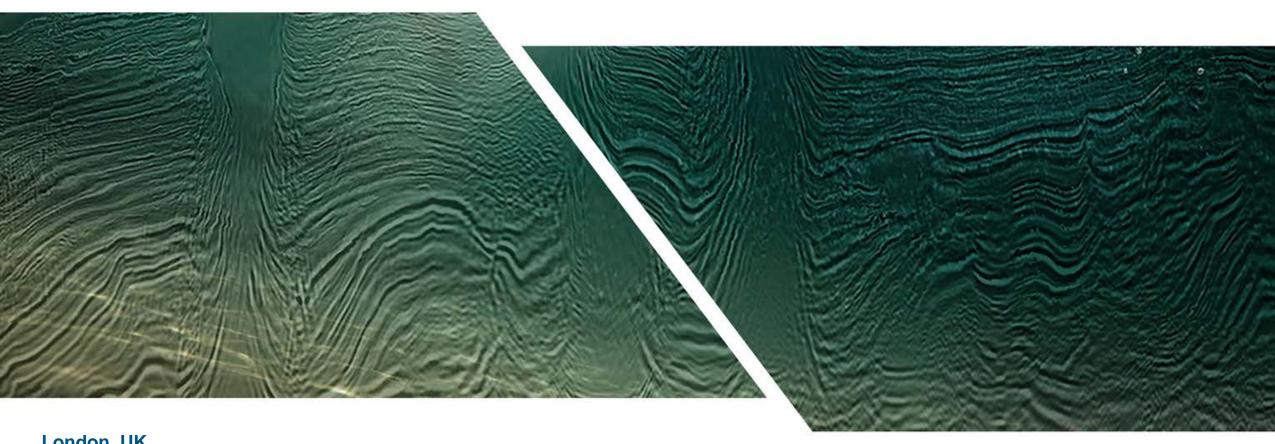


# **Capital Markets Day 2017**



# **Forward-Looking Statements**

All statements in this presentation other than statements of historical fact, are forward-looking statements, which are subject to a number of risks, uncertainties, and assumptions that are difficult to predict and are based upon assumptions as to future events that may not prove accurate. These factors include TGS' reliance on a cyclical industry and principal customers, TGS' ability to continue to expand markets for licensing of data, and TGS' ability to acquire and process data products at costs commensurate with profitability. Actual results may differ materially from those expected or projected in the forward-looking statements. TGS undertakes no responsibility or obligation to update or alter forward-looking statements for any reason.

# **TGS Capital Markets Day 2017**

•	09:00 - 09:10	Welcome Kristian Johansen
•	09:10 - 09:40	Q4 2016 Financial Results Kristian Johansen / Sven Børre Larsen
•	09.40 - 10:00	Q&A Moderators: John Olaisen & Amy Wong
•	10:00 - 10:25	Multi-client Seismic – An Asset Light Advantage Fredrik Amundsen / Tanya Herwanger
•	10:25 - 10:40	Coffee Break
•	10:40 - 11:05	Multi-client activity onshore – Ready for the Recovery Katja Akentieva / John Adamick
•	11.05 - 11.20	Financial Review Sven Børre Larsen
•	11:20 - 11:40	2017 Outlook & Guidance Kristian Johansen
•	11:40 - 11:55	Q&A Moderators: John Olaisen & Amy Wong
•	11:55 - 12:00	Concluding Remarks Kristian Johansen

## **TGS Presentation Team**

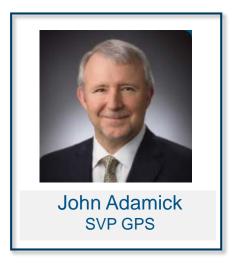












### This is TGS

The worlds largest geoscience data company, known for its asset light – multi-client business model

Global multi-client data library covering frontier & mature basins

Main offices: Oslo and Houston

Regional offices: London, Perth, Calgary, Singapore, Mexico City and Rio de Janeiro

~600 employees

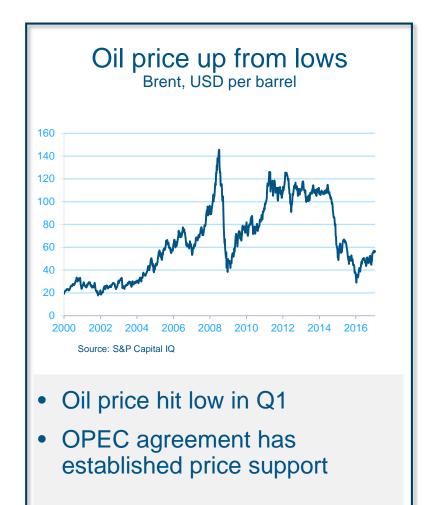
Traded on Oslo Stock Exchange, part of OBX Index (25 most liquid shares at the OSE)

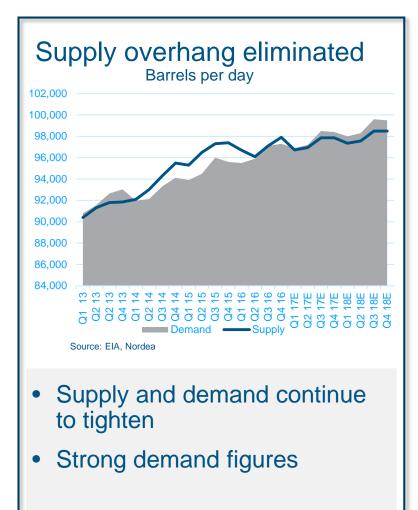
Market Cap: ~\$2.5 billion

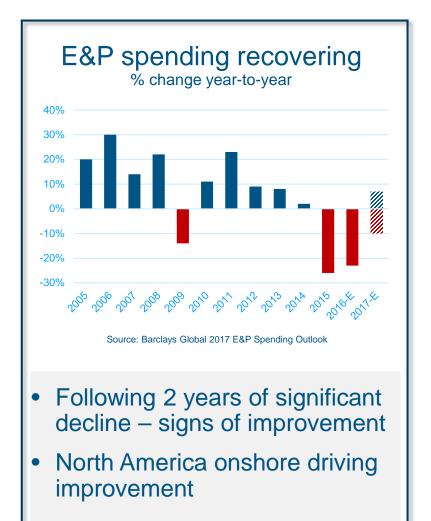


Leading global provider of multi-client seismic and geoscience data

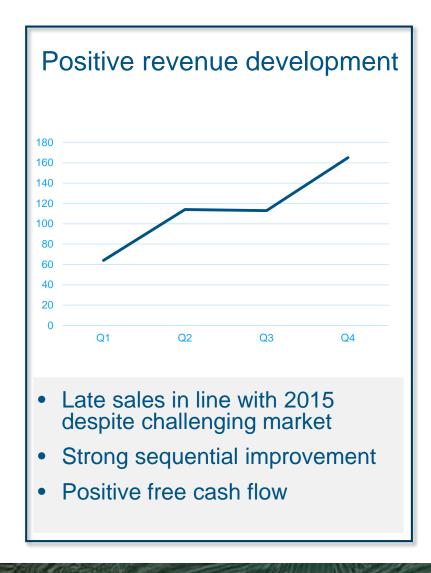
## **2016 Market Development**

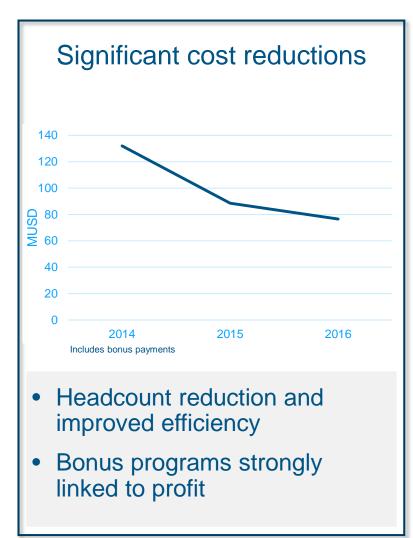


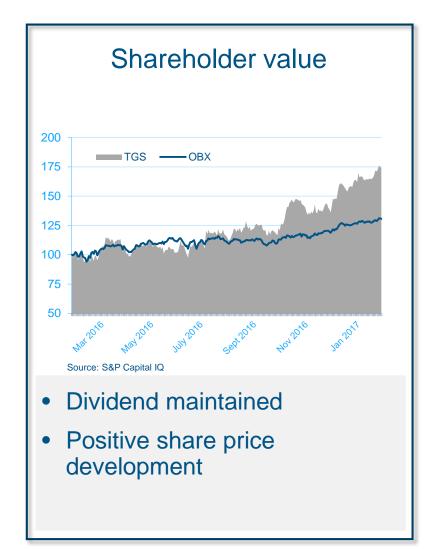




# **TGS Continues to Outperform in 2016**



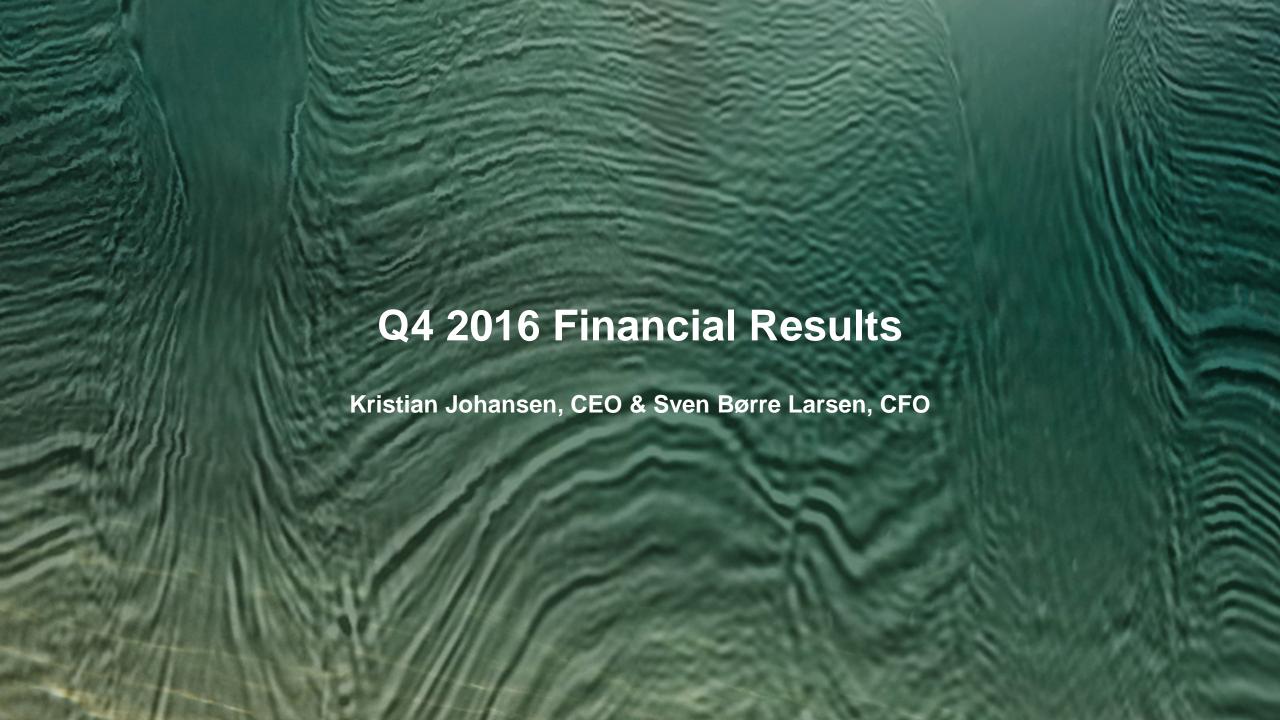




# **2016 Highlights**

- Strong financial recovery after challenging Q1
- Completed acquisition of Gigante Mexico largest 2D survey in the world
- Counter cyclical organic and non-organic investments
  - Acquisition of Dolphin's MC library
- 59 MUSD in dividend to shareholders
- 91 MUSD positive free cash flow despite 43% reduction in E&P spending last 2 years
- Lean, mean and highly motivated organization committed to delivering superior shareholder returns





