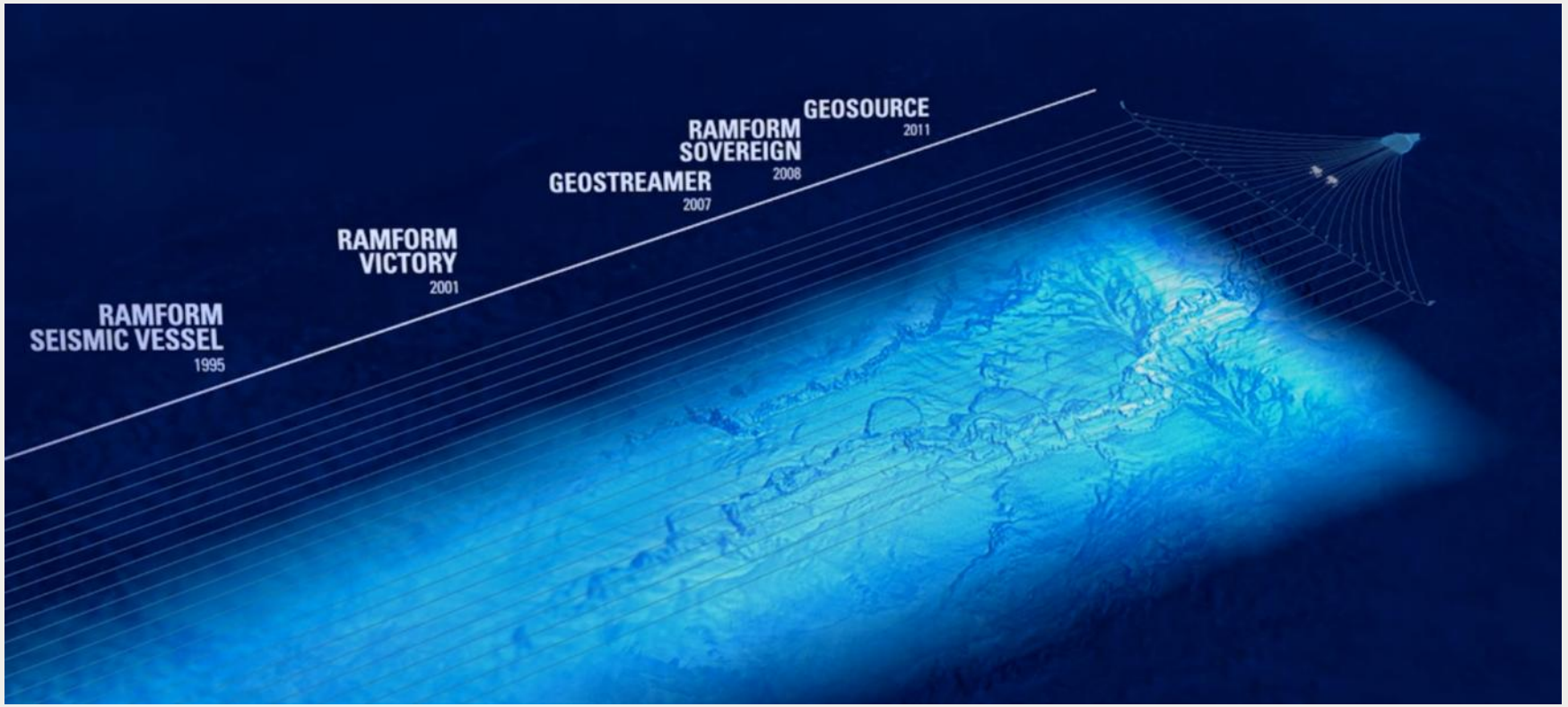
PERFORMANCE THROUGH THE CYCLE



PETROLEUM GEO-SERVICES ASA

CAPITAL MARKETS DAY 2011

OSLO

Agenda Capital Markets Day 2011

- 08:00 Introduction
  - Jon Erik Reinhardsen, CEO and President
- 08:25 Financials
  - Gottfred Langseth, EVP and CFO
- 08:50 Q&A
- 09:15 Coffee break
- 09:30 MultiClient
  - Sverre Strandenes, Executive Vice President MultiClient
- 09:45 Marine Contract
  - Per Arild Reksnes, Executive Vice President Marine Contract
- 10:00 Data Processing and Technology
  - Guillaume Cambois, Executive Vice President Data Processing and Technology
- 10:15 Coffee Break
- 10:30 Operations
  - Magne Reiersgard, Executive Vice President Operations
- 10:45 Concluding remarks
- 10:50 Q&A
- 11:15 Christmas lunch

Competitively Positioned
Performance Through the Cycle

Jon Erik Reinhardsen, CEO and President

PGS Capital Markets Day

December 16, 2011

Cautionary Statement

- 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 uncertainties and risks which are disclosed in PGS' Annual Report 2010
- This presentation must be read in conjunction with the Company's financial statements

Disclaimer

- The information included herein contains certain forward-looking statements that address activities, events or developments that the Company expects, projects, believes or anticipates will or may occur in the future. These statements are based on various assumptions made by the Company, which are beyond its control and are subject to certain additional risks and uncertainties. The Company is subject to a large number of risk factors including but not limited to the demand for seismic services, the demand for data from our multi-client data library, the attractiveness of our technology, unpredictable changes in governmental regulations affecting our markets and extreme weather conditions. For a further description of other relevant risk factors we refer to our Annual Report for 2010. As a result of these and other risk factors, actual events and our actual results may differ materially from those indicated in or implied by such forward-looking statements. The reservation is also made that inaccuracies or mistakes may occur in the information given above about current status of the Company or its business. Any reliance on the information above is at the risk of the reader, and PGS disclaims any and all liability in this respect.

