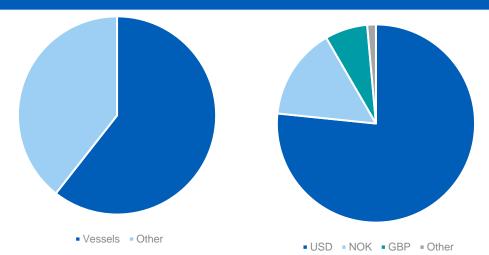
## Appendix:



## **IFRS 16 Lease Liability**

Estimated amortization table based on existing agreements			
Year	Lease liability (start of year)	Instalment	Interest
2023	~\$87M	~\$35M	~\$6M
2024	~\$63M	~\$31M	~\$4M
2025	~\$37M	~\$18M	~\$2M
2026	~\$21M	~\$8M	~\$2M
2027	~\$15M	~\$8M	~\$1M
2028	~\$9M	~\$4M	~\$1M
Thereafter	~\$6M	~\$7M	~\$1M

### Composition of December 31, 2022 lease liability



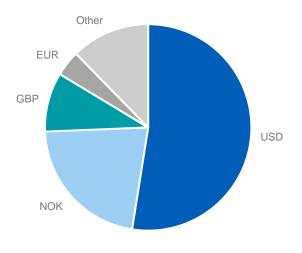
- Leasing arrangements are reported as assets (and depreciated over the lease term) and debt (with payments being reported as interest cost and instalments)
- New leasing arrangements, or extensions of existing arrangements, will be reported as addition to fixed assets

## Appendix:

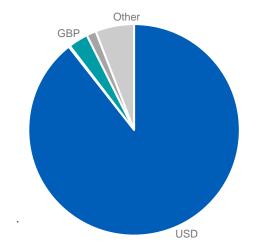
### Foreign Exchange and Sensitivity



Cash flow relating to operating payments



Cash flow realting to opeating receipts



- A significant portion of operating payments (cash cost and CAPEX) is in non-USD currencies
  - A 10% change of USD vs. NOK has an annual net EBIT impact of USD 10-12 million
  - A 10% change of USD vs. GBP has an effect of USD 4-5 million
- Leasing commitments in NOK generally not hedged



## Capital Markets Day 2023

Nathan Oliver, EVP Sales & Services

Oslo, January 26, 2023







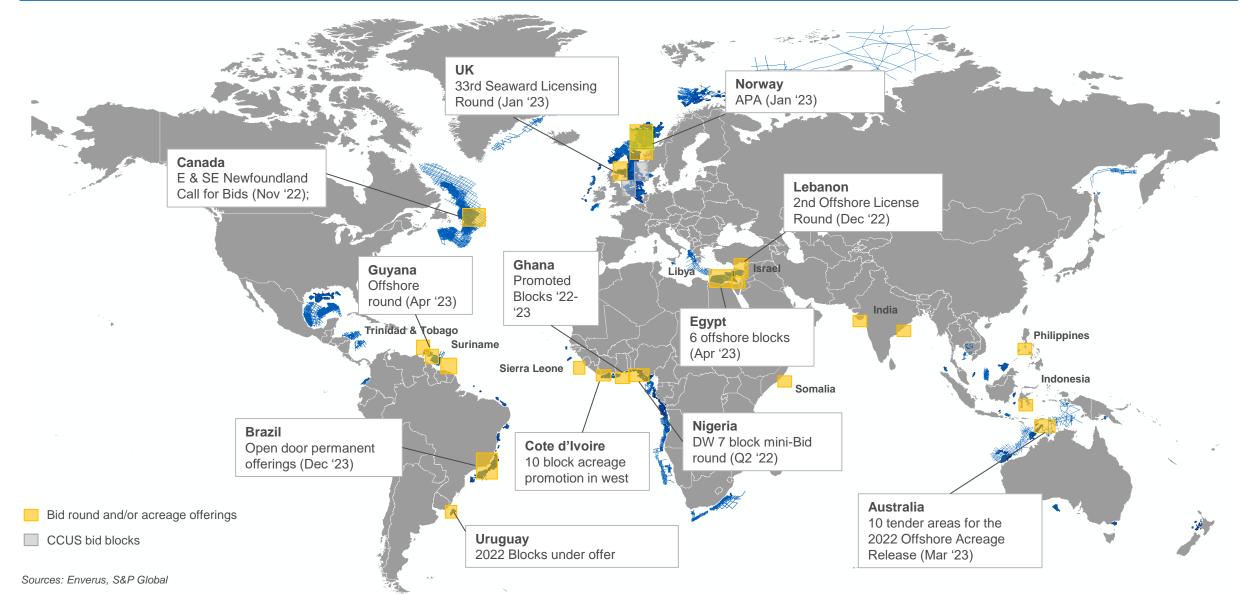
- Emerging basin exploration has returned to the agenda boosting seismic demand
- PGS' Integrated solutions create unique competitive advantage
- The MultiClient business continues to deliver robust returns
- Embracing digitalization to deliver creative commercial solutions and drive cost efficiency and turnaround