# **Q4 2016 Highlights**

- Q4 net revenues of 165 MUSD compared to 132 MUSD in Q4 2015
  - Net late sales of 145 MUSD, up 60% from 90 MUSD in Q4 2015
  - Net pre-funding revenues of 17 MUSD were down 53% from Q4 2015, funding 19% (37% excl. risk-sharing investments) of TGS' operational multi-client investments for the quarter (88 MUSD including 42 MUSD from risk sharing arrangements)
- Operating profit for the quarter was 42 MUSD compared to -140 MUSD in Q4 2015
- Cash flow from operations was 79 MUSD compared to 99 MUSD in Q4 2015
  - Cash balance of 191 MUSD at 31 December 2016 in addition to undrawn 75 MUSD Revolving Credit Facility
- Quarterly dividend maintained at USD 0.15 per share
- Full Year 2016 net revenues of 456 MUSD compared to 612 MUSD in 2015
- Full Year 2016 operational investments of 271 MUSD including 51 MUSD from risk sharing arrangements (39% pre-funded, 48% excl. risk-sharing investments)
- Full Year 2016 operating profit of 53 MUSD compared to -21 MUSD in 2015

# **Q4 2016 Operations**



# Q4 Activity – Gulf of Mexico

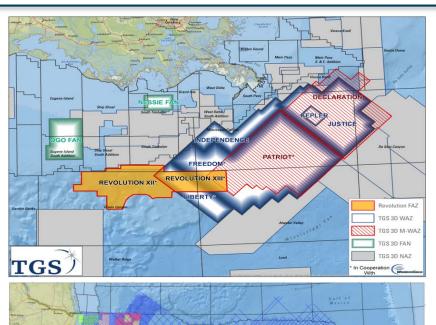
#### **Revolution XII and XIII**

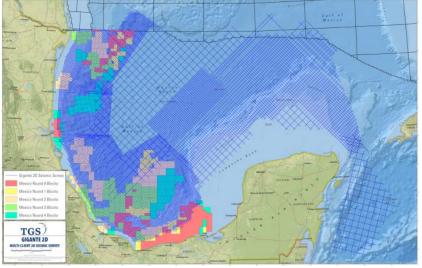
- ~7,150 km² (306 blocks) multi-client full-azimuth survey in collaboration with WesternGeco
- Survey utilizes WesternGeco's proprietary Q-Marine\* point-receiver marine seismic system combined with the proprietary multi-vessel, Dual Coil Shooting acquisition technique
- Located in Green Canyon, Atwater Valley and Ewing Bank protraction areas of the Central Gulf of Mexico - This part of the Gulf of Mexico continues to see the highest activity level and benefits from significant near-term lease turnover

\*Mark of Schlumberger

### Gigante 2D Seismic and Multibeam, Coring, and Geochemical Surveys

- ~186,000 km multi-client 2D regional survey completed during Q4 2016 with fast track data made available for December 2016 licensing round
- Data processing will continue throughout 2017
- ~600,000 km² multibeam survey completed in Q4 2016 with geochemical analysis of the acquired cores continuing in 2017
- Interpretation of the data will integrate with the 2D seismic survey and enhance the value proposition to clients





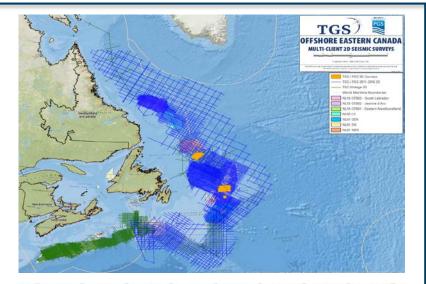
# Q4 Activity – East Canada & NW Africa

#### **Newfoundland Labrador 2016 Season**

- 41,800 km multi-client 2D survey in partnership with PGS sixth consecutive season of data acquisition completed in Q4 2016 with 2,300 km<sup>2</sup> of 3D data added earlier in the year
- TGS-PGS JV library in this region now exceeds 153,000 km of modern 2D data and 11,200 km<sup>2</sup> of 3D data in addition to 83,700 km of TGS vintage data, an expansive well log library and advanced multi-client interpretation products
- Successful licensing rounds in 2015 and 2016 and new Call for Bids issued over approximately 23,000 km<sup>2</sup> in Labrador South region (bids due 8 November 2017)

### North West African Atlantic Margin NWAAM 2017

- Over 11,500 km of multi-client 2D seismic in partnership with PGS commenced in Q4 2016
- Designed to infill, extend and complement the TGS NWAAM 2012 2D survey which helped with recent commercial discoveries in the MSGBC basin
- Confirms TGS commitment to the leading frontier basin in Africa, where TGS now has approximately 40,000 km of 2D data and 8,000 km<sup>2</sup> of 3D data





### **Net Revenues**

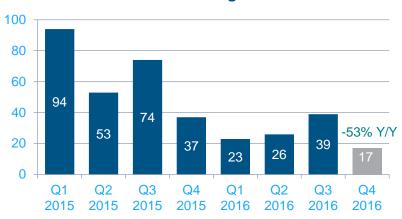
#### Late sales revenues



#### **Proprietary revenues**



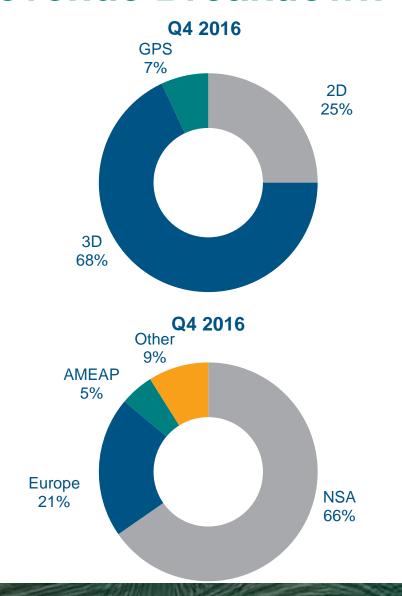
#### **Prefunding revenues**

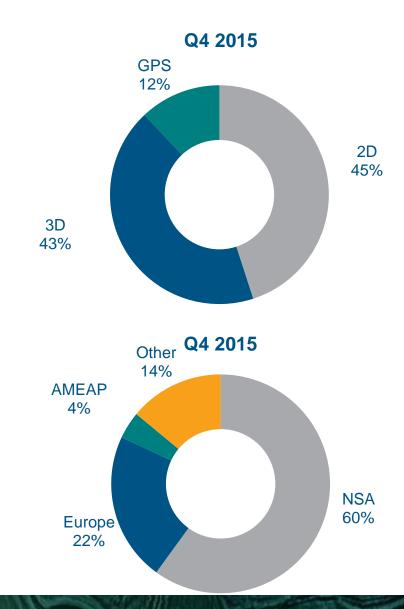


#### **Total revenues**



### **Net Revenue Breakdown**





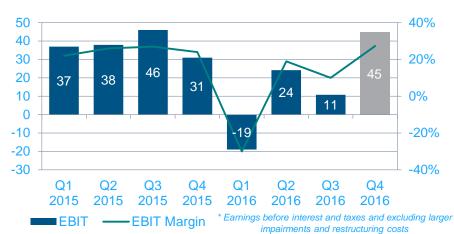
# **Operating Expenses, EBIT, Free Cash Flow**

### Operating expenses \*

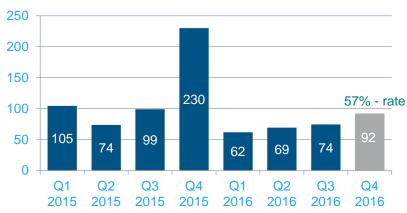


\* Include personnel costs and other operating expenses. Adjusted for restructuring costs and larger impairments of operating items

#### EBIT \*



### **Amortization and impairment \***



\* Q1-Q4 2016 reflects the new amortization policy effective from 1 January 2016

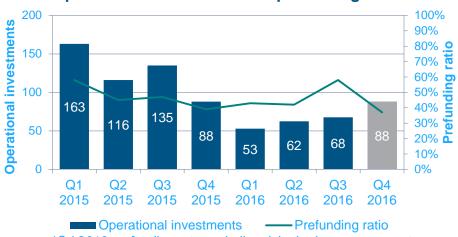
#### Free cash flow \*



\* Defined as cash flow from operational activities minus operational cash investments in multi-client projects

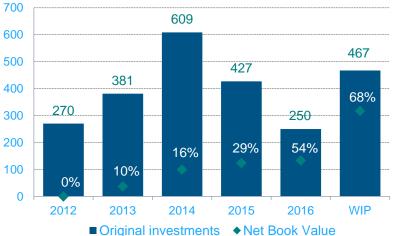
# **Multi-Client Library**

### Operational investments and prefunding ratio



\*Q4 2016 prefunding rate excluding risk-sharing arrangements

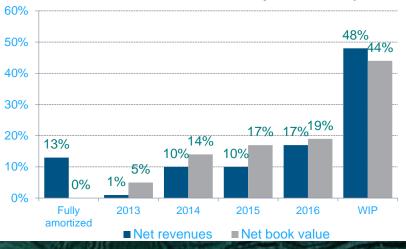
### Investments – year of completion 609



#### **Multi-client library - NBV**



#### Net revenues vs net book value – year of completion



## **Q4 2016 Income Statement**

USD million, except EPS		Q4 2016	Q4 2015	Change in %
Net revenues		165	132	25%
Cost of goods sold – proprietary and other		0.1	0.4	-77%
Amortization of multi-client library		92	230	-60%
Gross margin		72	-99	173%
Personnel costs		16	15	5%
Other operating expenses		11	22	-49%
Cost of stock options		0.1	0.2	-45%
Depreciation		3	3	-8%
Operating profit	25%	42	-140	130%
Net financial items		-3	-2	-96%
Profit before taxes	23%	39	-142	127%
Taxes		15	-20	174%
Net Income	15%	24	-122	120%
EPS, Undiluted		0.24	-1.20	120%
EPS, Fully Diluted		0.23	-1.19	120%

## **Q4 2016 Cash Flow Statement**

USD million	Q4 2016	Q4 2015	Change in %
Received payments from customers	111	140	-21%
Payments for operational expenses	(27)	(24)	-15%
Paid taxes	(5)	(17)	72%
Operational cash flow	79	99	-21%
Investments in tangible and intangible assets	(2)	(1)	-105%
Investments in multi-client library	(45)	(119)	62%
Investments through mergers and acquisitions	-	(8)	100%
Interest received	0.2	0.8	-75%
Interest paid	(0.05)	(0.09)	46%
Dividend payments	(14)	-	N/A
Proceeds from share issuances	-	0.8	-100%
Change in cash balance	18	-27	165%

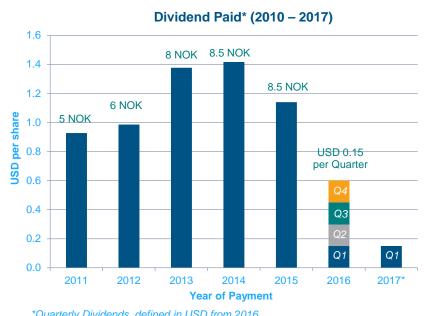
## **Balance Sheet**

USD million	Q4 2016	Q3 2016	Change in %	Q4 2015
Assets				
Cash and cash equivalents	191	173	10%	163
Other current assets	353	275	28%	308
Total current assets	544	449	21%	471
Intangible assets and deferred tax asset	83	88	-6%	90
Other non-current assets	11	21	-49%	25
Multi-client library	812	816	0%	839
Fixed assets	23	23	-2%	30
Total Assets	1,473	1,397	5%	1,455
Liabilities				
Current liabilities	262	198	32%	218
Non-current liabilities	6	7	-13%	6
Deferred tax liability	41	37	12%	33
Total Liabilities	309	242	28%	257
Equity	1,164	1,155	1%	1,198
Total Liabilities and Equity	1,473	1,397	5%	1,455