Leading Marine Geophysical Company

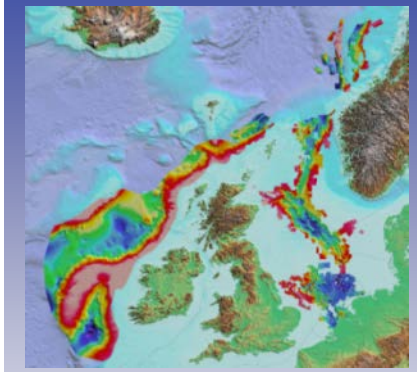
Marine Contract

Marine market leadership

ca 50% of Q3 2011 LTM Revenues

Marine Contract acquires seismic data exclusively for oil and gas exploration and production companies

MultiClient



Diverse MultiClient library

ca 40% of Q3 2011 LTM Revenue

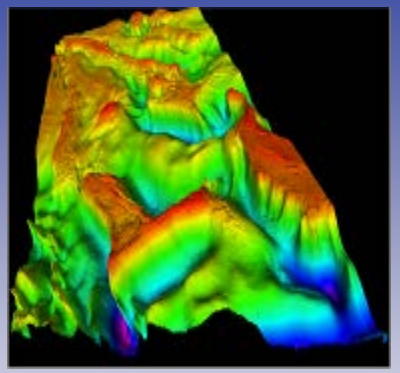
MultiClient initiates and manages seismic data PGS acquires, markets and sells to multiple customers on a non-exclusive basis

Operations

Productivity leadership

Operations supports Marine Contract and MultiClient with vessel resources and manages fleet renewal strategies

Data Processing & Technology



Technology differentiation

ca 10% of Q3 2011 LTM Revenue

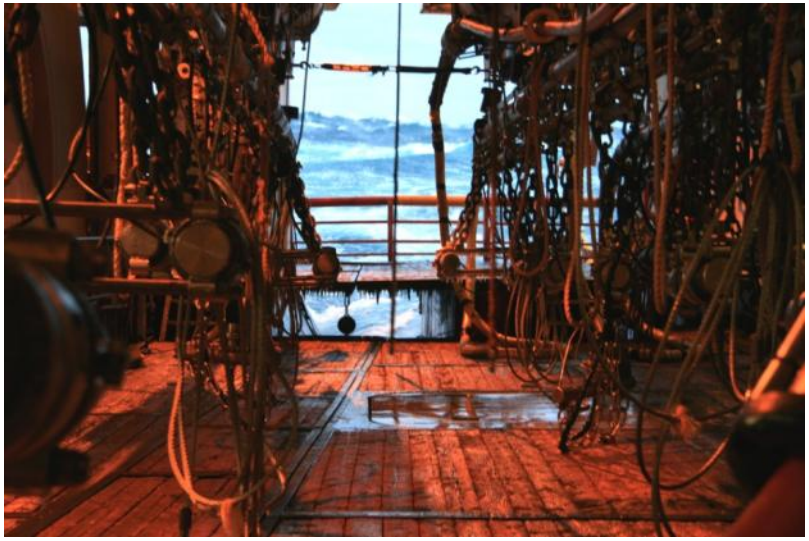
DP&T processes seismic data acquired by PGS for its MultiClient library and for external clients on contract and manages research and development activities

Client focus ● Global presence ● Innovation leadership

2012 Guidance

- EBITDA in the range of USD 650-700 million
  - Corresponding to a Marine Contract EBIT margin in the range of 10-15%
- MultiClient cash investments in the range of USD 300-325 million
  - Pre-funding level above 100%
  - Approximately 40% of effective 3D streamer capacity allocated to MultiClient (GeoStreamer® only)
- Capital expenditures in the range of USD 350-400 million
  - Of which approximately USD 200 million to new build program

Q4 2011 Recent Developments



- Weak utilization and weaker productivity
  - Extended yard stays and downtime caused by maritime issues
  - Increasingly challenging market for 6-streamer vessels with short backlog
  - Unfavorable weather conditions impacting productivity
- Weak results from contract seismic partially offset by solid MultiClient revenues
  - 2011 EBITDA slightly below USD 525 million
  - 2011 Marine Contract EBIT margin expected at approximately 5%
- Improvement opportunities identified and actioned