## **2023 E&P Activity Drivers – License Rounds**

### Bid round and/or acreage offerings

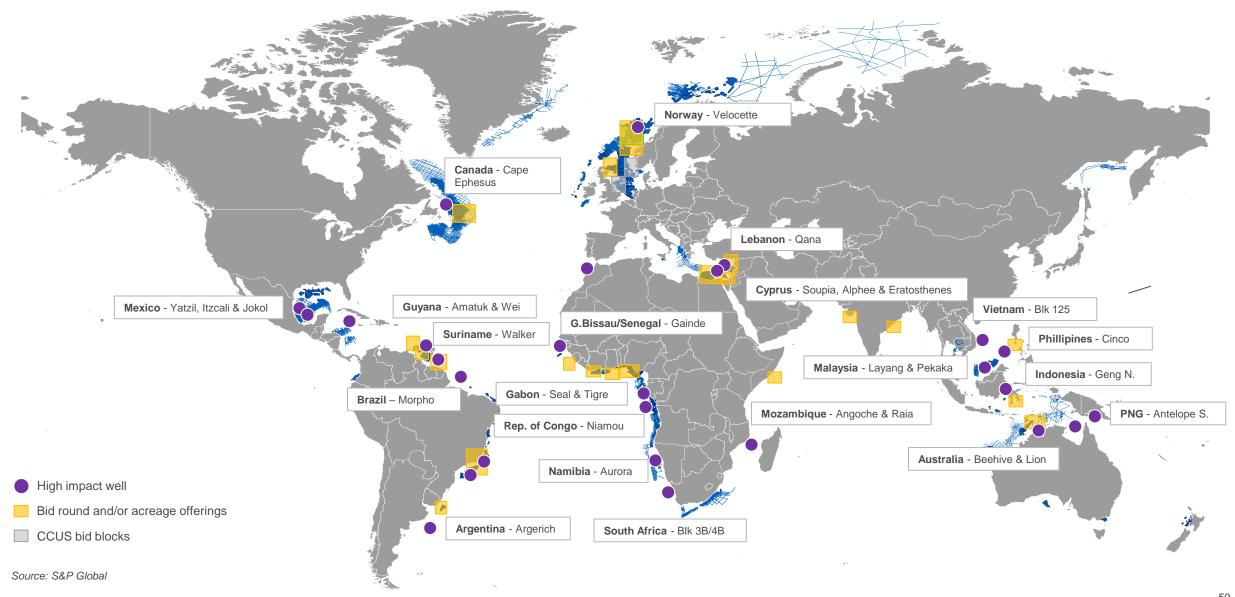




### **2023 E&P Activity Drivers – High Impact Wells**



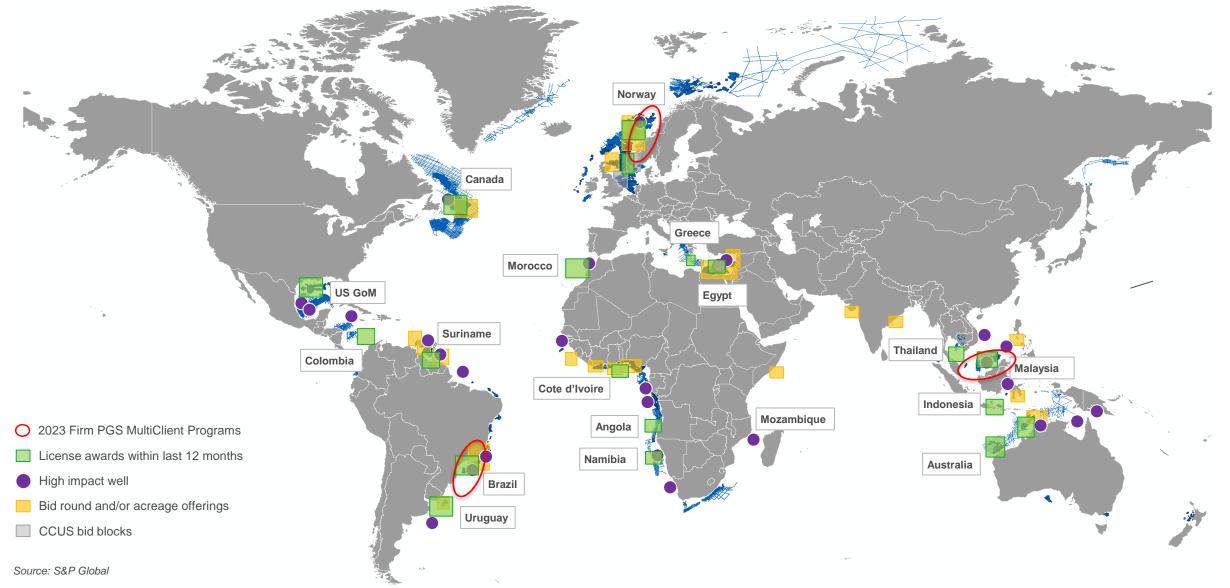
### Exploration drilling to continue at 2022 levels, success rates are increasing in frontier plays



## **2023 E&P Activity Drivers - License Awards**

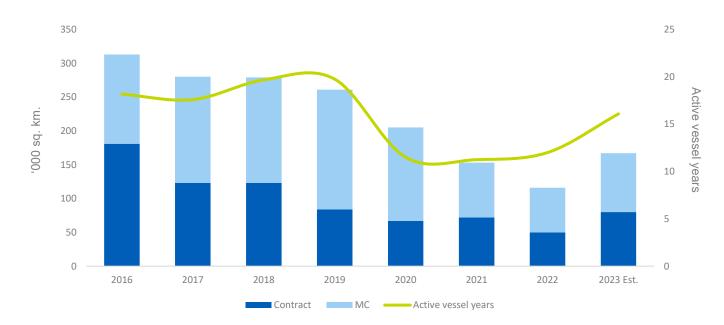
### Recent license awards to IOCs, large Independents & NOCs

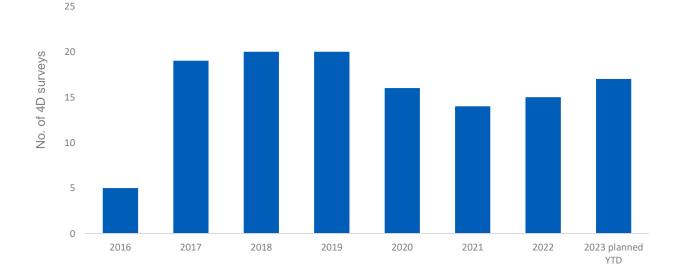






### **Seismic Volumes Forecast to Grow Significantly in 2023**

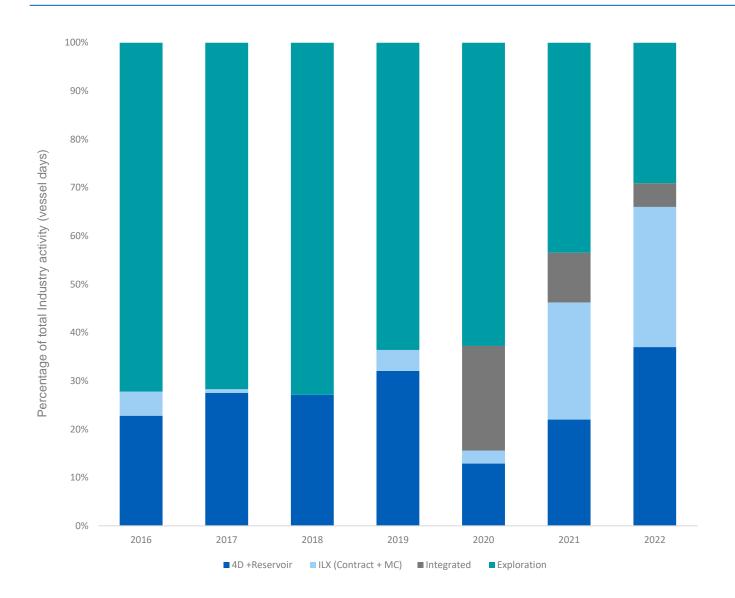




- Volumes of planned seismic are forecast to increase by as much as 40% YoY from the low base of activity in 2022
- The increase in activity is broad based but underpinned by returning appetite for frontier exploration, evidenced by energy companies' accumulation of new acreage and an increase in new MultiClient programs
- Demand growth in a supply constrained market provides opportunity for margin expansion and increased utilization
- The number of 4D programs reduced during the pandemic and remained largely static in 2022 due to project delays, despite the high level of bids and leads observed late-2021/early 2022



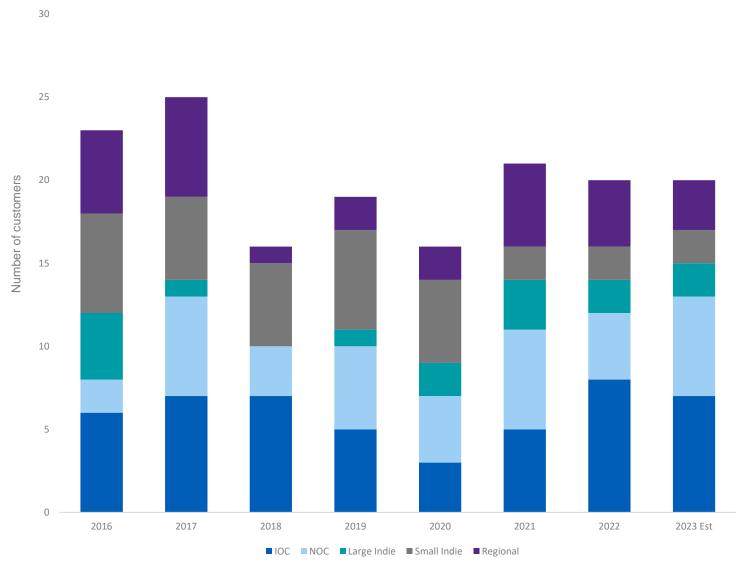
## ILX and Integrated Projects Form a Substantial Part of Total Industry Activity Mix