The Company holds no interest-bearing debt

### Dividend stable at USD 0.15 per share

- Shareholder authorization to distribute quarterly dividend payments from Q1 2016
  - Aim to keep a stable quarterly dividend through the year
  - Actual quarterly dividend level paid will be subject to continuous evaluation of market outlook, cash flow expectations and balance sheet development
- Q1 2016: USD 0.15 per share dividend paid on 23 February 2016
- Q2 2016: USD 0.15 per share dividend paid on 1 June 2016
- Q3 2016: USD 0.15 per share dividend paid on 25 August 2016
- Q4 2016: USD 0.15 per share dividend paid on 18 November 2016
- Q1 2017: USD 0.15 per share dividend to be paid on 23 February 2017 (shares will trade ex-dividend on 9 February 2017)

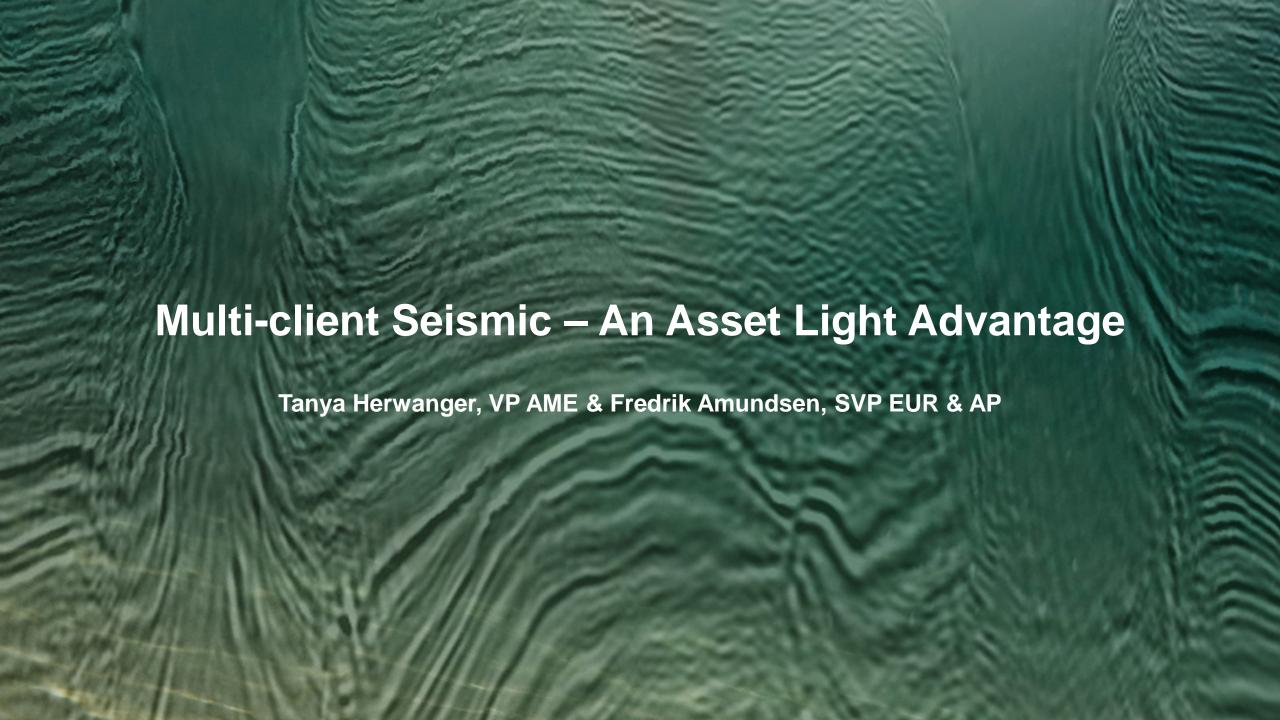


\*Quarterly Dividends, defined in USD from 2016 Historical NOK dividends converted to USD using FX rate on ex-dividend date

# **Summary**

- Q4 net revenues of 165 MUSD
- Full Year 2016 net revenues of 456 MUSD
- Positive cash flow further strengthens balance sheet
- Cash balance of 191 MUSD in addition to undrawn 75 MUSD Revolving Credit Facility
- Quarterly dividend maintained at USD 0.15 per share
- Strong finish to 2016, beating company and market expectations; but industry conditions are expected to remain challenging in 2017





### The Multi-client Model

The Contract Model: A geophysical services business



Client tenders for service

Client awards and funds project

Client owns data

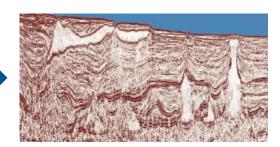
### The Multi-client Model: An investment business



TGS secures customer commitment

TGS invests in and controls project

TGS Licenses data to multiple clients



**Exploration Insight** 



Flexibility to select appropriate technology



Invest & deliver



The right data, in the right place, at the right time

### Offshore Multi-client Seismic Market













# **ROSGEO** Recent TGS Survey: Partner Russia



Source: Company financial reports

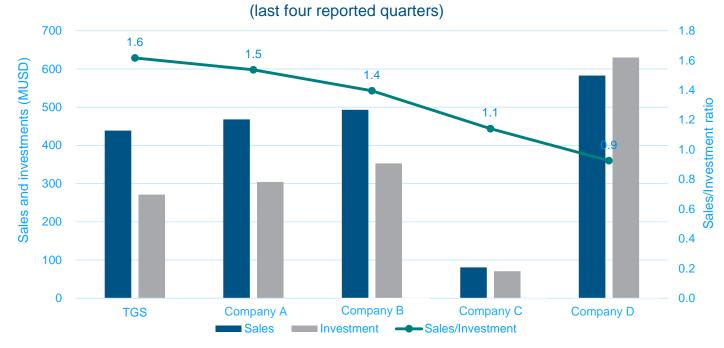








### Sales and Invesments largest MC companies

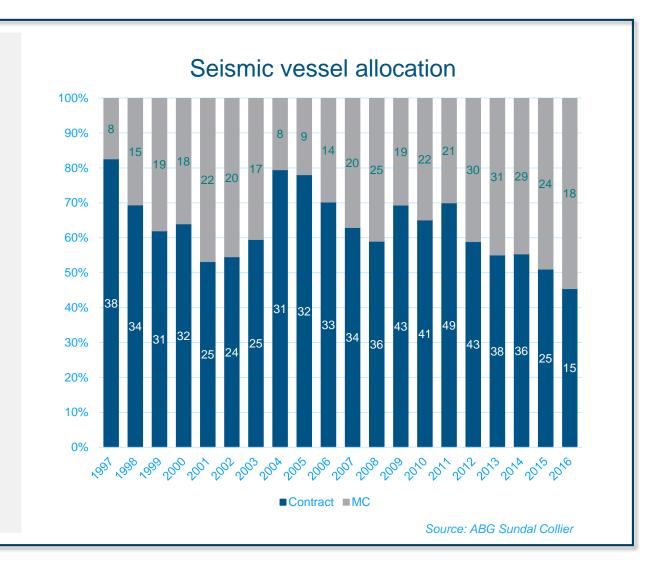




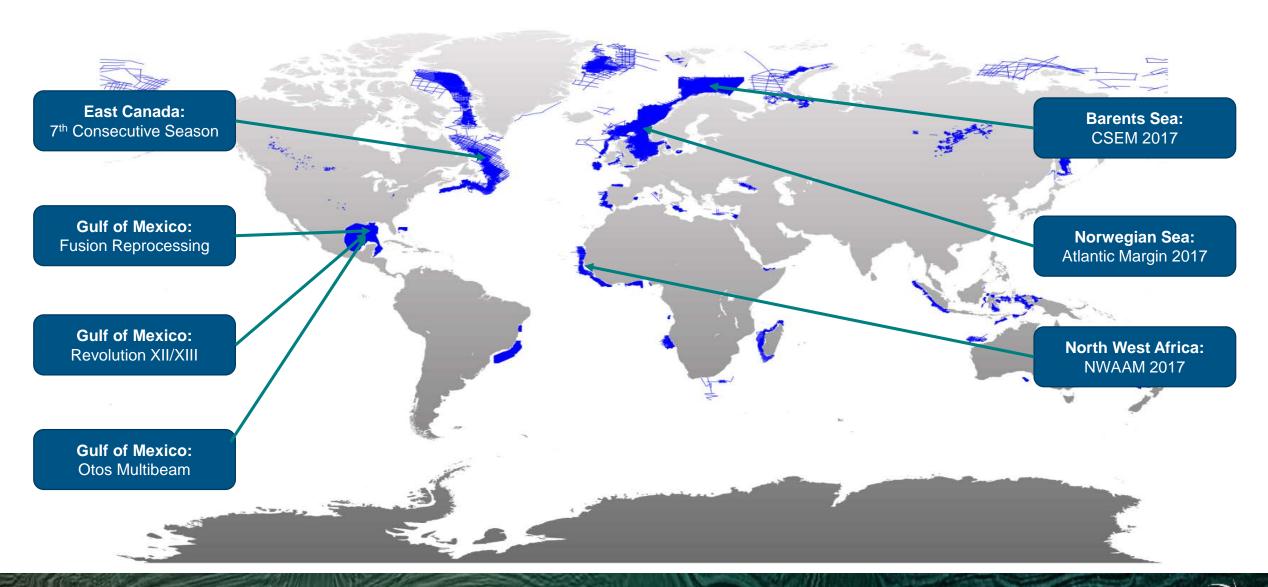


### **Recent Multi-client Trends**

- Growing focus on multi-client seismic
  - Tempting historic margins
  - Efficient way to balance vessel utilization
- Increased influence of E&P Procurement
  - Converted contracts
  - Global deal-making
- Opening up of new regions to multi-client
  - Mexico
  - Malaysia
- Expansion of multi-client activities in frontier regions
  - East Canada
  - Norwegian Atlantic Margin
- Application of new technology in mature basins
  - Norway
  - U.S. GOM



# **2017 Announced Offshore Multi-client Projects**

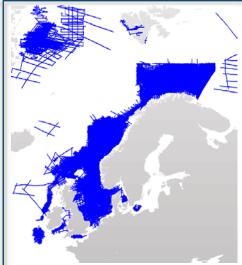


# **Strategic Focus Areas**

### **NSA**

- Regular licensing rounds in Canada, U.S. GOM, Mexico GOM and Brazil
- Commanding position in key basins (Newfoundland-Labrador, Central GOM, Mexico)



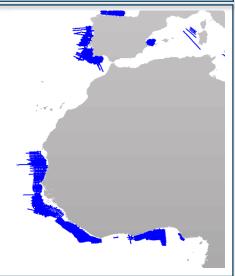


### **EUR**

- Regular licensing rounds in Norway and UK
- Superior 2D position in Norway with well-placed 3D library

### **AME**

- Superior 2D position in NW Africa which is now seeing increased interest and activity from significant discoveries
- Potential for opening of delayed licensing rounds