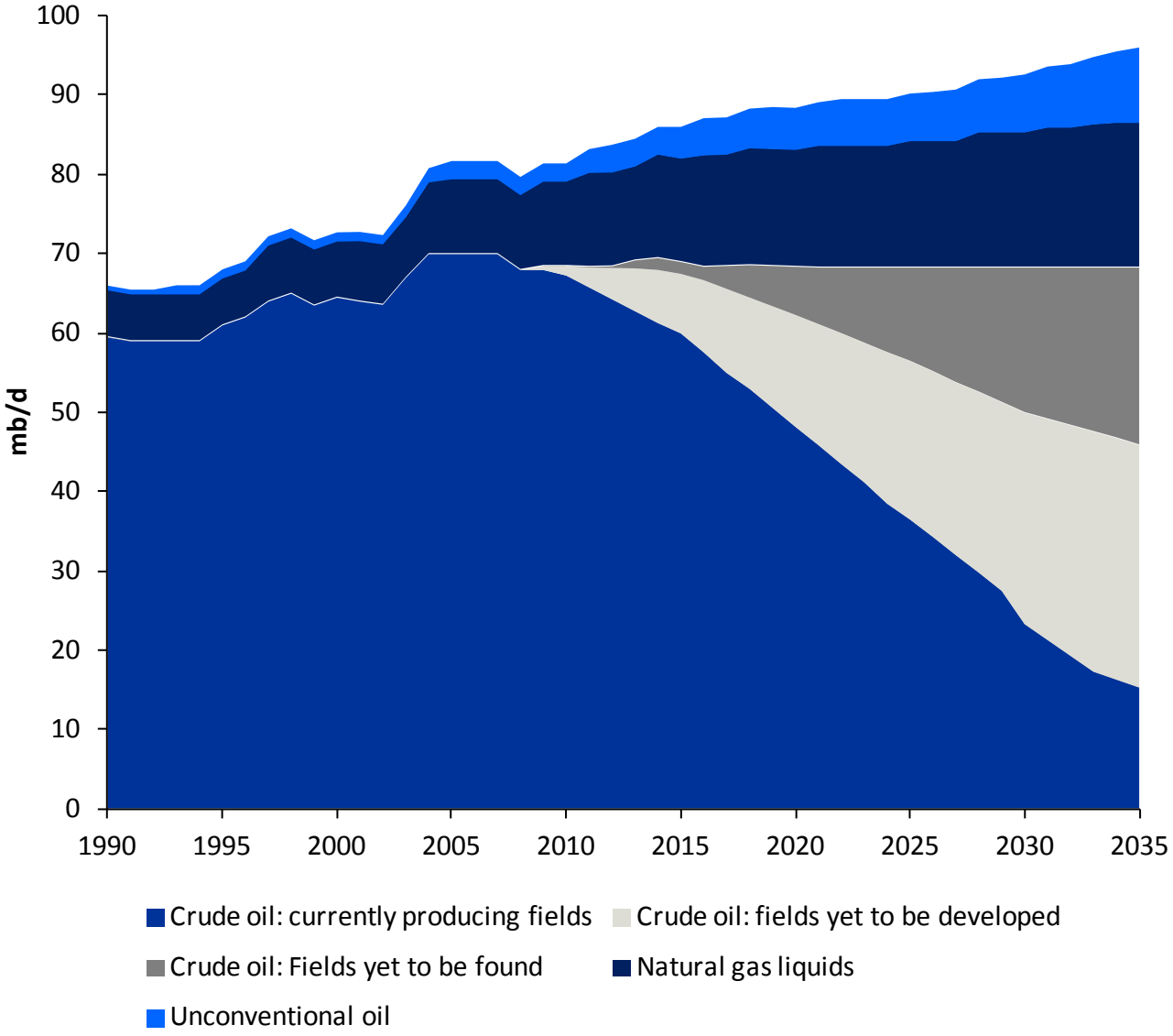
Profit Improvement Program Initiated

- Targeting USD 50 million run rate improvement by end 2012
  - USD 25 mill effect embedded in 2012 guidance

- Profit improvement initiatives
  - *Nordic Explorer* converted to 2D GeoStreamer vessel Dec 2011
  - General belt tightening
  - Operations specific cost reductions and organization improvement plan
  - Work flow process improvements

Renewed focus on cost and fleet performance will deliver margin uplift

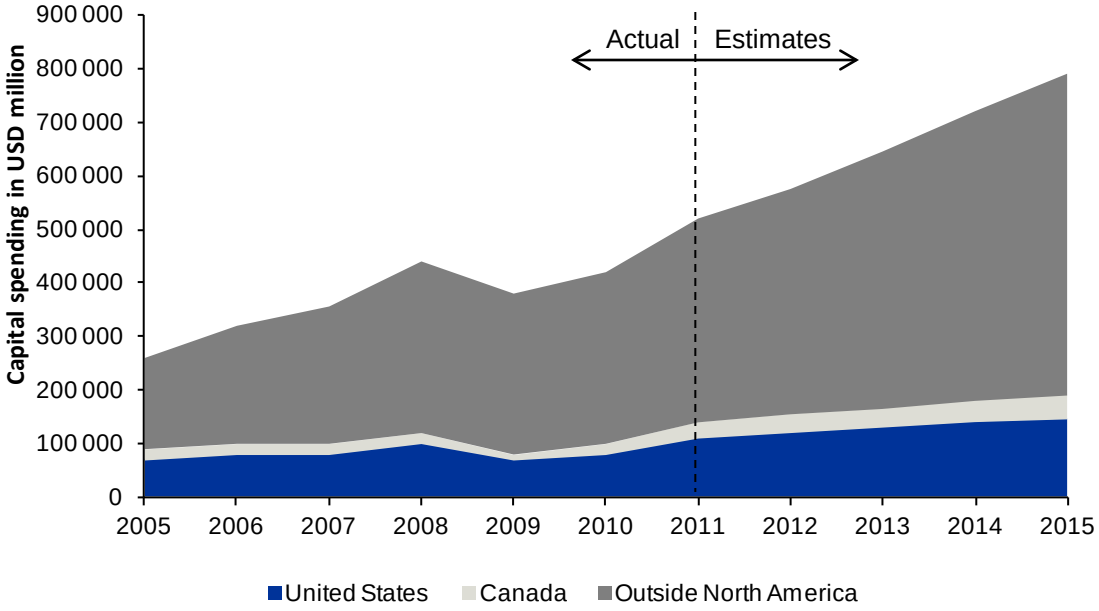
Market Context:
Robust Future Demand for Oil and Gas

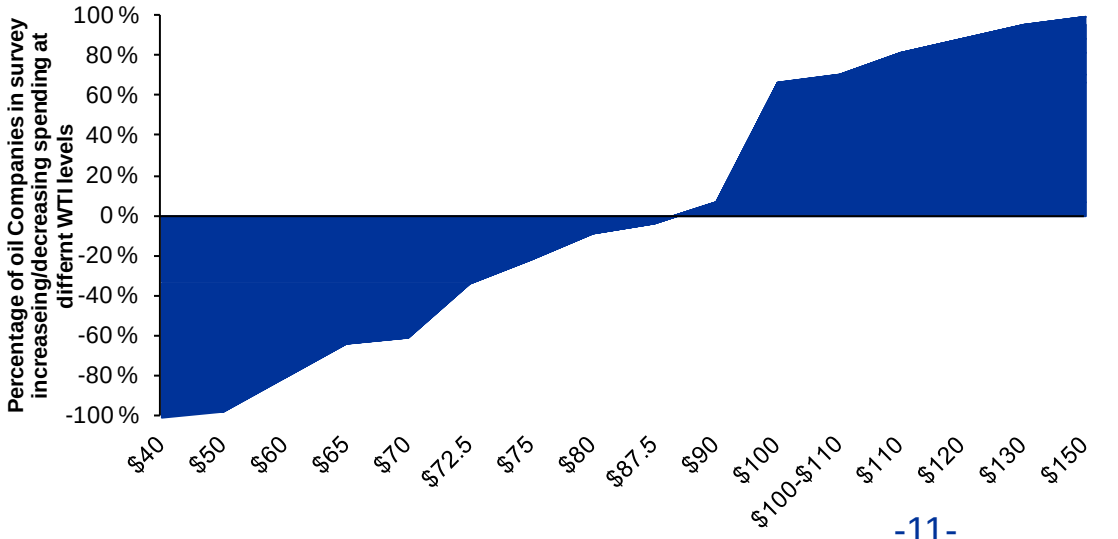


- Oil and gas will continue to be an important source of energy
- Oil production gap will increase dramatically – seismic will be important to find and develop new fields

Source: IEA, oil production in the New Policies Scenario.