- There has been a strong focus on optimum exploitation of existing assets along with nearfield exploration to leverage infrastructure
- ILX has become a substantial component of PGS' project mix. In such mature basins high resolution multi-sensor data is of great value. PGS remains the only contractor with a fleetwide homogenous multi-sensor offering
- ILX, 4D and Reservoir seismic volumes are expected to be augmented in future by the growth in CCUS projects
- Integrated projects have become a significant segment to PGS. These are uniquely created through leverage of our full suite of technical capabilities along with MultiClient expertise and agreements with governments



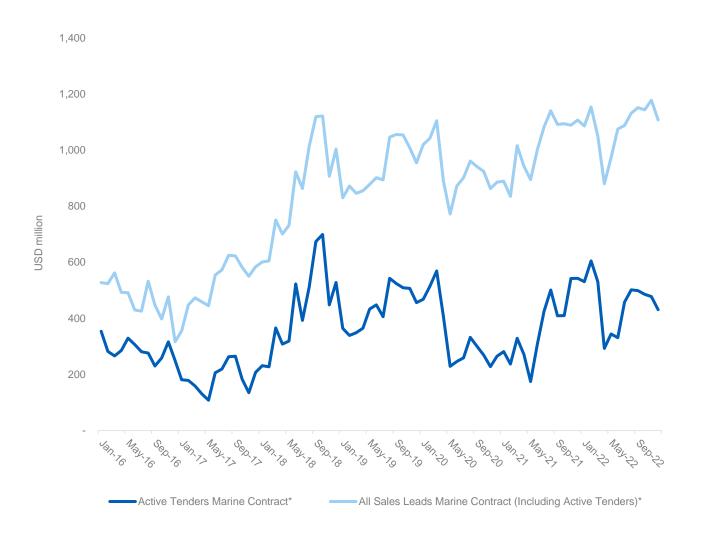
### **Overall Number of Contract Customers has Remained Stable Over Recent Years**



- The number of individual Contract customers industry-wide has remained relatively stable over the last several years, despite the level of M&A in the same period
- IOC's and NOC's have been the bedrock of activity throughout this period. We see the latter group increasing their exploration efforts, with certain of them expanding internationally
- Independents and Regional players continue to be present, though with cyclical activity
- The customer base may further grow in future with the appearance of CCUS specialist companies who are not part of the traditional core customer base today



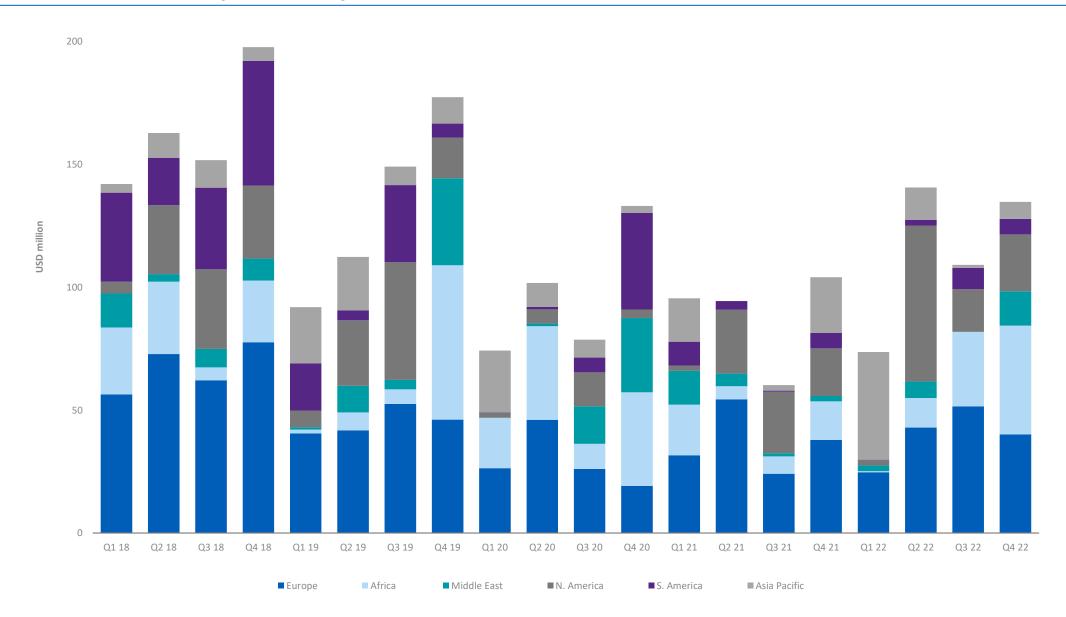




- The order book increased by close to 75% YoY across both the Contract and MultiClient segments resulting in improved utilization
- YoY rates improved by ~35% vs. 2021 average
- Sales leads are back above pre-COVID levels, with active tenders just about back at that level
- The active tender's curve is somewhat lumpy due to single large tenders coming and going – typically large Brazilian 4D projects
- These curves reflect only publicly tendered seismic and do not show the current growth in MultiClient projects, and certain of the Integrated projects that PGS performs directly



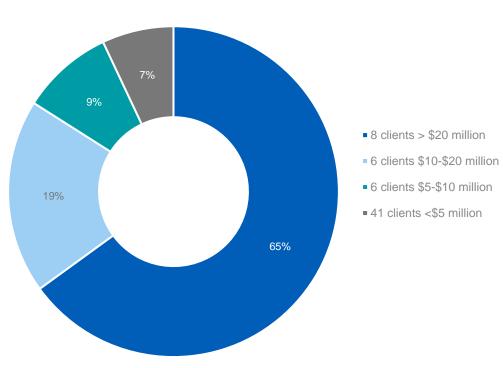
## **PGS MultiClient Library Diversity**



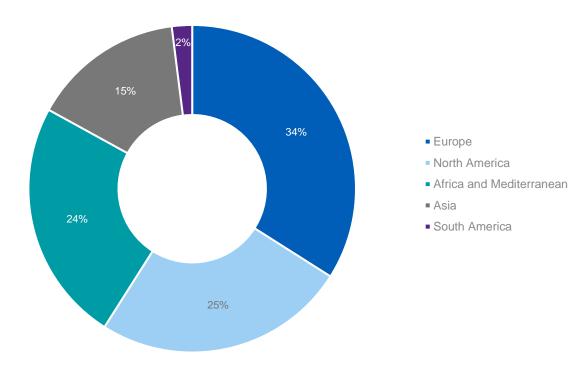








### 2022 Regional Revenue Distribution



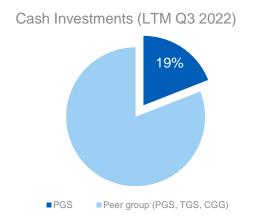
>60 Clients with Good Geographical Diversity