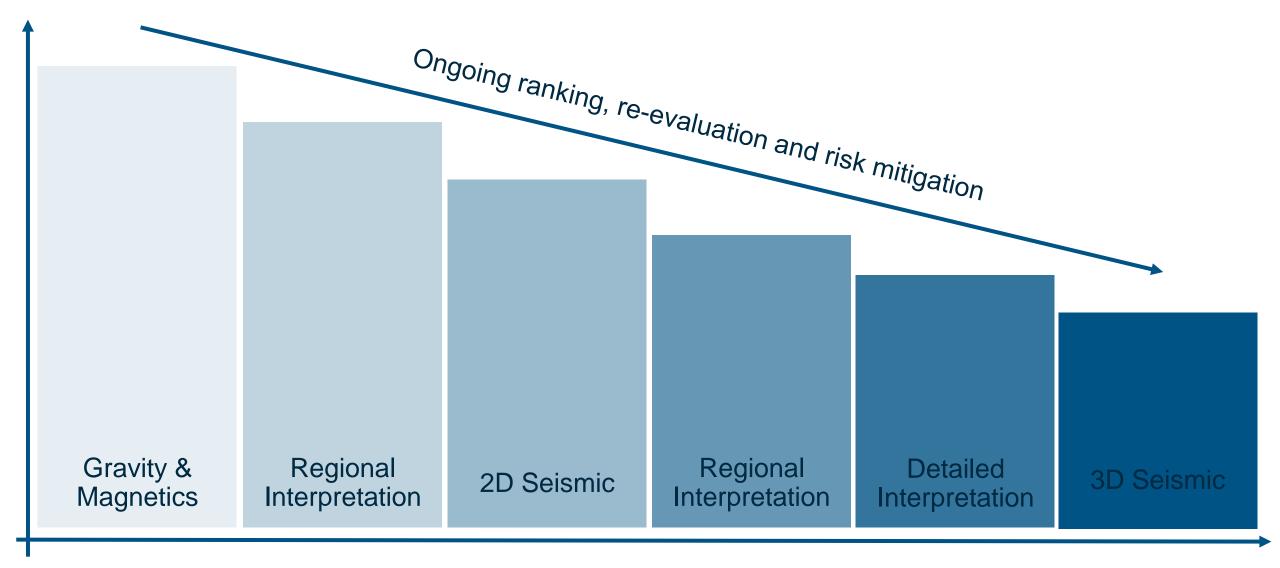




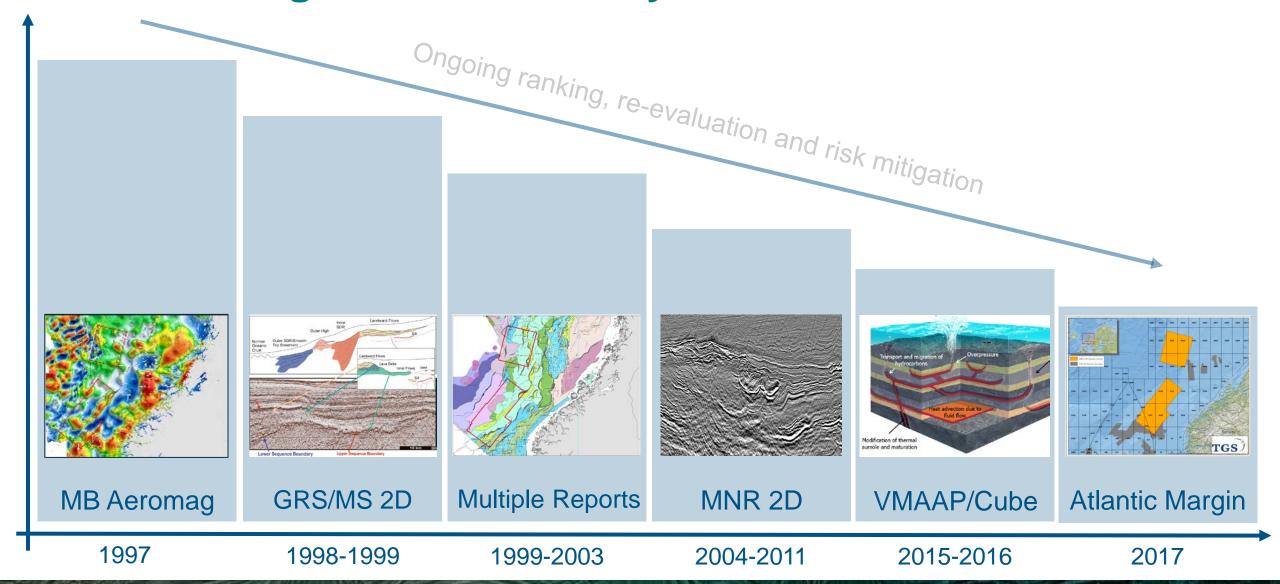
### AP

- Potential renewed interest in the North West shelf as a result of recent discoveries
- Opening up of frontier regions such as Malaysia

### **Evolution of a Multi-client Area**

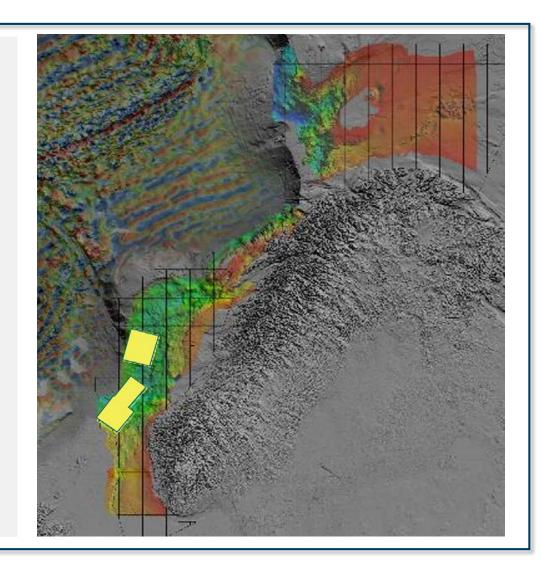


# **Atlantic Margin – A Case Study**



# **The Atlantic Margin 3D**

- 40,000 km<sup>2</sup> of 3D seismic
- Acquisition technology steered by prefunder
- Under explored and largely open acreage
- Close to existing infrastructure
- Several blocks expected to be included in the 24th license round



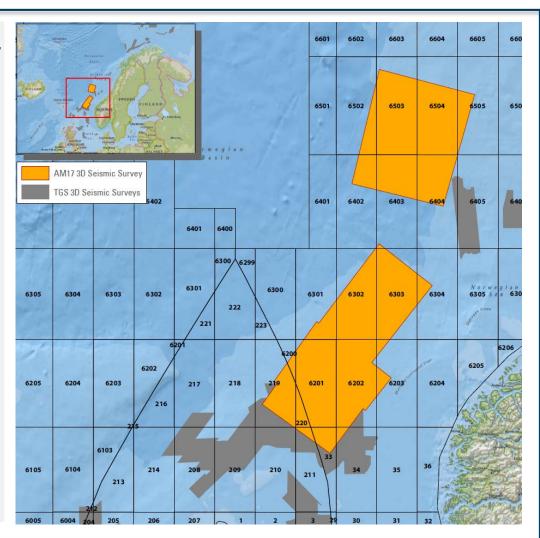
# **Atlantic Margin – Why TGS?**

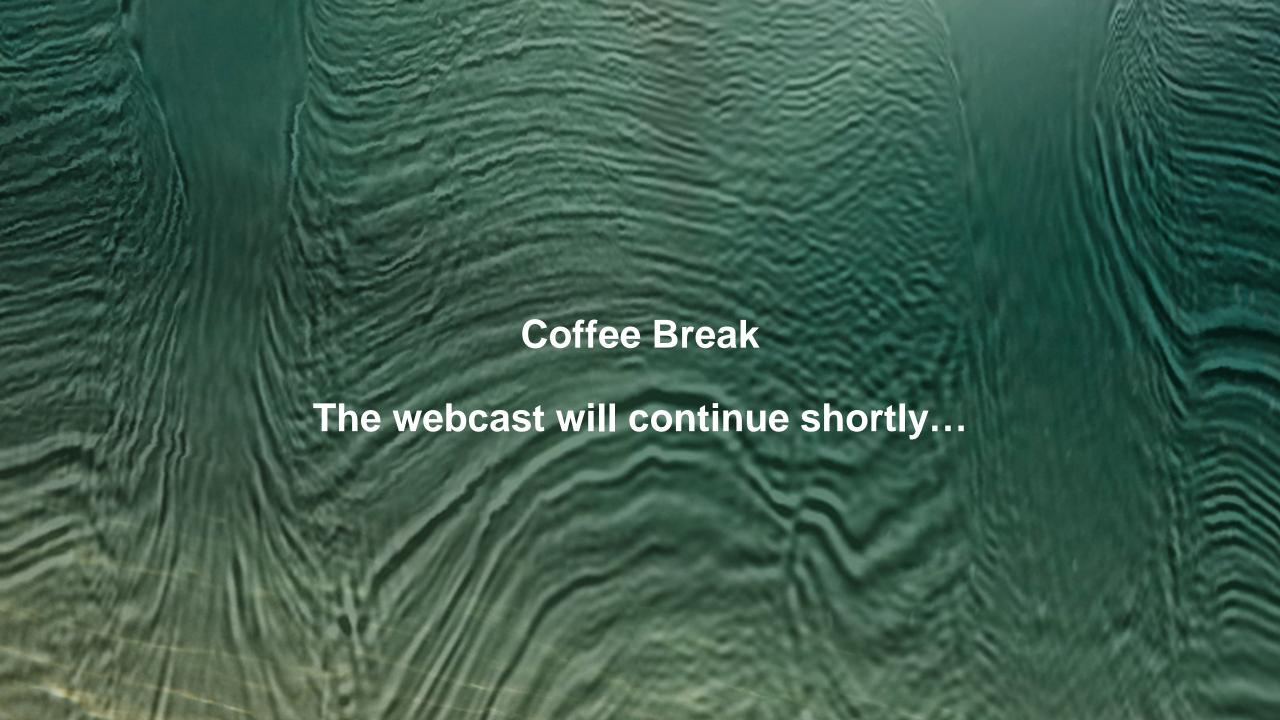
- Knowledgeable People
- Flexibility to Adapt
- Financial Capability



# **Multi-client - Summary**

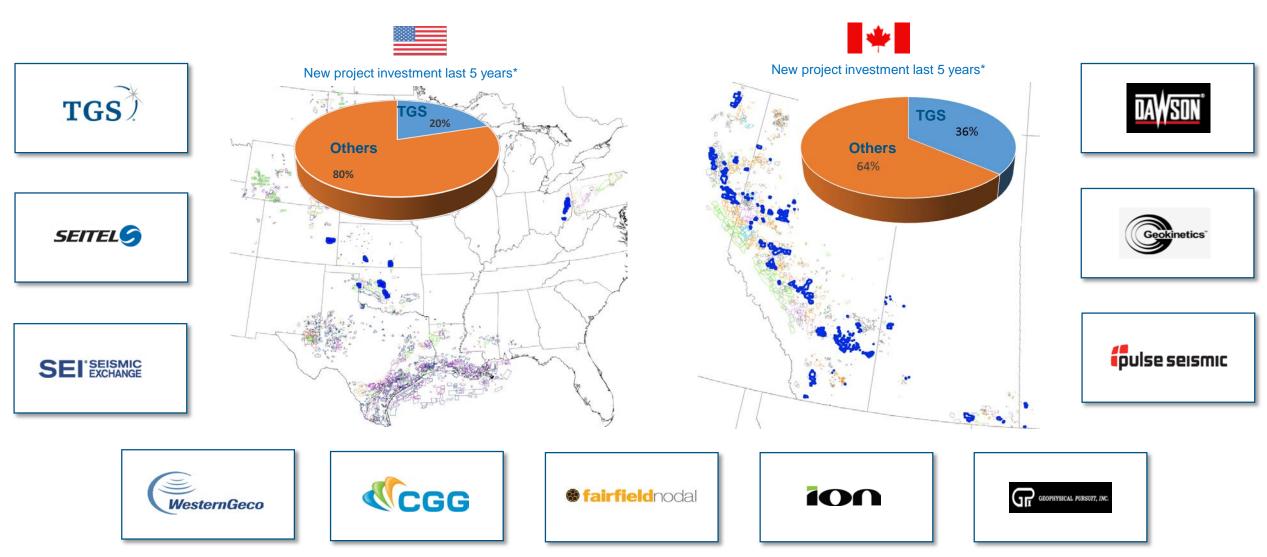
- The leading multi-client seismic company in the industry
- Operating as Customer, Competitor and Collaborator to our peers
- We have a track record of successful investment decisions
- Well positioned to benefit from recent trends
- A strong 2017 outlook in mature, frontier & new regions
  - Including the largest 3D in Europe to date
  - An excellent example of the TGS way