Market Context:
Exploration and Production Spending Continues to Grow



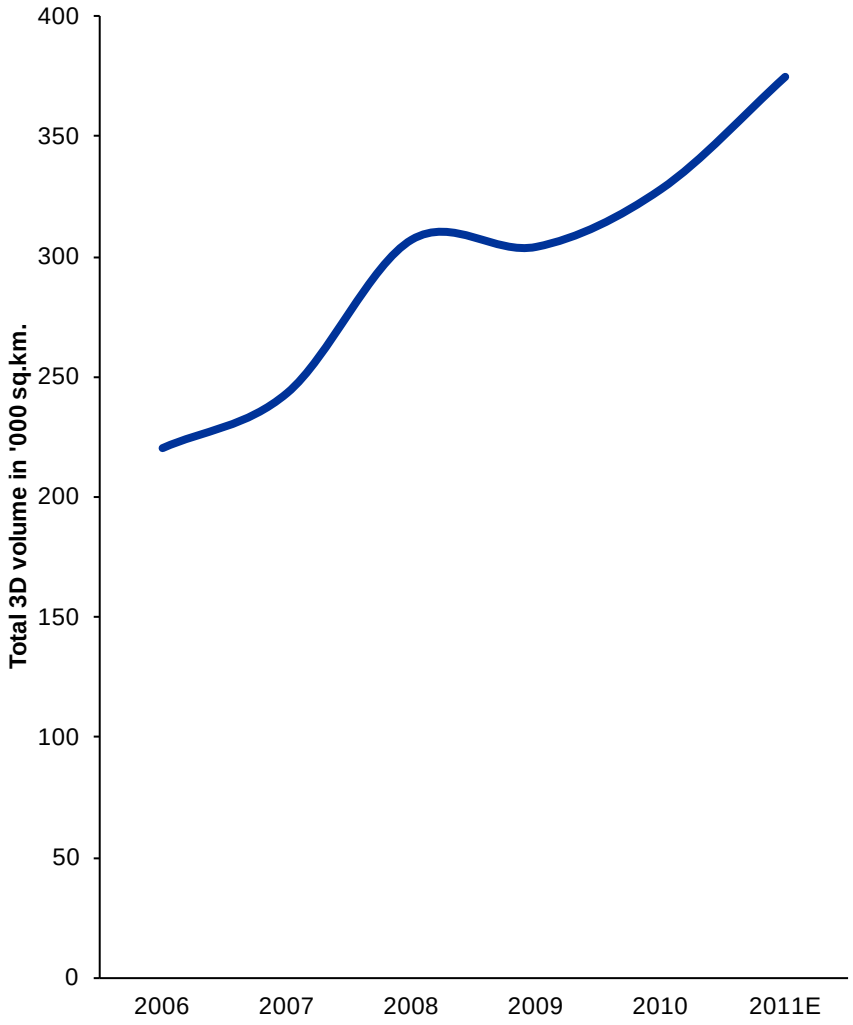


- Global E&P spending is expected to approach USD 600 billion in 2012, 10% increase vs. 2011
- E&P spending, including seismic spending, correlates with development in the oil price

Source: All graphs and data points from Barclays Capital Global 2012 E&P Spending Outlook

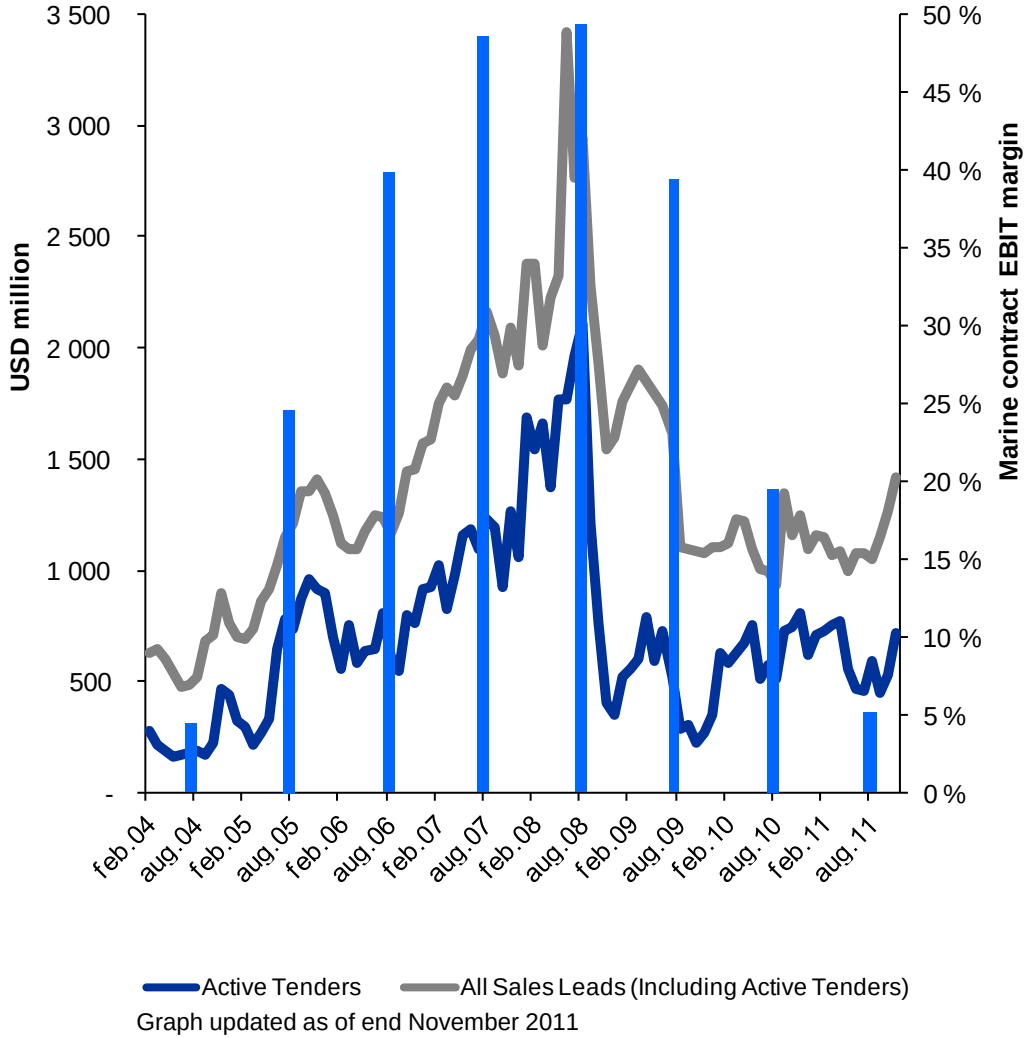
Market Context:

Healthy Growth in Demand for Seismic



- From 2006 to end 2011 demand for seismic has grown by approximately 70% measured in sq.km.
  - HD3D is growing quicker than the general market
- Demand in sq.km. stayed fairly flat despite financial crisis and cut in spending among oil companies in 2009
- Growth in ‘11 over ‘10 is 14%
  - annual average since 2006 of 10%

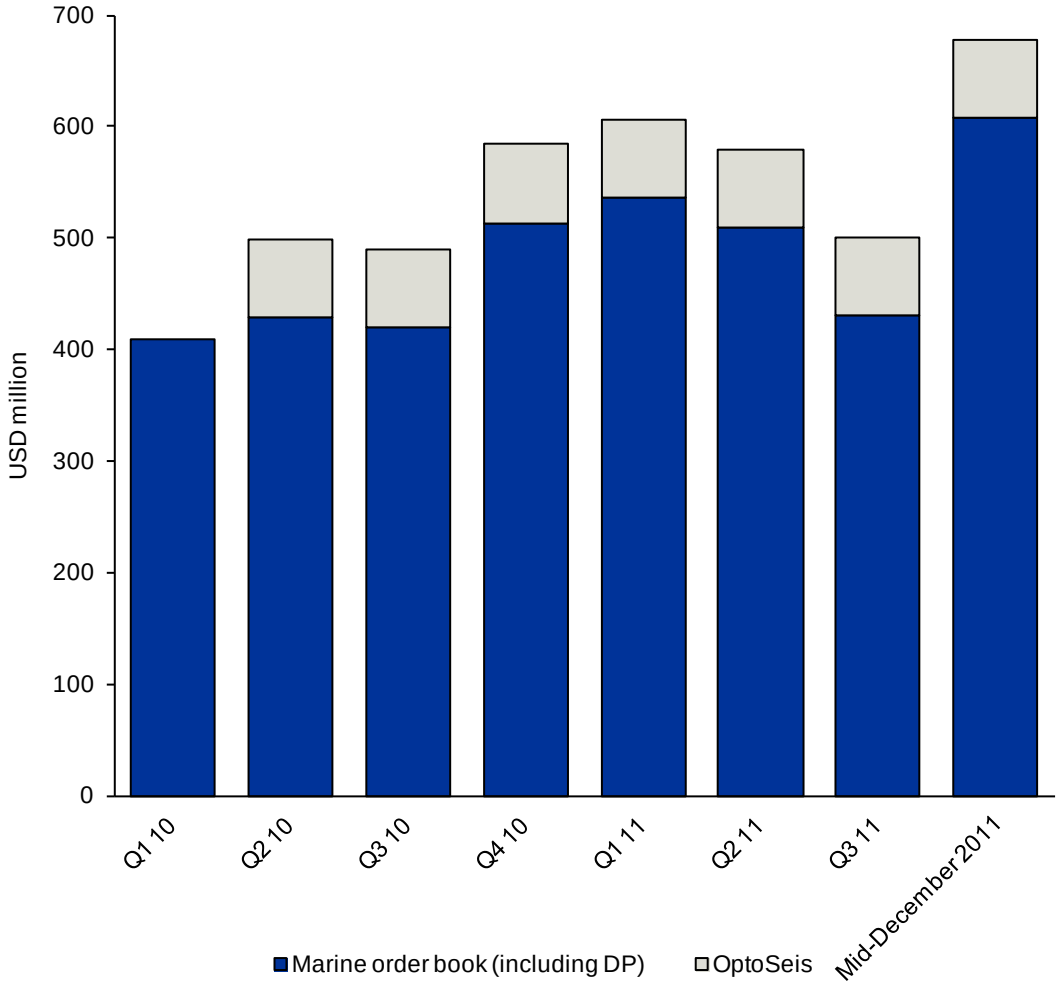
Market Context:
Strong Margin Expansion Potential



Graph updated as of end November 2011

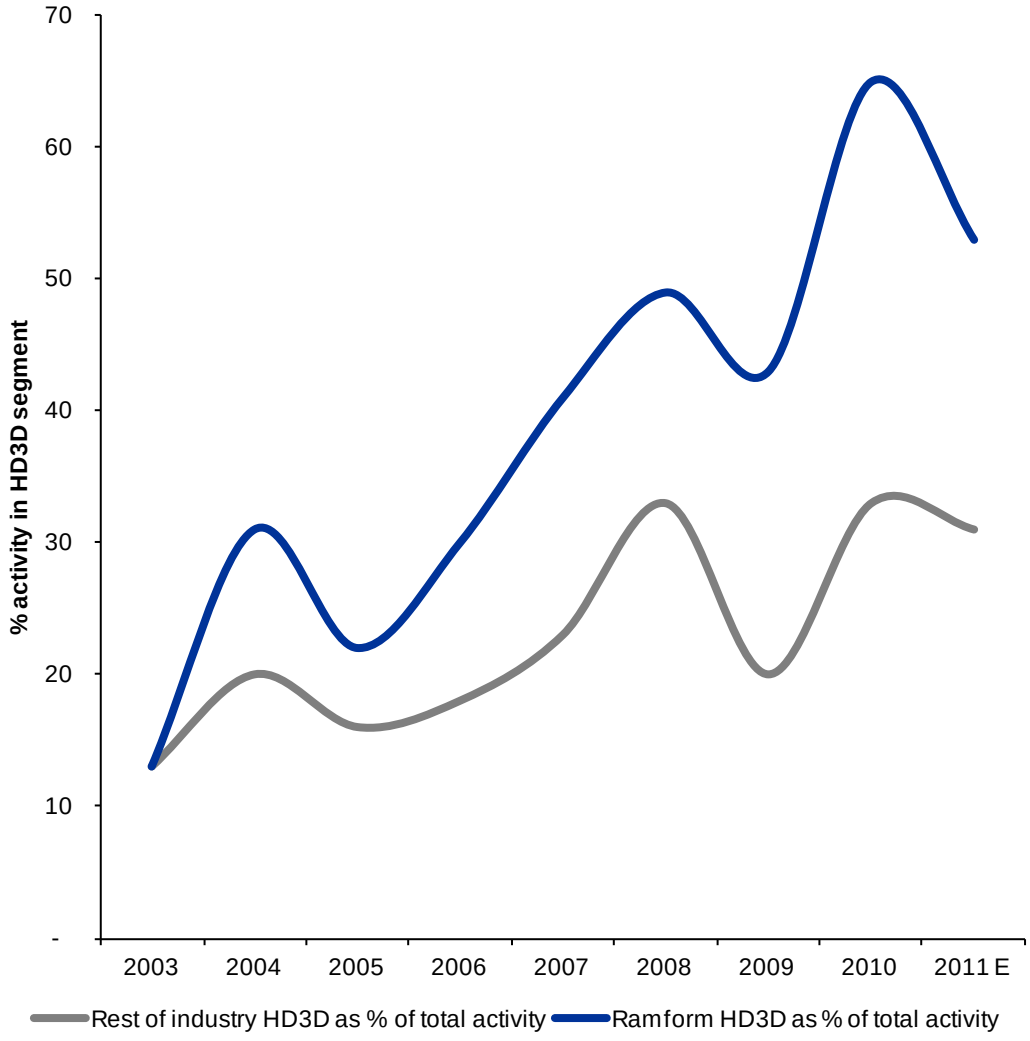
- Recent positive trend for tender activity measured in USD
- Sales leads increase driven by work in Baffin Bay, Greenland, Barents and North Sea
- Limited pipeline of new vessels being built
- Margins have historically expanded rapidly when there is supply constraint