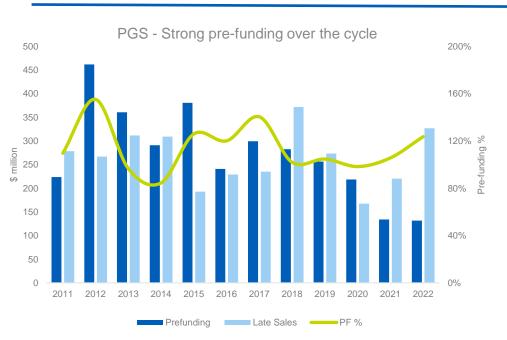


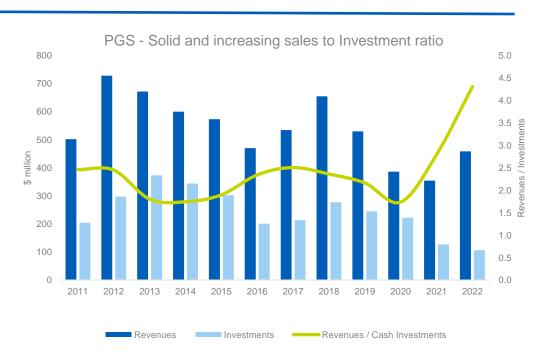
## **PGS MultiClient Peer Group Performance Comparison**







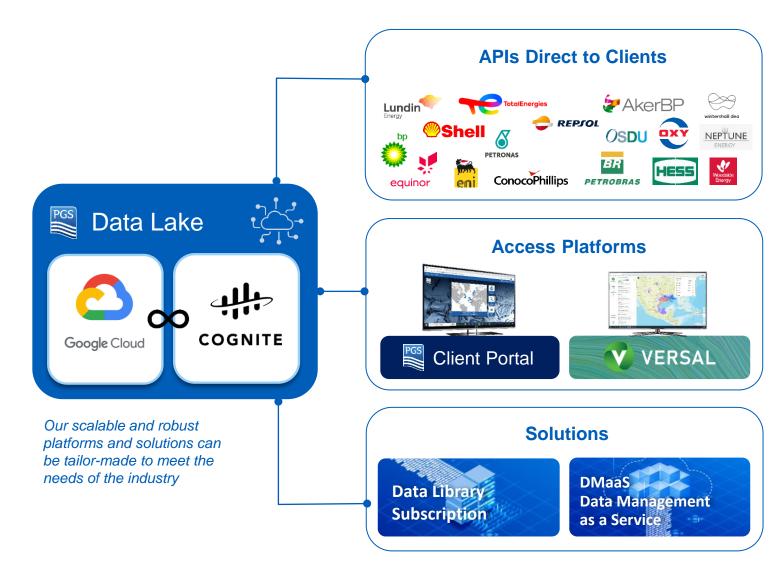






### **PGS MultiClient OnDemand™ Business Models**

- PGS has developed a strategic cloud-based solution architecture that can serve MultiClient subsurface data to our customers
- This capability, enabling enterprise access, is market-leading and will drive workflow efficiencies, enabling teams to spend more time focusing on data analysis
- Our customers want data at scale and fast in order to make the right commercial decisions and reduce risk in the fast-changing energy landscape









### Why the cloud?

- PGS signed a preferred cloud vendor agreement with CGP with the ambition of moving 20% of compute to the cloud as 'lift and shift'
- The economic downturn and early successes transform the ambition to move 80% compute into GCP
- PGS decommissions its last Cray supercomputer achieving the transition to GCP as the primary source of compute



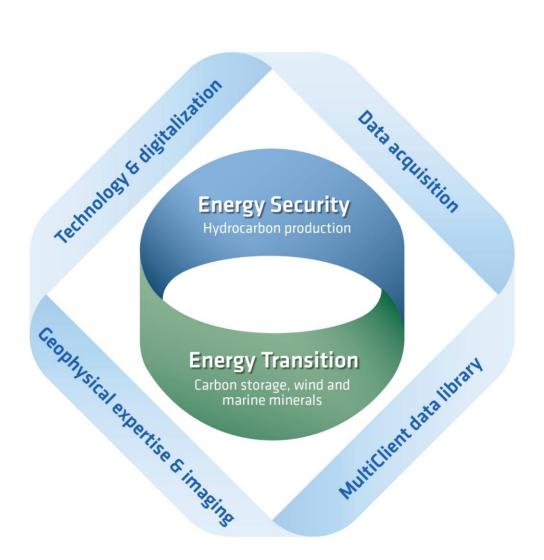
### The power of the cloud

- Significant increase in capacity without upfront capex e.g. for one week in August we operated the 7<sup>th</sup> largest supercomputer on Earth
- Access to a large range of modern compute hardware on-demand
- Modernisation of our HPC software stack
- Uses low-carbon energy throughout our chosen GCP region (97% carbon free)





- The recent return to emerging basin exploration helps drive positive momentum in the offshore E&P segment
- Strong utilization and pricing improvements in the Contract segment in 2022
- Bookings significantly up YoY and pricing expected to continue to rise in 2023
- PGS continues to be uniquely positioned as the only fully Integrated player with market leading acquisition, imaging and digitalization technology providing significant competitive advantage





## **Capital Markets Day 2023**

Berit Osnes, EVP New Energy

Oslo, January 26, 2023







### **PGS Mission**

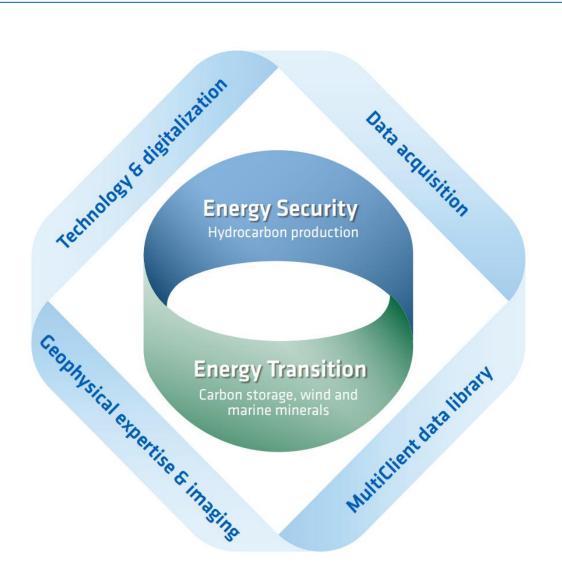
To advance marine subsurface knowledge for evolving energy needs

### **PGS Vision**

To support affordable and sustainable energy for all

### Strategic goal

To develop New Energy into a significant business unit

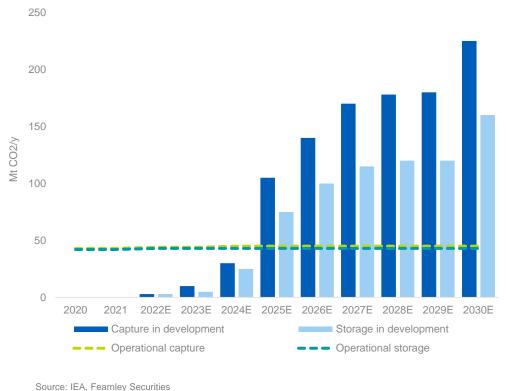






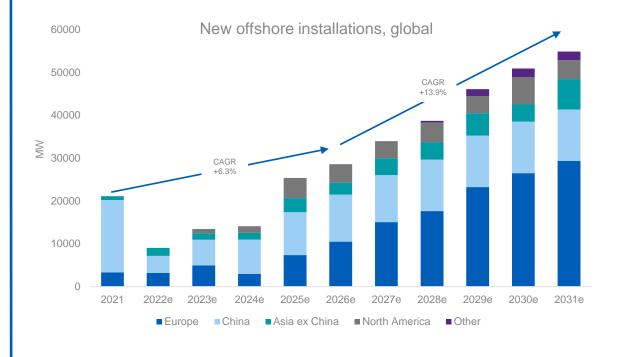
#### **Urgent need for more CO<sub>2</sub> storage development**