## **Onshore Multi-client Seismic Market**



<sup>\*</sup> Market share based on square miles of new projects acquired

## **Evolution of TGS Onshore Seismic**

#### 2011

Began building U.S. team

#### 2013

Expansion of position in Utica

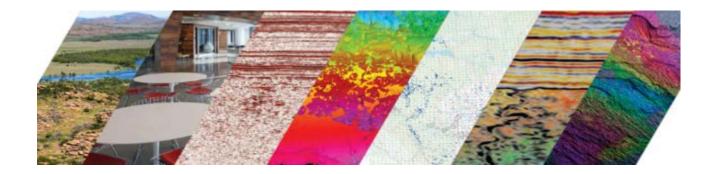
Western Canada project in Montney play

#### 2015

Significant expansion in the heart of Duvernay play (Kaybob-Bigstone 3D)

#### **2017**

Strengthen core areas and enter new basins



#### **2012**

Acquired Arcis in Canada

Commenced acquisition of first U.S onshore survey

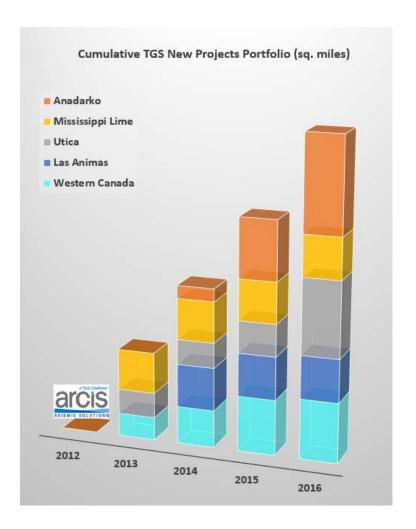
#### 2014

Entered the Scoop/Stack play in Anadarko basin (Loyal 3D)

#### **2016**

Delivered the largest dataset in Anadarko basin (Blanchard 3D)

Expansion in Duvernay play (Chickadee 3D)



# **Delivering on the Strategy**

## Investment



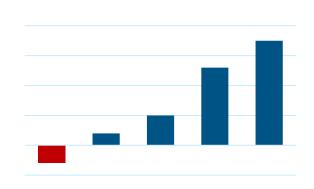
## **Promised**

Create a balanced portfolio and dominate key areas

### Delivered

- Utica
- SCOOP & STACK
- Duvernay

## Rate of Return



## **Promised**

Cost recovery one year after completion

#### **Delivered**

- Cost recovery ahead of target
- Expected Sales/Cost Ratio 1.75

## Leverage our strengths



### **Promised**

Deliver high quality, integrated products

#### **Delivered**

- Inventory of reservoir products
- New data acquired with best parameters and technology

# **Typical Project Characteristics**

## Land



## Prefunding

• 70-120%

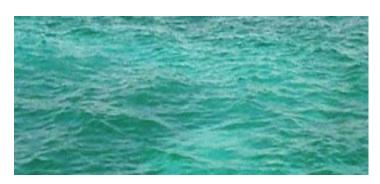
## Longevity

- Commercial life over 20 years
- Indefinite exclusivity

#### Sales Drivers

- High frequency of acreage turnover but uncertain timing
- Typically held acreage
- Mineral rights are split vertically

## Marine



## Prefunding

• 20-60%

## Longevity

- Commercial life 5-15 years
- Data eventually goes to public domain in most areas

#### Sales Drivers

- Regular Licensing rounds
- Typically open acreage

# Capitalizing on our Strengths

## **Asset Light Business Model**

- Technology neutral
- Benefit from depressed pricing

## **Strong Balance Sheet**

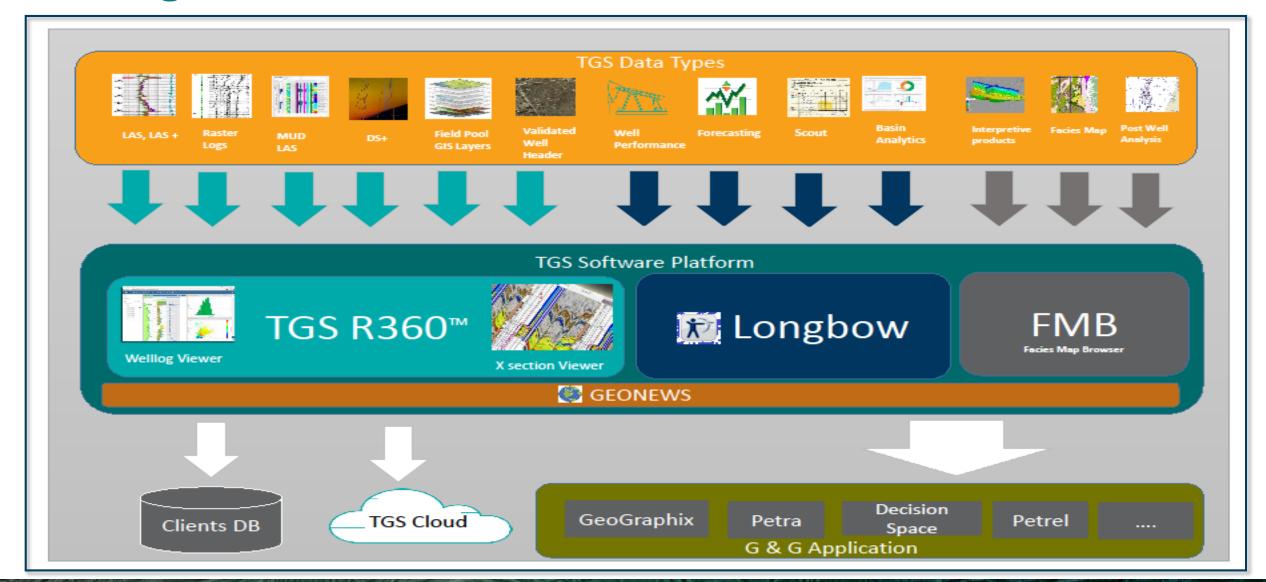
 Increasingly important factor for E&P procurement and seismic vendors

## **Diverse Products Portfolio**

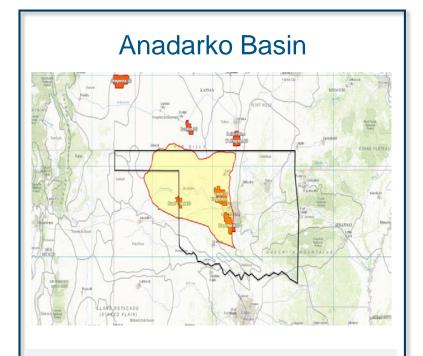
- Advanced Imaging, well log data, geologic data
- Market intelligence



# Geologic Products: Diverse Data and Software Platforms



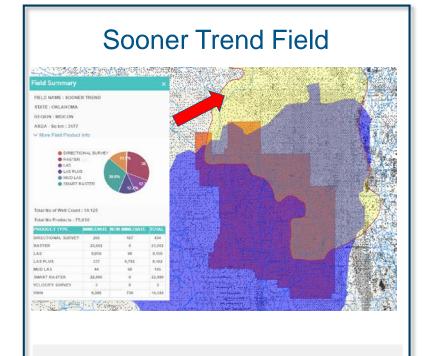
# Case Study: US Oklahoma – SCOOP and STACK Play



- Anadarko Basin in Yellow
- TGS 3D surveys in Orange

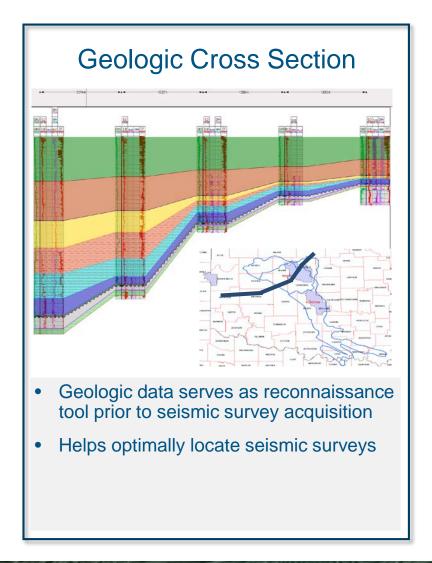
# R360 Drilldown

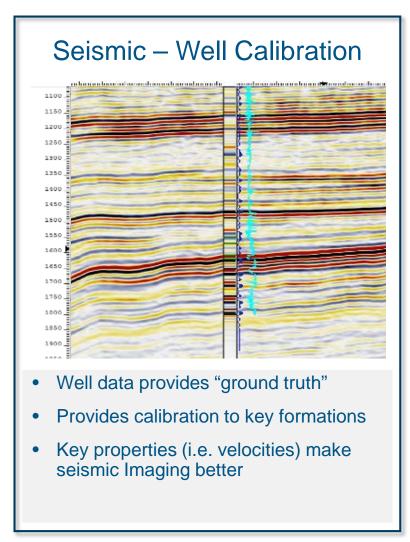
- R360 view TGS e-commerce platform
- Key Meramec Formation in purple
- TGS well data shown with black dots

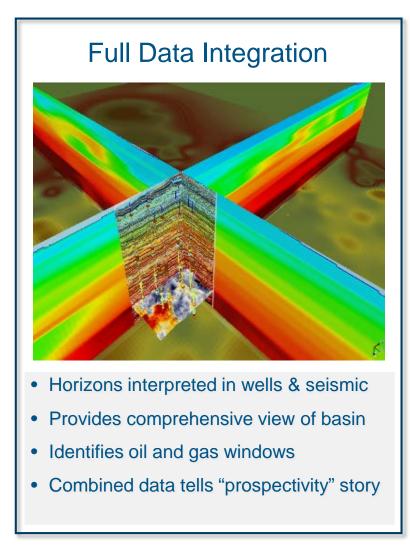


- Further drilldown with R360 to field level
- TGS has 10,125 wells and 75,000 products in Sooner Field alone
- Available individually or all at the click of a button

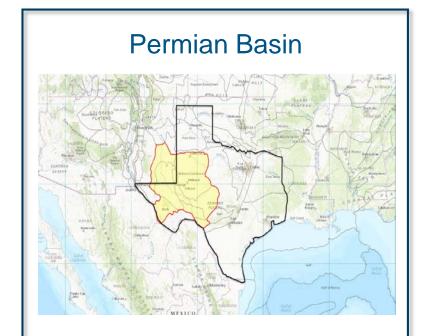
# Making Seismic Better – SCOOP and STACK Play







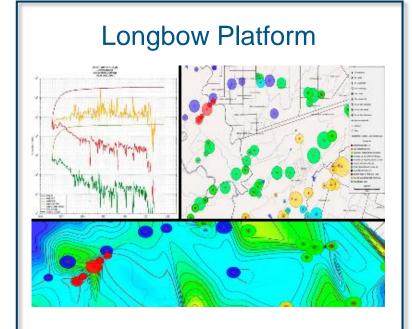
# **Case Study: US Texas – Permian Basin**



Permian Basin in Yellow

# TIS Busin And Trackes Suremay List Howard Province Name - Province Busin NAME - TOS Busin And Trackes Suremay List Howard Province Name - Province Busin NAME - TOS Busin And Busin Busin

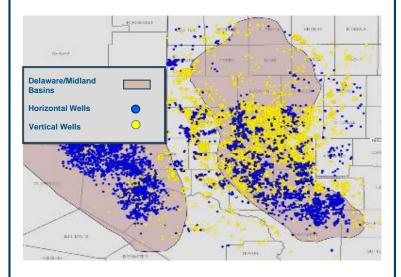
- R360 view TGS e-commerce platform
- TGS well data shown with black dots
- 425,000 TGS wells and 2.4 million products



- Nationwide permit, well header, production volumes at the individual well level
- Complex queries, visualization and forecasting
- Compare wells, operators, plays, techniques, etc.