Market Context:
Solid Order Book Fueled by Good MultiClient Projects



- Recent committed pre-funding on MultiClient work of USD 250 million adds to visibility
- Additional MultiClient pre-funding for North Sea is firming up
- Early data indicates higher prices in the North Sea
  - Still too early to conclude

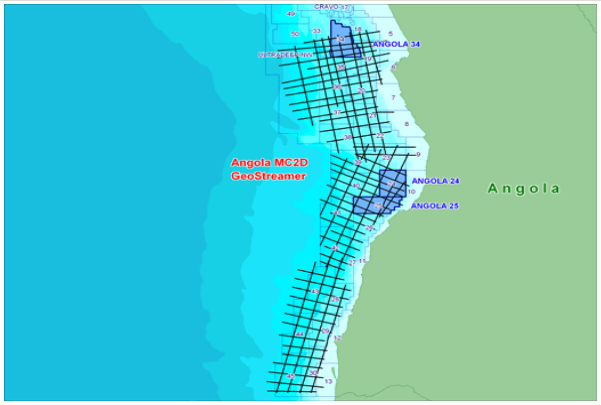
Market Context:
Drivers for the High Density 3D Market

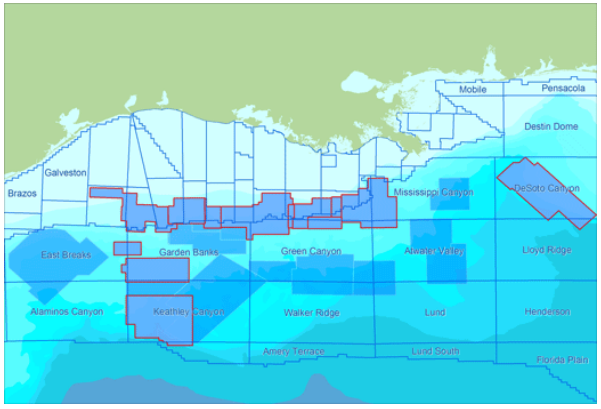


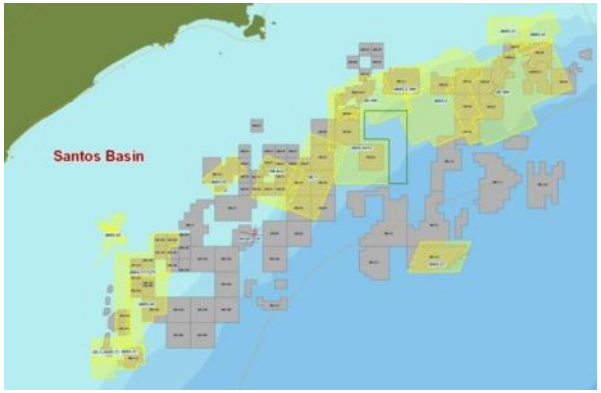
- Exploration: The age of easy oil is over
  - Deeper water, deeper targets, more complex geology, harsher environment
  - Requires increased use of HD3D seismic for data quality and productivity
- Enhanced Oil Recovery
  - Requires repetitive and comparable HD surveys through life of field
- GeoStreamer broadband offering has added demand for more advanced seismic

Market Context:

Four Basins Driving 2012 Demand Growth







- **The North Sea:** Two major discoveries this year positive for the 2012 season
- **Angola:** Seismic activity is expected to increase significantly in pre-salt regions
- **Gulf of Mexico:** All major seismic companies have been awarded seismic permits
  - During 2012 activity is expected to ramp up to pre-Macondo level
- **Brazil:** Launch of license round 11 expected in H2 2012 – a catalyst for increased activity

GeoStreamer Proven Benefits in Different Basins

Arctic:

- Clear efficiency gains due to increased weather window
- Northernmost ever 3D survey acquired in 2011

North Sea:

- Efficiency gain and improved resolution and reservoir characterization
- Directly associated with two major recent discoveries

Mediterranean:

- Improved imaging below the Messinian evaporite
- Significantly upgraded prospectivity in Cyprus and Lebanon

New areas:

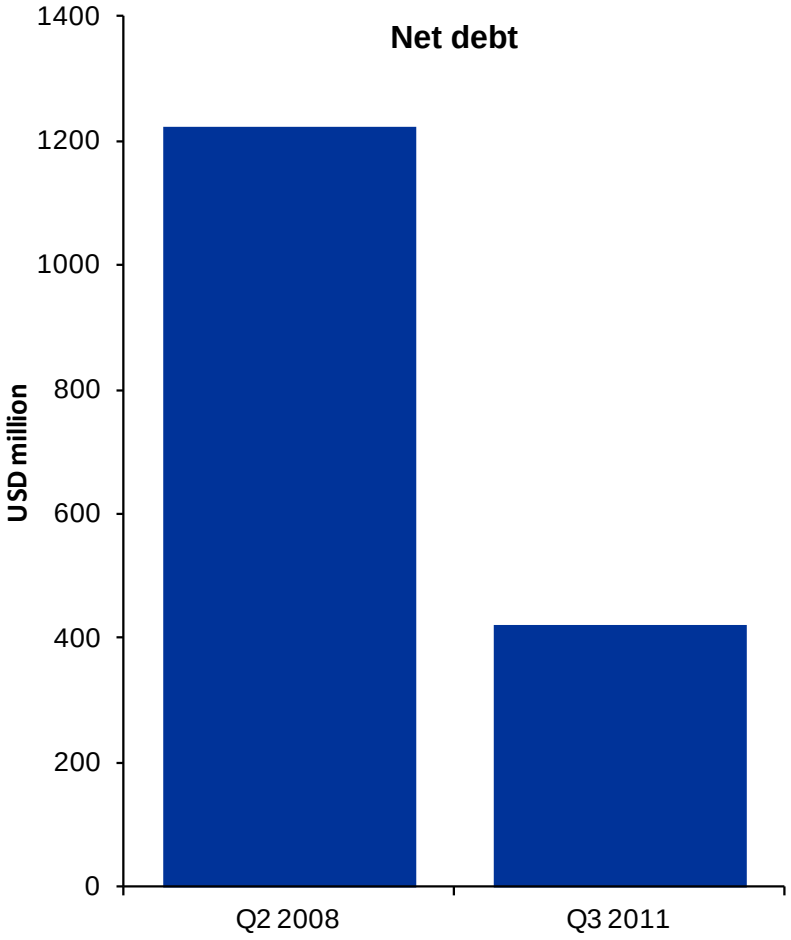
- Northwest Shelf Australia: 10,500km^2 of 3D data acquired since 2010
- Brazil: 5,050km^2 of 3D data acquired in 2011

Strategic Positioning:
An Industrialized Player in a Growing and Maturing Market

- Conservative balance sheet with ability to handle challenging market conditions
  - Ability to invest in technology, library and capacity through the cycle
  - Ability to pay dividend
- A cost effective and modern fleet that attracts customers and delivers profitability
- Differentiation through technology
- Proactive allocation of capacity between Marine Contract and MultiClient to optimize profitability and cash flow
  - High MultiClient pre-funding as driving rule

Strategic Positioning:

Solid Balance Sheet Supports Long-term Value Creation

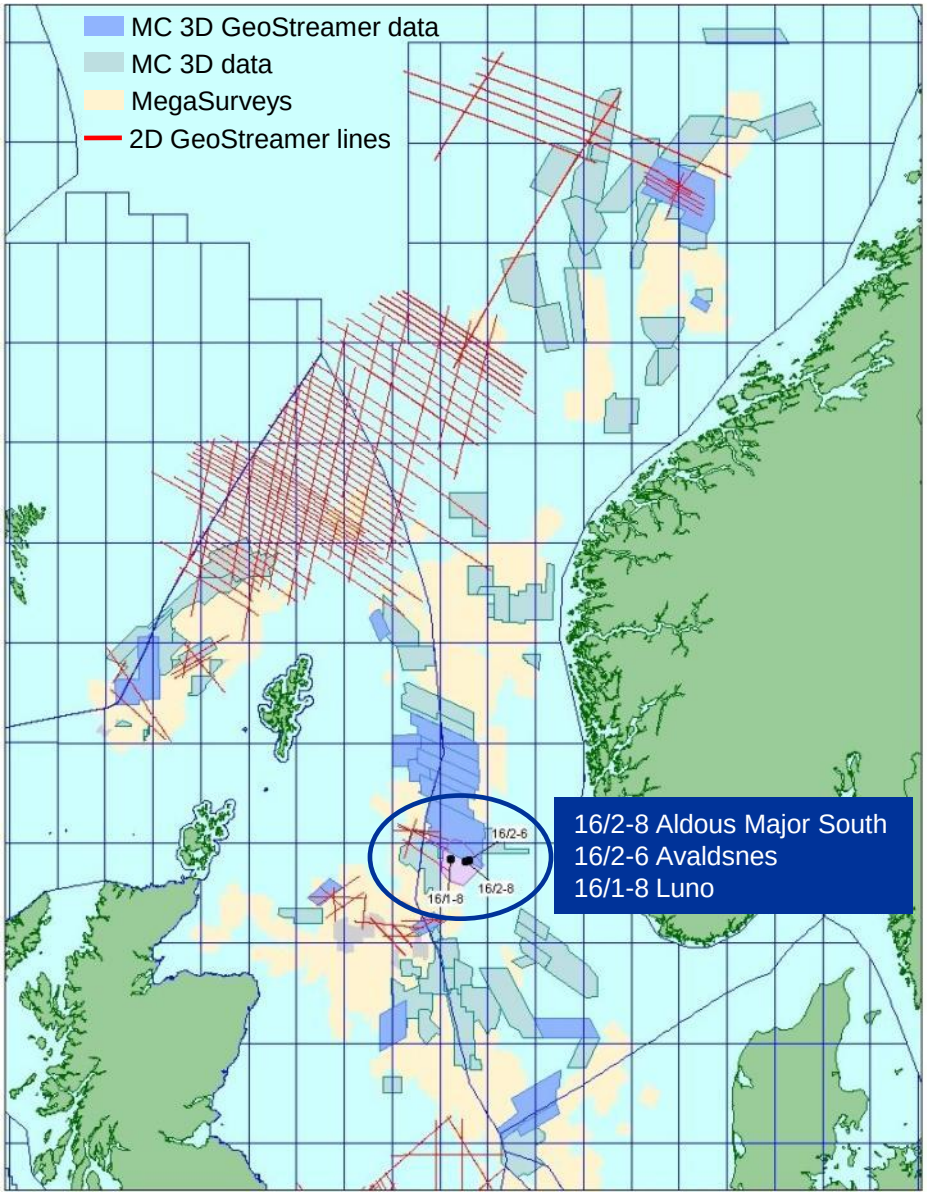


- Net debt has been reduced by more than USD 800 million since peak in 2008
  - Well capitalized to handle weak markets and macro turbulence
- Proven ability to generate healthy cash from operations through the cycle
  - Productivity leadership and industrialized operations
- Ability to renew and build capacity industrially through the cycle
  - Critical mass is important
  - Market share is not an objective
  - Flexibility to charter non-core capacity