- · Storage development lags capture development
- NZ-2050 requires 1,500 Mtpa CO<sub>2</sub> stored by 2030



#### Offshore Wind is in rapid growth

- Global CAGR is 6-14% but Europe CAGR is 22-26% \*
- Main site characterization work 4-5 years ahead of installation



<sup>\*</sup> Source: GWEC Market Intelligence, June 2022



### Northwest Europe Leading the Way in Carbon Storage License Award Process

CCS Cycle

Screen

Identify

Characterize

Monitor

**PGS Products and Services** 

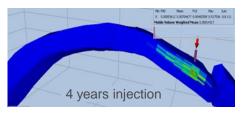
MultiClient data library sales

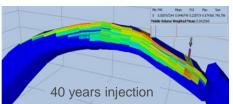
GeoStreamer acquisition and processing for project development and monitoring

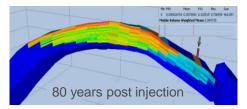
MultiClient library rejuvenation

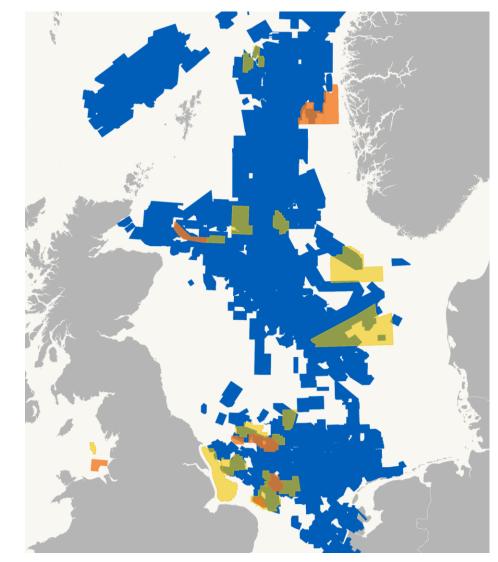
Technology development for long-term monitoring

Geoscience advice and project partnership









### **Recent PGS Projects related to Carbon Storage**





Smeaheia
3D High Resolution
Development Survey

Lol to Develop Carbon Storage Offshore Australia





3D High Resolution Development Survey

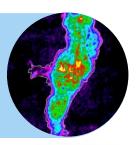
UK Carbon Storage
License Round





4D High Resolution Baseline Survey

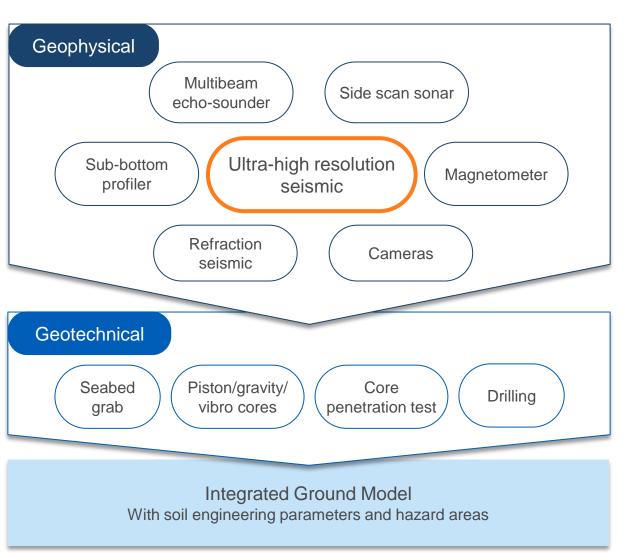
Snøhvit and Sleipner Acquisition and Processing CO<sub>2</sub> Monitor Surveys











## **PGS Position in Offshore Wind**



Offshore Wind Cycle

Screen

Identify

Characterize

**Monitor** 

#### **PGS Products and Services**

MultiClient data library sales

UHR3D P-cable and other geophysical acquisition and processing for project development

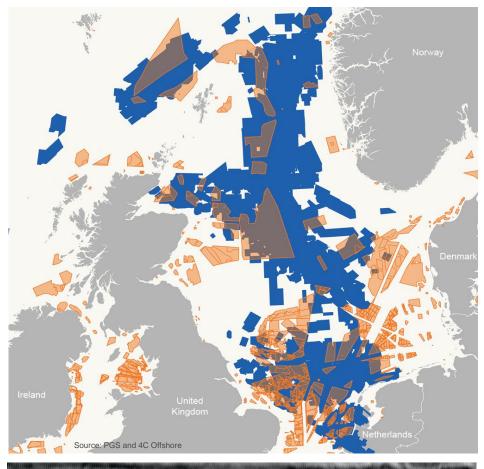
MultiClient library rejuvenation

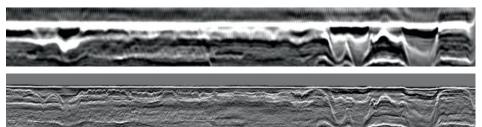
Technology development for efficiency gains