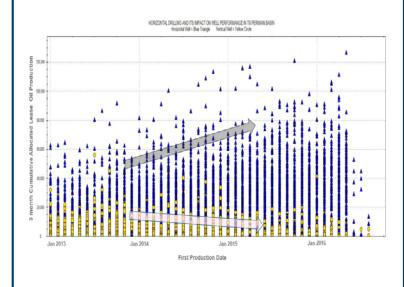
# **Case Study: US Texas – Permian Basin**

## Permian Well Locations 2013-2016



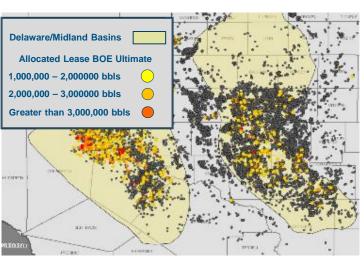
- Horizontal wells blue, vertical wells yellow
- Predominance of horizontal vs vertical wells in recent years

## Horizontal vs Vertical Production



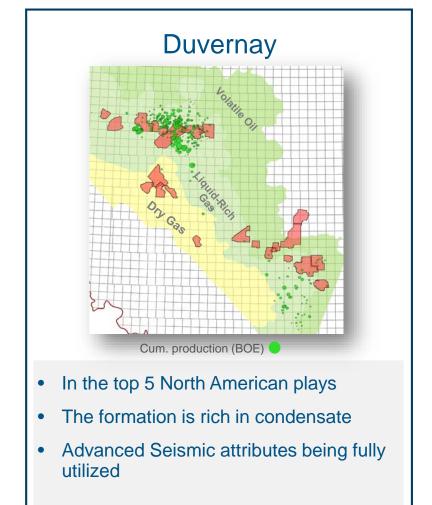
- Horizontal wells blue triangles
- Vertical wells yellow circles
- 3 month cumulative production shown
- Production from horizontals far superior

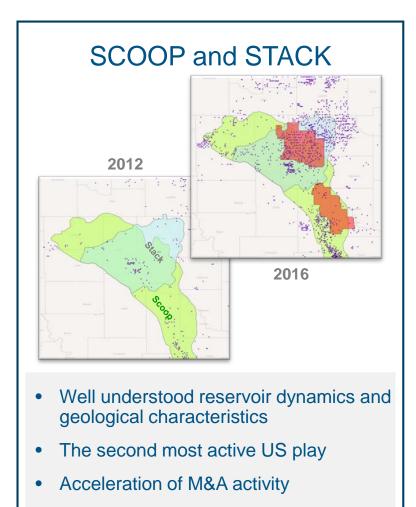
## EUR Map

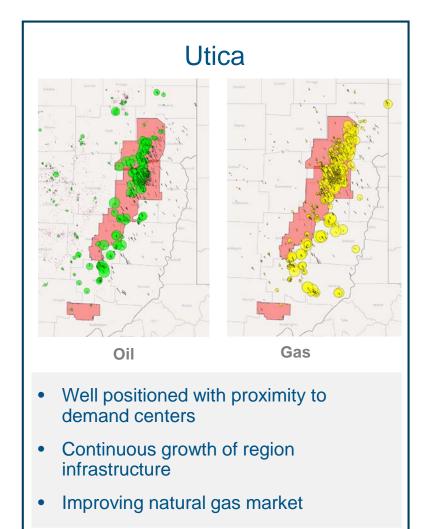


- Estimated Ultimate Recovery
- Forecast of ultimate hydrocarbon production
- Valuable predictive tool, multiple uses

## **Core Positions in Three Premier Basins in North America**







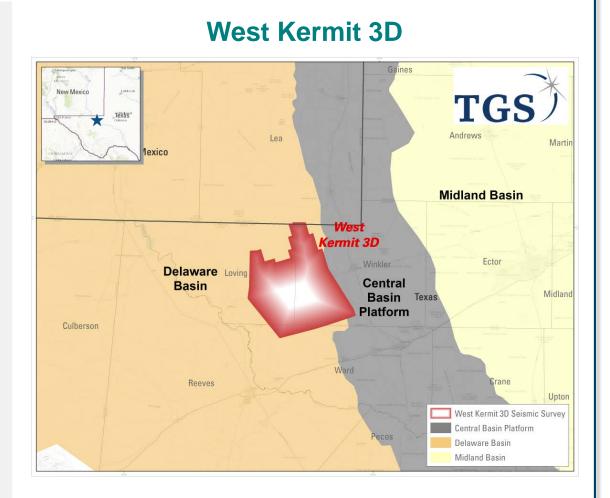
# **Permian – a Basin of Opportunities**

## **Situation**

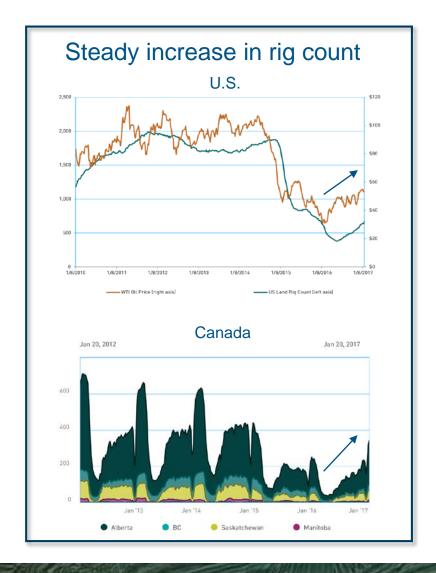
- Land rush: large and small companies moving in
- Increase in multi-client seismic activity in both Midland and Delaware basins
- Complex basin where seismic adds significant value

## **TGS Advantage**

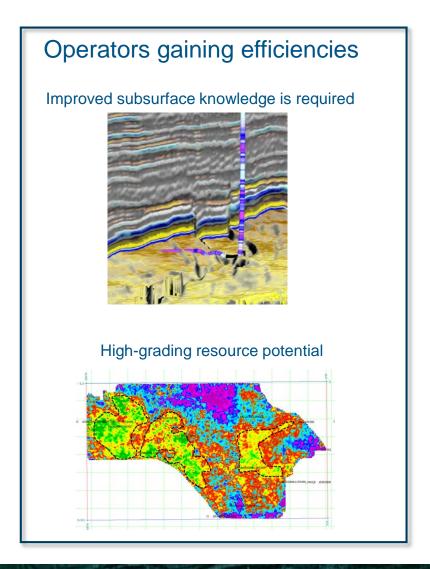
- Strong market intelligence
- TGS has commenced field operations on its first Permian project



# **Recent Trends Show Future Growth Opportunity**







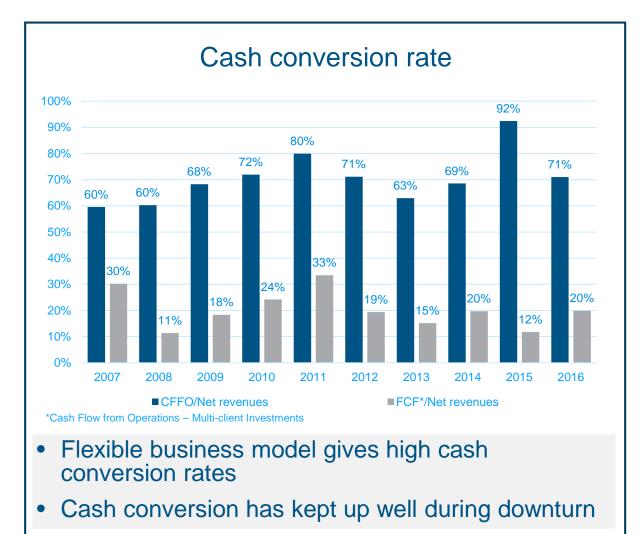
# **Summary**

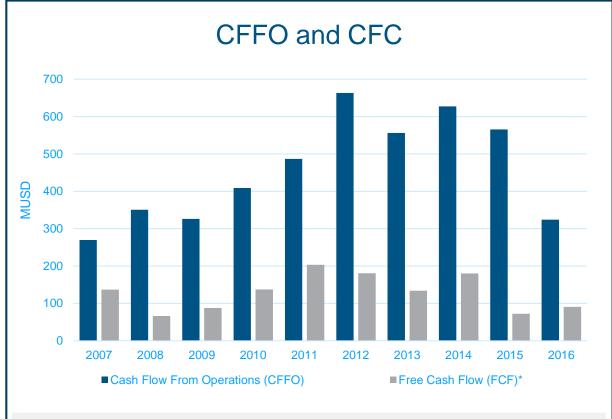
- Entered onshore business in 2011
- Gained leading market positions in several key basins
- While the onshore library is still young it is showing good financial results
- Geological Products business complements onshore seismic business strategy
- TGS has announced its first project in the Permian basin
- TGS is well positioned to increase its onshore market share





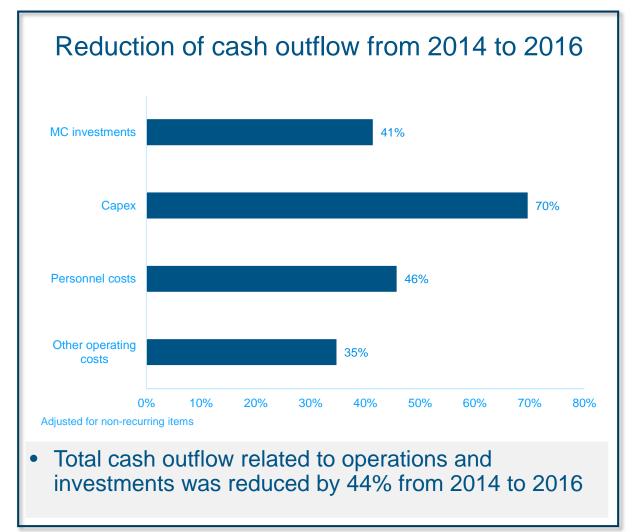
# Maintaining Robust Cash Flow Through the Downturn

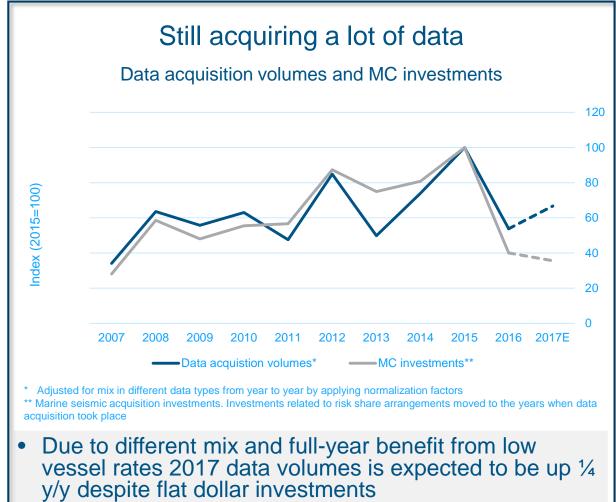




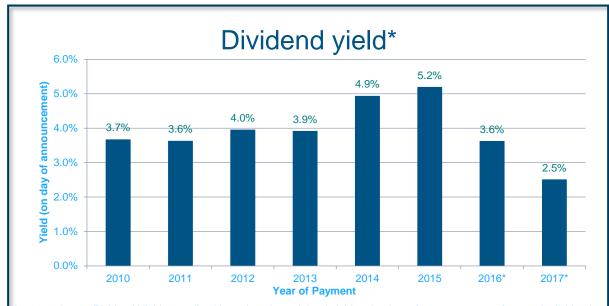
 High cash conversion rates are resulting in solid cash flows despite net revenues halving from peak

## Flexible Business Model Provides Downside Protection



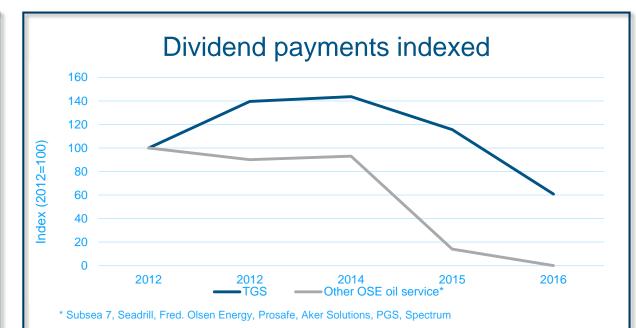


# Solid Cash Flow Supporting Dividends



\*2016 and 2017 Dividend Yield annualized based on the weighted yield at the time of announcement of quarterly dividends

- Ambition to pay a dividend that is in line with its longterm underlying cash flow.
- Quarterly dividend payments
  - Aim to keep a stable quarterly dividend through the year
  - Actual quarterly dividend level paid will be subject to continuous evaluation of market outlook, cash flow expectations and balance sheet development

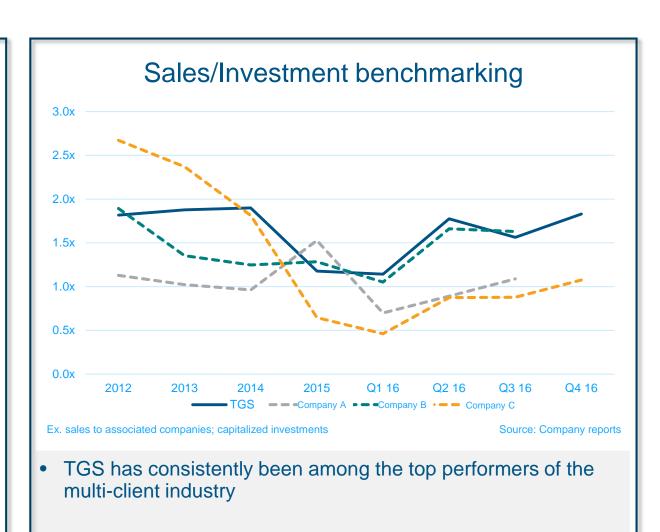


- TGS has been able to keep paying dividends through the down cycle
- Many other oil service companies have had to terminate dividend payments
- TGS was the only oil service company at OSE that paid dividends in 2016

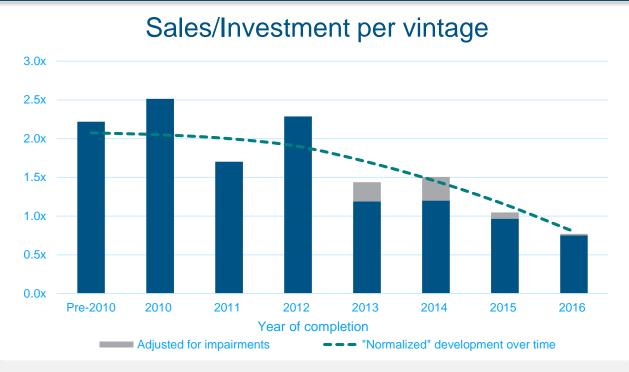
# **Strong Multi-client Performance over Time**



- Well below target past couple of years due to weak market conditions



# Sales/Investment Development according to Plan



- Due to the downturn it is anticipated that recent vintages need more time to fulfill return potential than originally expected
- As there is lower likelihood of being overshot in the current weak market, it is fair to assume that the commercial life
  of certain surveys will be longer than in a normal market
- Overall, sales/investment development is not far from normal expectations, despite weak market conditions

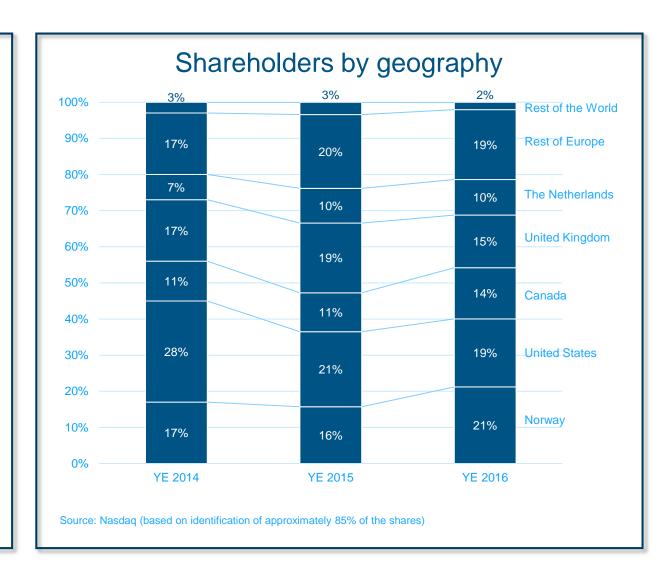
## **Shareholder Overview**

## Top 10 shareholders

As per 31 December 2016

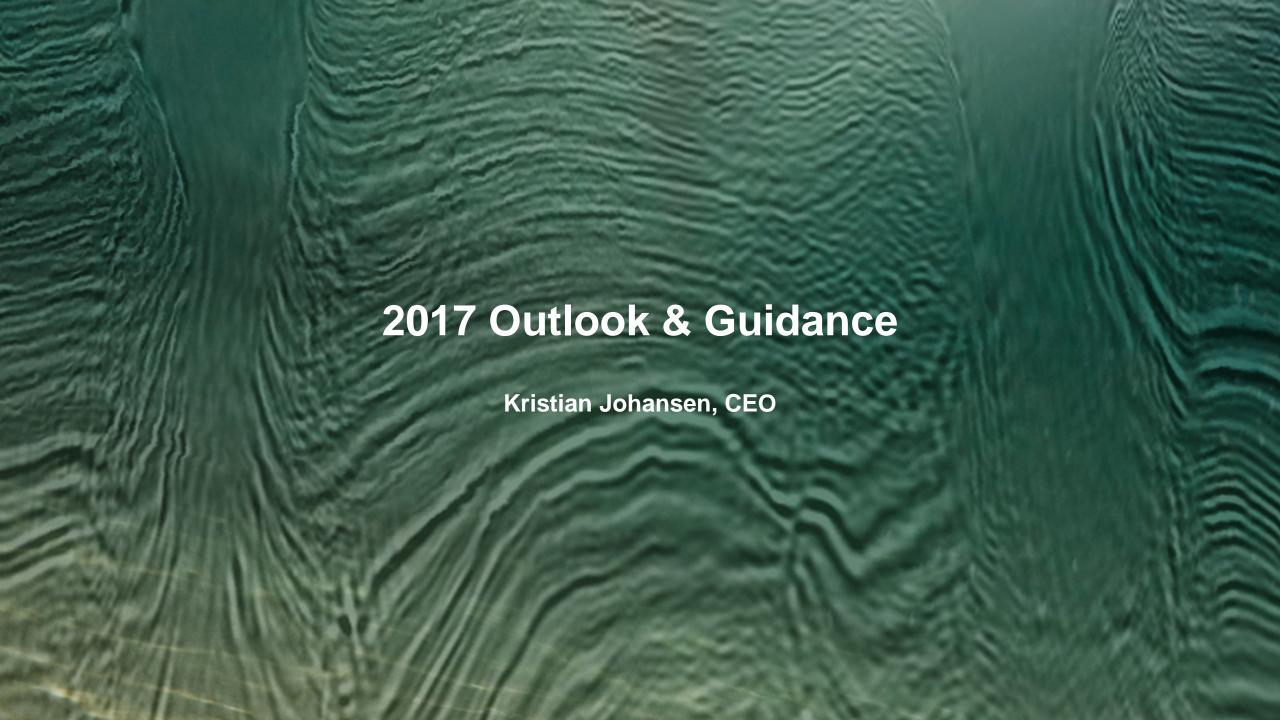
Account	Ownership
Folketrygdfondet	7.7%
APG Asset Management	7.5%
Sprucegrove Investment Management, Ltd.	6.6%
Kiltearn Partners LLP	5.4%
Allianz Global Investors GmbH	3.1%
Swedbank Robur Fonder AB	2.9%
Sheffield Asset Management, L.L.C.	2.7%
Mackenzie Financial Corporation	2.3%
Royce & Associates, LP	2.1%
Pareto Forvaltning AS	2.1%

Source: Nasdaq



# **Summary**

- Flexible business model with low capital intensity and high degree of variable cash outflows protects cash flow during weak markets
- Multi-client library is performing well despite weak market conditions
- TGS well positioned to grow cash flow and returns when the market improves:
  - Efficient cost structure
  - Strong balance sheet
  - Counter-cyclical investments during the downturn
  - Quality multi-client library with exposure in the right places



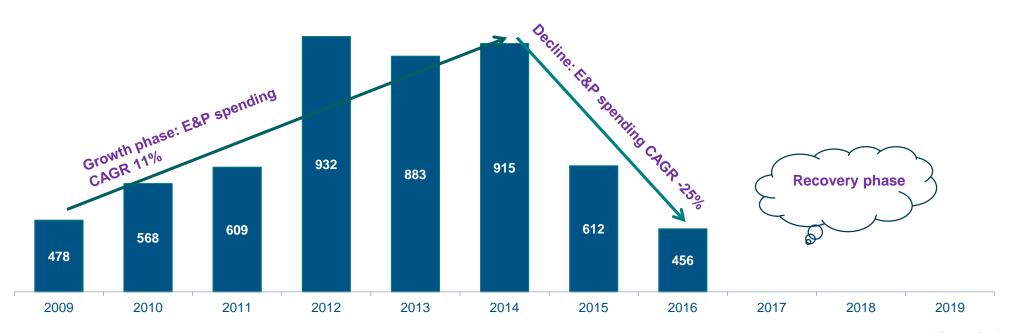
# **Different Cycles – Different Priorities**