Technology development for long-term site monitoring

#### Geoscience advice

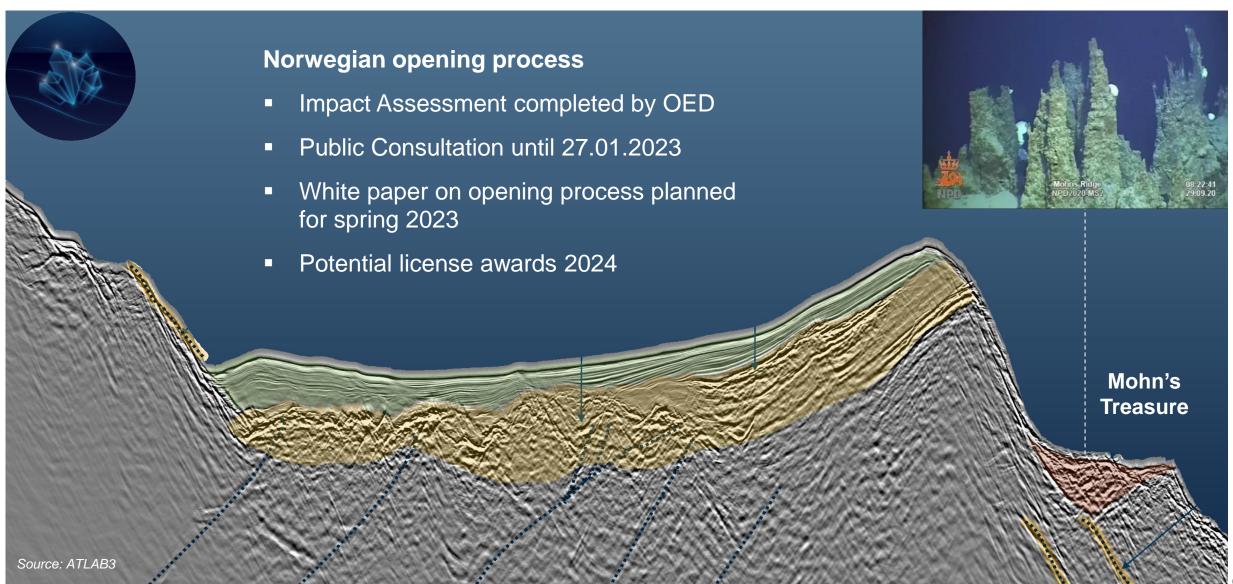








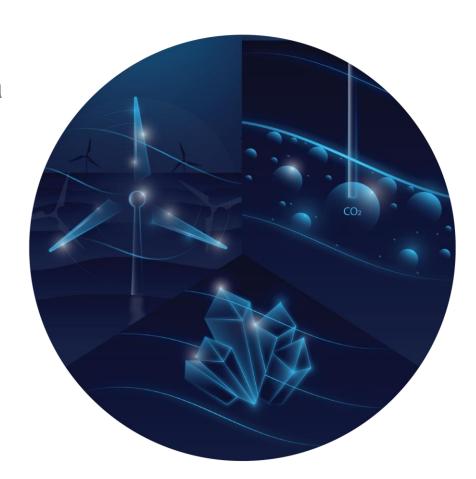
## Seismic Data Delivers Valuable Insight for Mapping of Marine Mineral Deposits



### **Summary**



- Strategic goal to develop New Energy into a substantial business unit
- Successful entry in Carbon Storage
- First entry in Offshore Wind
- Leverage PGS strengths –
   integrated geophysical expertise







## **Capital Markets Day 2023**

Rob Adams, EVP Operations

Oslo, January 26, 2023



## **Operations: 2022-2024 Strategic Priorities & Objectives**



## Safely reduce operational costs and turnaround time with the right technologies and people, now and for the future









**Safety** 

**Operations** 

**Technology** 

People

Maintain, streamline and modernise our "No compromise" safety culture and remain compliant in all aspects of **HSEQ** 

Reduce project delivery costs and turnaround time

Utilise technology to drive continual cost saving and productivity

Improve personnel utilisation, efficiency and structures to reduce costs

- **Exposure Reduction**
- Culture Development
- Digital Transformation

- Cost Reduction
- Turnaround Time Improvement
- Project Management Excellence

- **Exposure Reduction**
- Life Cycle Cost Reduction
- Productivity Improvement
- Technology Agility

- Crew Utilisation Improvement
- Operations' Management Efficiency
- Cost Effective Structures

Priorities



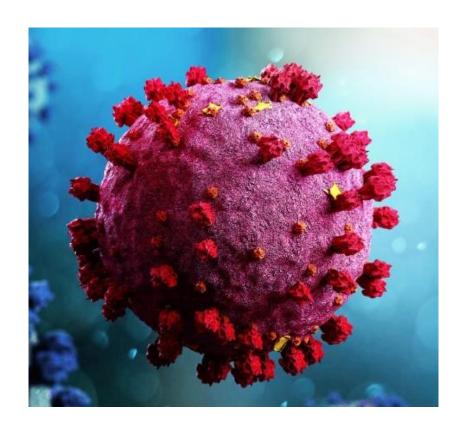
# **Safe and Efficient Operations**

Safety is good for business



## **PGS & COVID-19**





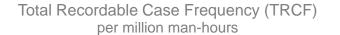
- One of the most challenging periods in our history
  - Significant change in the market
  - Huge challenges with crewing and logistics
- Zero cases of COVID transmission offshore between March 2020 & March 2022
- Crewing strategy proved very resilient
  - Wide base of nationalities
  - Able to retain key talent

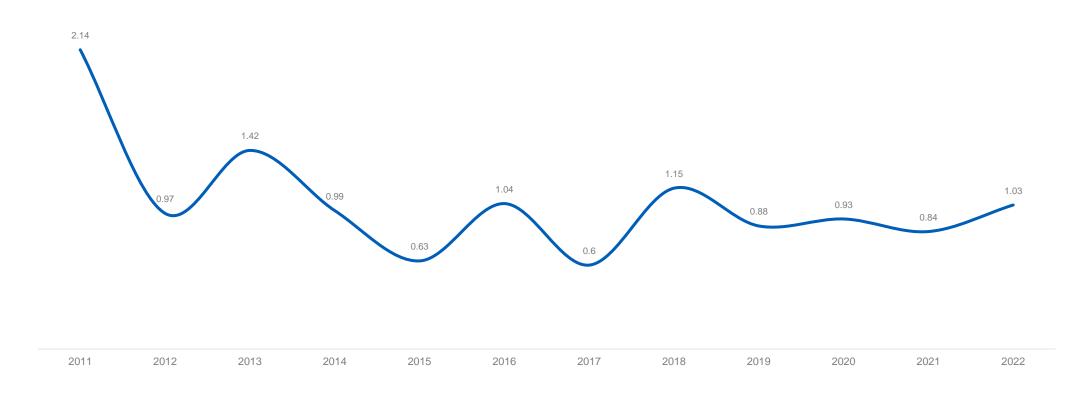
Over 70 man years in solitary confinement (quarantine) whilst travelling to and from our vessels

Maximum trip length performed was 16 weeks at sea



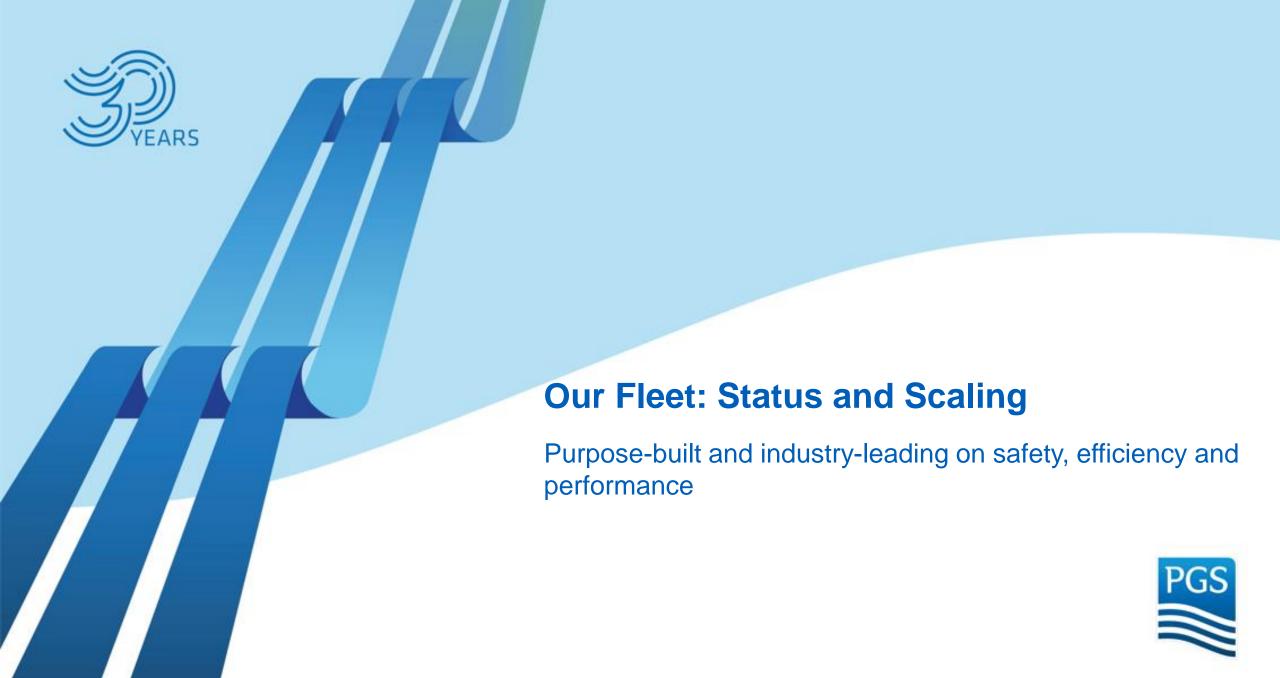
# **HSEQ Performance: Among Industry Leaders**