Growth and market share

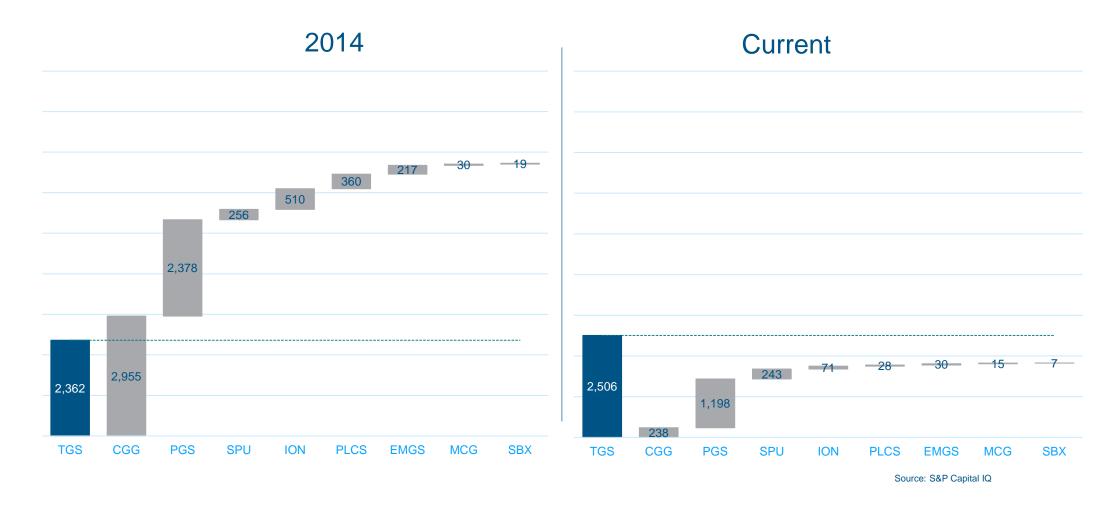
Cash flow and risk mitigation

Capital efficiency and profitable growth



Sources: Barclays; TGS

# Strategy Pays Off - Market Cap Peak vs. Current



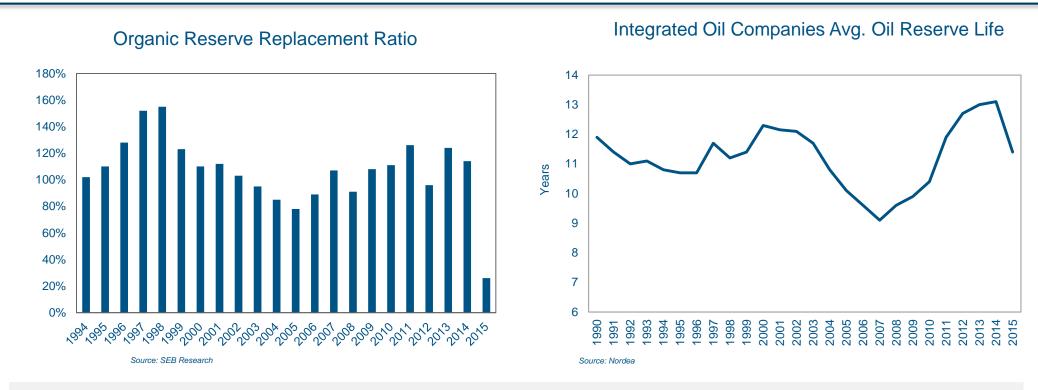
TGS has once again proven its resilient business model

# **Exploration Spending Likely to Recover Long-term**

## Two factors point to increased activity in the longer-term

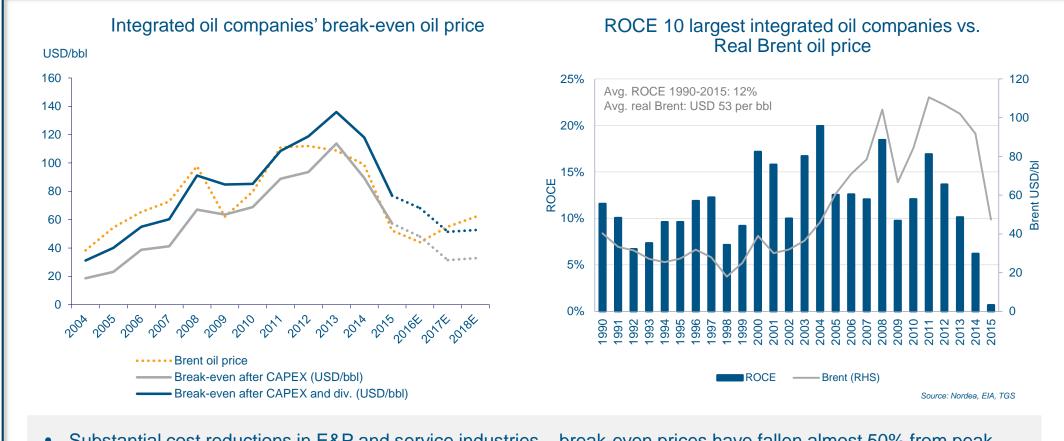
- 1. Current exploration efforts are unsustainable
- 2. Cost levels should eventually come down to levels that justify higher spending at current oil prices

# 1. Current Exploration Efforts are Unsustainable



- Substantial reduction in oil companies' exploration spending Seismic spending down more than 60% since peak in 2013
- This has resulted in historically low exploration success
  - Only 2.7bn barrels of new conventional oil supply was discovered in 2015, the lowest since 1947 (Wood Mackenzie)
  - Global reserve replacement ratio well below 1 in 2015-16

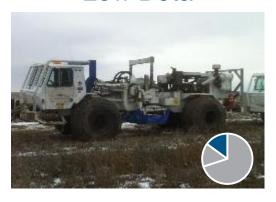
# 2. Costs are Coming Down



- Substantial cost reductions in E&P and service industries break-even prices have fallen almost 50% from peak
- Historically the largest oil companies have been able to produce decent return on capital at real oil prices of around USD 50 per barrel

# TGS MC Library – Managing Risk & Return

## Low Beta



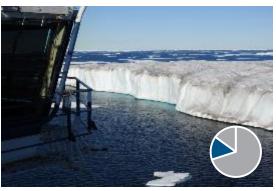
- Lower returns but high IRR
- Prefunding in excess of 70% low or no net investment
- Project characteristics
  - Awarded acreage
  - Onshore areas
  - Farm-ins / relinquishments
  - Low downside risk

## Medium Beta



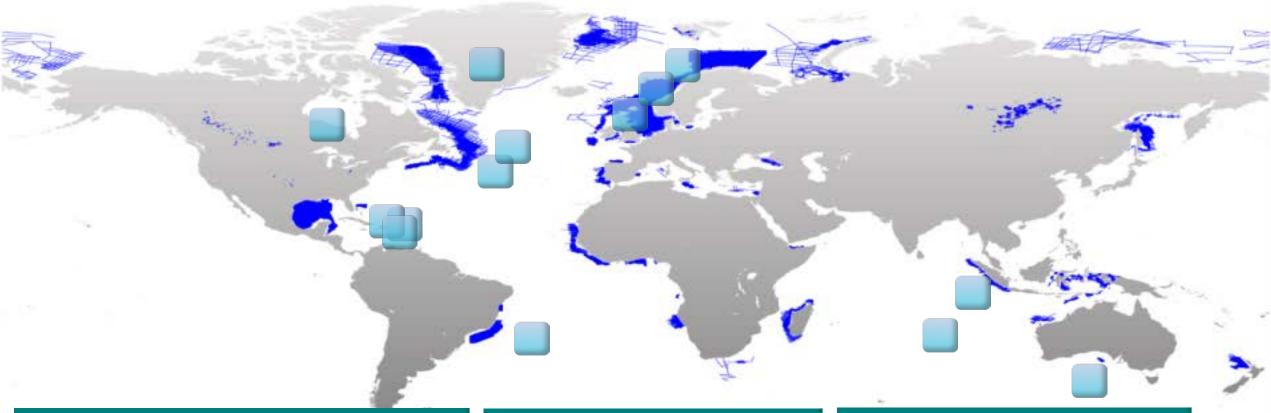
- Return targets >2x investment
- Prefunding of 30-50%
- Open acreage and regular license rounds
- Established multi-client areas
- Many clients

## High Beta



- Return targets >2.5x investment
- Low or no prefunding
- Risk sharing with suppliers
- G&G knowledge driven projects
- Higher risk and volatility

# **License Round Activity and TGS Positioning**



#### **North & South America**

- Central GOM Mar 2017 (2012-17 Plan)
- Central & Western GOM Aug 2017 (2017-22 Plan)
- Newfoundland & Labrador Nov 2017 (Scheduled Land Tenure)
- Nova Scotia Oct 2017 (3-Year Rolling Plan)
- Canada Onshore at least monthly
- Brazil 14th Offshore and Pre-Salt Rounds in 2017
- Mexico Round 2.1 & 2.2 in H1 2017, further rounds into 2019

#### Africa, Middle East, Asia Pacific

- Ongoing uncertainty on timing of African licensing rounds
- Australia Feb & Mar 2017 (bids due)
- New Zealand 2017 (consultation underway)
- Indonesia H2 2017 (Round announcements)

#### Europe / Russia

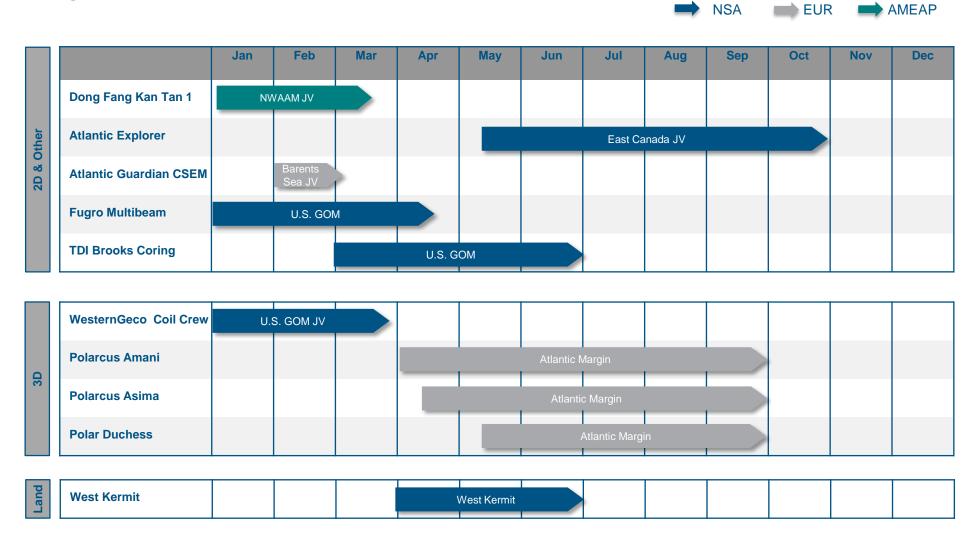
- Norway APA H1 2017 (Round Launch)
- Norway 24<sup>th</sup> Round H1 2017 (Round Launch)
- UK Supplementary Round 7 Mar 2017 (bids due)
- Greenland Dec 2017 & 2018 (bids due)

# **Backlog**

## Historical Backlog (MUSD) 2012 - 2016



# 2017 Projects Schedule\*

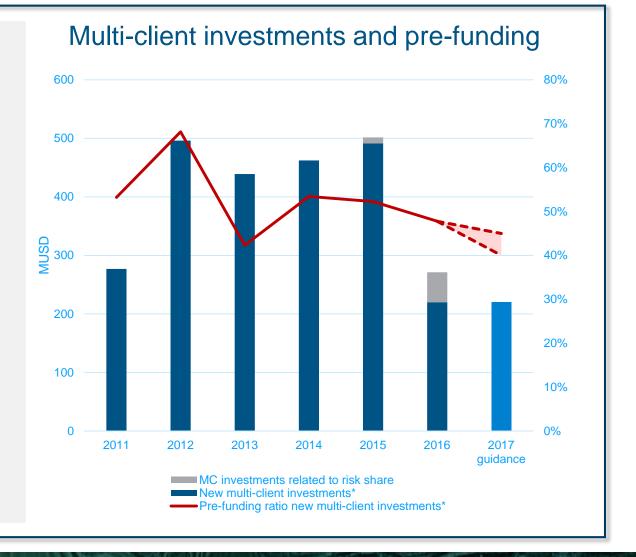


<sup>\*</sup>Acquisition schedule excludes Fusion M-WAZ Reprocessing, other processing projects and GPS investments

## **Guidance**

- Based on the current investment plan, TGS provides the following guidance for 2017:
  - New multi-client investments\* at approximately the same level as in 2016
  - Additional multi-client investments expected from sales of existing surveys with risk sharing arrangements
  - Pre-funding of new multi-client investments\* expected to be approximately 40-45%

\*New multi-client investments excluding investments related to surveys with risk sharing arrangements





# Thank you