# No compromise on safety or operational robustness

Operational safety is priority number 1 in PGS - protecting our crews, assets and the environment



### The PGS Fleet



The PGS fleet is the most efficient in the industry

We constantly improve our technology and performance



RAMFORM Atlas - active 3D



RAMFORM **Hyperion** – active 3D



RAMFORM Tethys - active 3D



RAMFORM Sovereign – active 3D



RAMFORM Vanguard – active 3D



RAMFORM Titan - active 3D



PGS Apollo - source



SANCO Swift - 2D/source/wind



**Tansa** – Service agreement for JOGMEC

Vessels currently in stack



RAMFORM Valiant - stacked



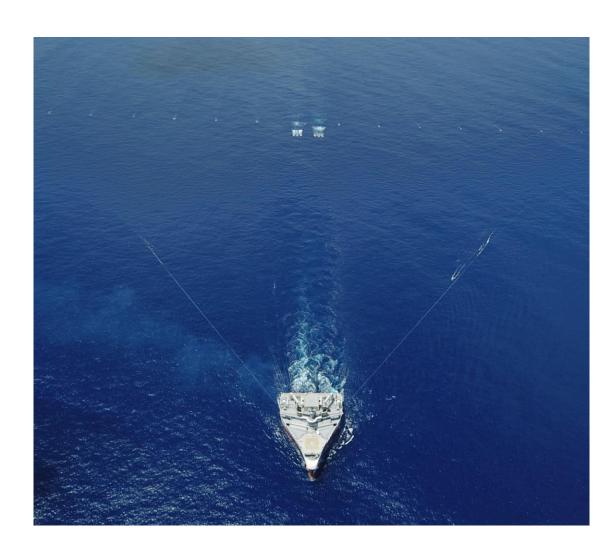
RAMFORM **Explorer** - stacked



RAMFORM **Victory** – reactivation for a survey in Brazil

## **Fleet Strengths**

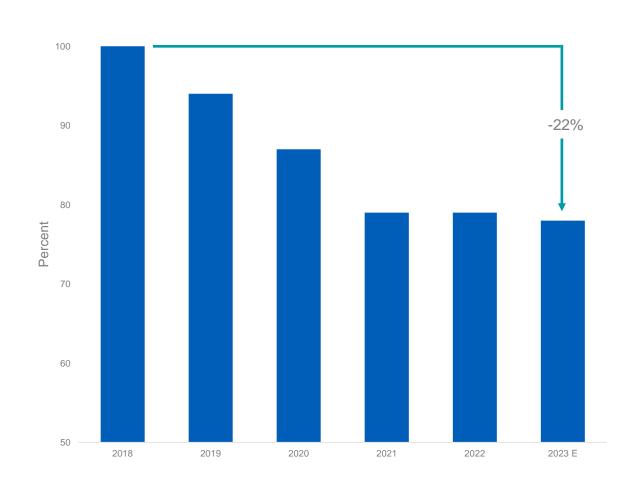




- Modern, safe homogeneous vessels provide the best working environment
- All vessel are equipped with dual sensor GeoStreamer<sup>™</sup> cables
- Flexibility to do all types of jobs from one vessel
- Industry leading engine and propulsion redundancy give safe and robust projects
- Advanced back deck solutions provide high safety and rapid deployment and recovery capabilities
- Digitalisation enables condition-based maintenance and cost savings
- Modern core fleet of support vessels enables efficient and safe crew changes and at sea fuelling







- Cost for Titan Class vessels has gone down significantly over the last 5 years
  - Numbers are relative to 2018 numbers and normalized for inflation and FX
- Driven by:
  - Relentless focus on cost
  - Restructure in 2020
  - Management of assets and inventory
  - Digital initiatives





## When will PGS embark on fleet expansion?

- Market driven
  - Sustainable margin growth will drive fleet expansion
  - Market share is not a key driver

## Potential bottlenecks





Equipment



RAMFORM Atlas - active 3D



RAMFORM Hyperion – active 3D



RAMFORM **Tethys** – active 3D



RAMFORM **Sovereign** – active 3D



RAMFORM Vanguard – active 3D



RAMFORM **Titan** – active 3D

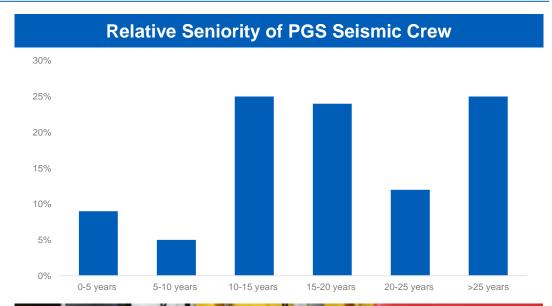


## People



- Since 2019 the industry has lost in excess of 500 experienced seismic crew
  - A lot of these will not return
- Building crews from the next generation is key
  - PGS' crew model with a balance towards full time crew is advantageous
    - Over 80% of our seismic crew is employed full time by PGS

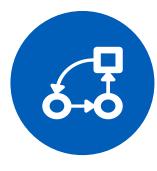
Obtaining skilled crew may be the key challenge to scale up











- Supply chains heavily impacted by COVID & Ukraine
  - Lead times are up significantly
- One of the keys here is streamers
  - PGS has 2,400 sections being built
  - PGS has refurbished over 2,000 sections in the last two years
    - Lifetime extended by >5 years
- CAPEX run rate will be ~\$100 million annually
  - This will include one vessel set of new GeoStreamer each year

**PGS** continues to build and repair streamers









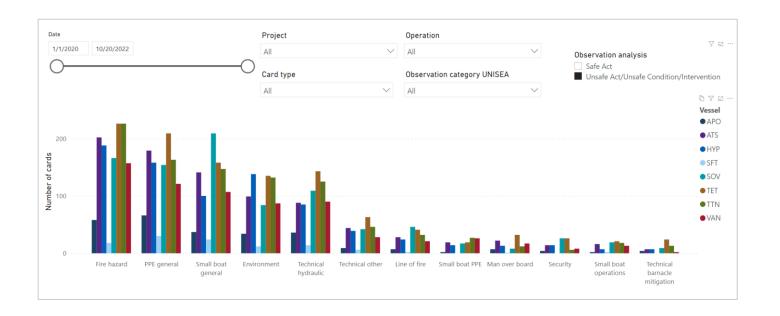


#### **Problem**

7,500 Safety Observations each year

### **Value**

Proactive prevention of incidents



# VERDANTIX

Innovation Excellence **Awards 2022** 

**★ WINNER ★** 

# Verdantix Innovation Excellence Awards 2022

The Verdantix Innovation Excellence Awards recognize the people and organizations who are instrumental in implementing successful, innovative technologies that improve processes, management and reporting. By identifying and sharing best practices, we aim to help our clients – and all EHS, ESG, Sustainability and Operations professionals – to diminish climate impact, lower incident rates, reduce maintenance downtime and enhance operational safety.

#### **Award categories**



Pandemic Risk Management

Compass Group, NAD West Fraser



Safety Performance Improvement

PGS

Virgin Atlantic



Supplier Assurance & Contractor Risk

GE Appliances
Trane US





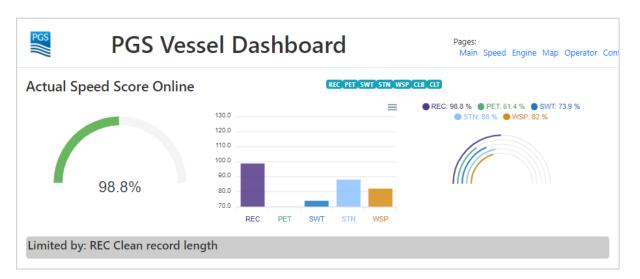
# **Optimal Vessel Speed in Production**

#### **Problem**

More complex surveys had led to lower fleet speed

### **Value**

• Increased potential speed; ability to automate control





Sheridan's levels of autonomy		Use case
Level 7	executes automatically, then necessarily informs the human, or	End goal



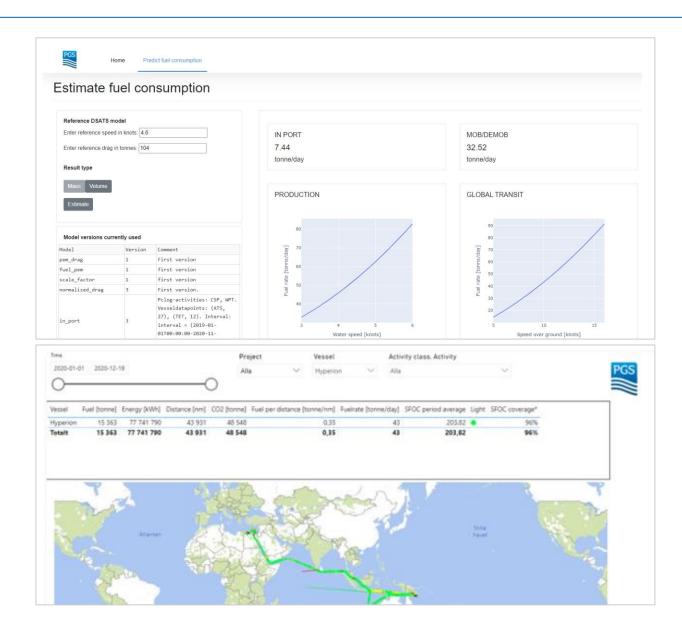
# **Energy Efficiency**

## **Problem**

High Fuel Cost

## **Value**

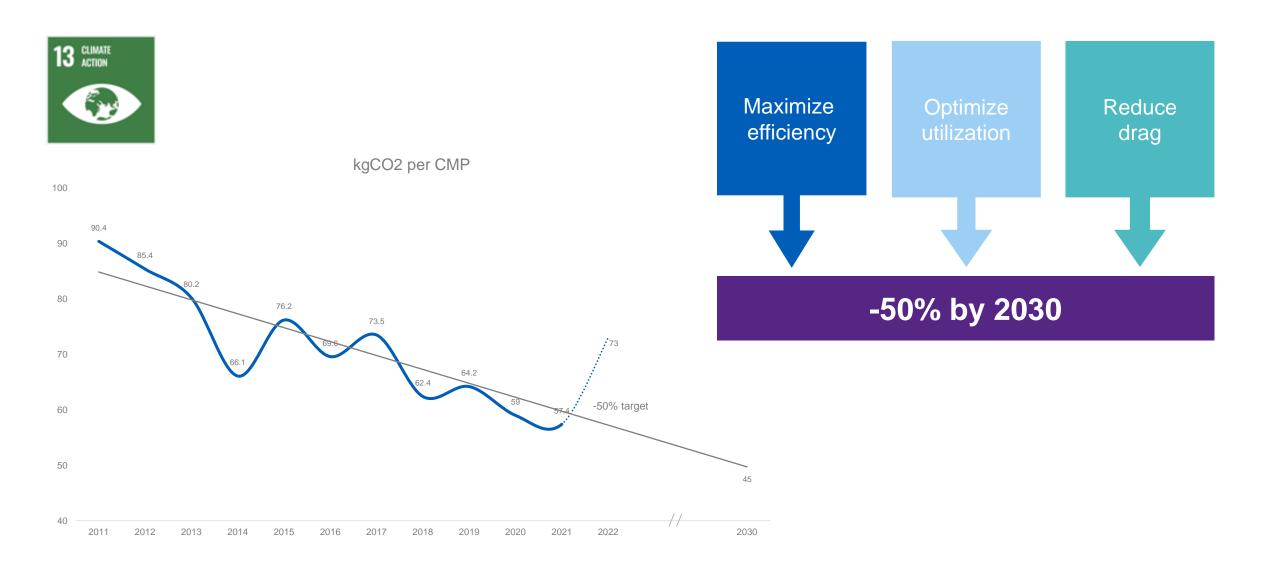
 Reduced fuel consumption through efficiency







# **PGS** is Further Reducing Emissions Per Data Unit



## **New ESG Targets From 2023**



NET-ZERO

**CARBON FOOTPRINT** 

**75 %** 

**REDUCTION IN MARITIME EMISSIONS** 

100 %

RENEWABLE ENERGY ONSHORE

2050

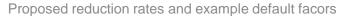


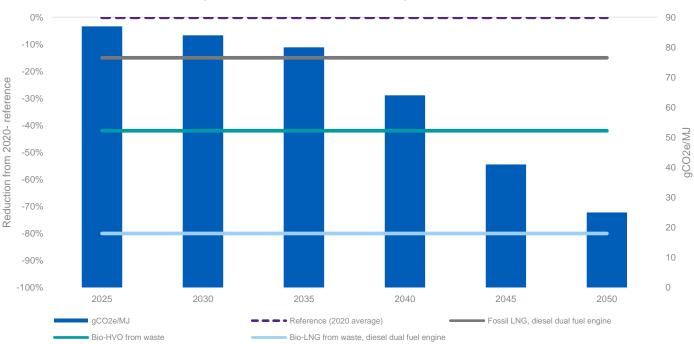


- IMO and EU changes remain unconfirmed
- PGS has performed a study with DNV
  - Next gates are manageable
  - Longer term targets require fleet renewal

75%
REDUCTION IN MARITIME EMISSIONS

2050







PGS

- ~100 lives saved at sea in 2022
- PGS Emergency Response Team trains regularly and is prepared for challenging scenarios
- PGS contributes to healthier oceans
  - 200 tons of debris removed from oceans in last 5 years
  - Rescuing marine life from entanglement in ghost nets











## **Summary**





PGS has the most productive fleet in the industry

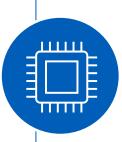


Ability to scale up

- Market and margin driven
- Challenges are availability of people and equipment



Continued focus on competitive cost base



Expect further changes in how we work driven by Digitalization



Dedicated to safety and delivery