Strategic positioning:
Differentiation Through Innovation

- Commercial launch of GeoStreamer GS™ at EAGE 2011 – the only ghost free acquisition solution
- The Ramform vessels deliver superior efficiency and lowest cash cost per streamer
- Technology and efficiency leadership makes High Density 3D (HD3D) PGS' main market
- GeoStreamer technology increasingly differentiates PGS' MultiClient offering
- Commercial EM launch in 2012
- Jubarte OptoSeis fiberoptic system to be installed in 2012

Strategic positioning:
Proactive Allocation to MultiClient and Contract



- MultiClient margin is less volatile over the cycle compared to contract work
- PGS seeks to optimize profitability
  - More MultiClient in a weak market
  - More Marine Contract in a strong market
  - Prefunding target is 80 – 120 %
  - Grow Data Processing on the back of GeoStreamer and MultiClient surveys
- Internal pull for capacity where margin and cash flow get priority
- More MultiClient increases barriers to entry

Strategic positioning:

Vessel New Build Options Decision Criteria

- Attractive return on capital is the key criteria
- Dividend capacity going forward
- Financing capacity and leverage ratio
- View on the market
- Vessel replacement program
- Ship yard capacity and pricing going forward
- Options have to be called mid-April 2012

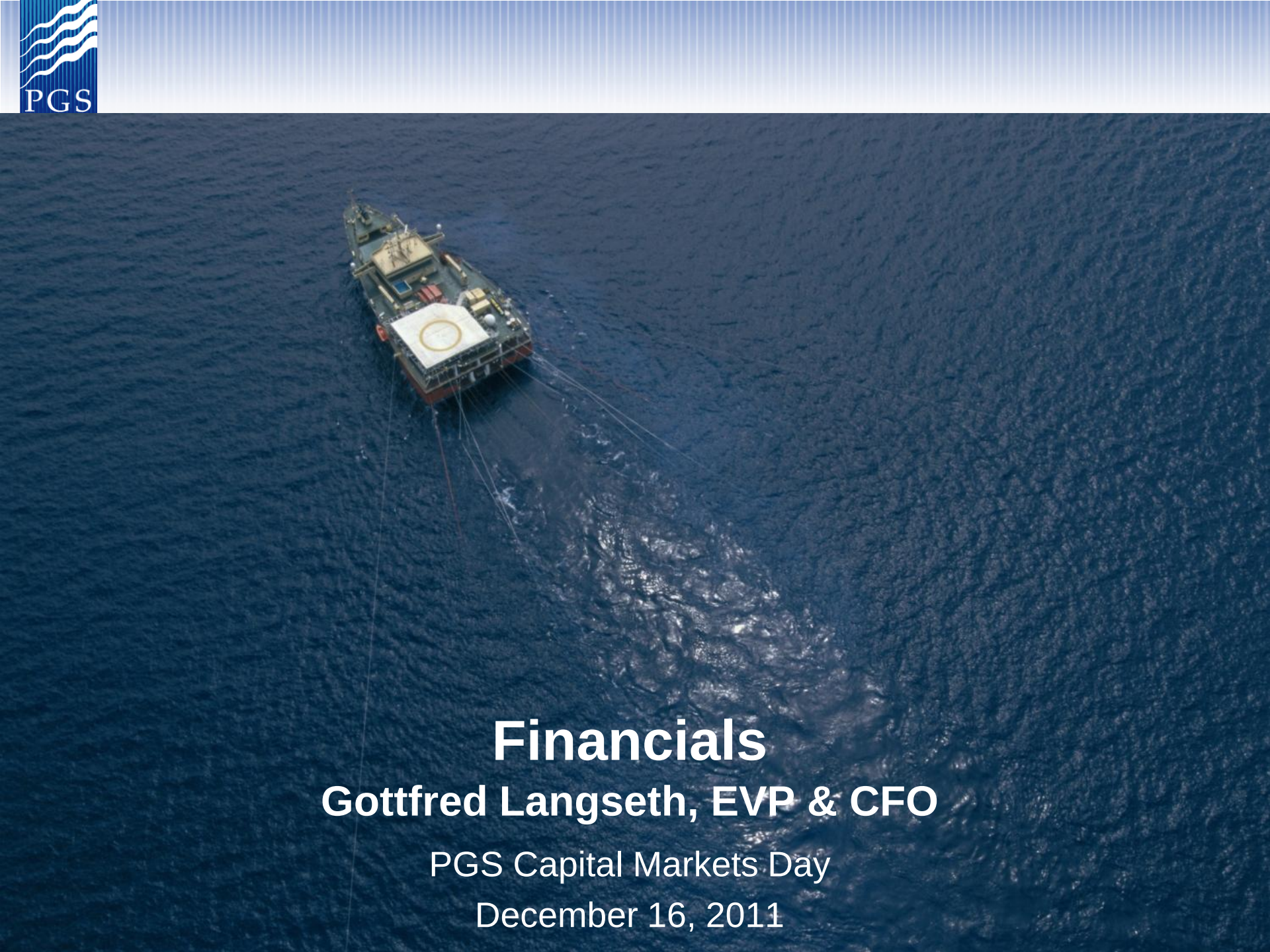
2012 Guidance

- EBITDA in the range of USD 650-700 million
  - Corresponding to a Marine Contract EBIT margin in the range of 10-15%
- MultiClient cash investments in the range of USD 300-325 million
  - Pre-funding level above 100%
  - Approximately 40% of effective 3D streamer capacity allocated to MultiClient (GeoStreamer® only)
- Capital expenditures in the range of USD 350-400 million
  - Of which approximately USD 200 million to new build program

PGS – A Focused Marine Seismic Company

- Productivity & scale
  - Building new 5th generation Ramform vessels
  - Leading 3D MultiClient library return
- Leading edge Data Processing capabilities
- Strong operational capabilities
- Technology differentiaton
  - GeoStreamer GS
  - Fiber optic monitoring
  - Electromagnetics
- Proactive financial management

Competitively Positioned – Performance Through the Cycle



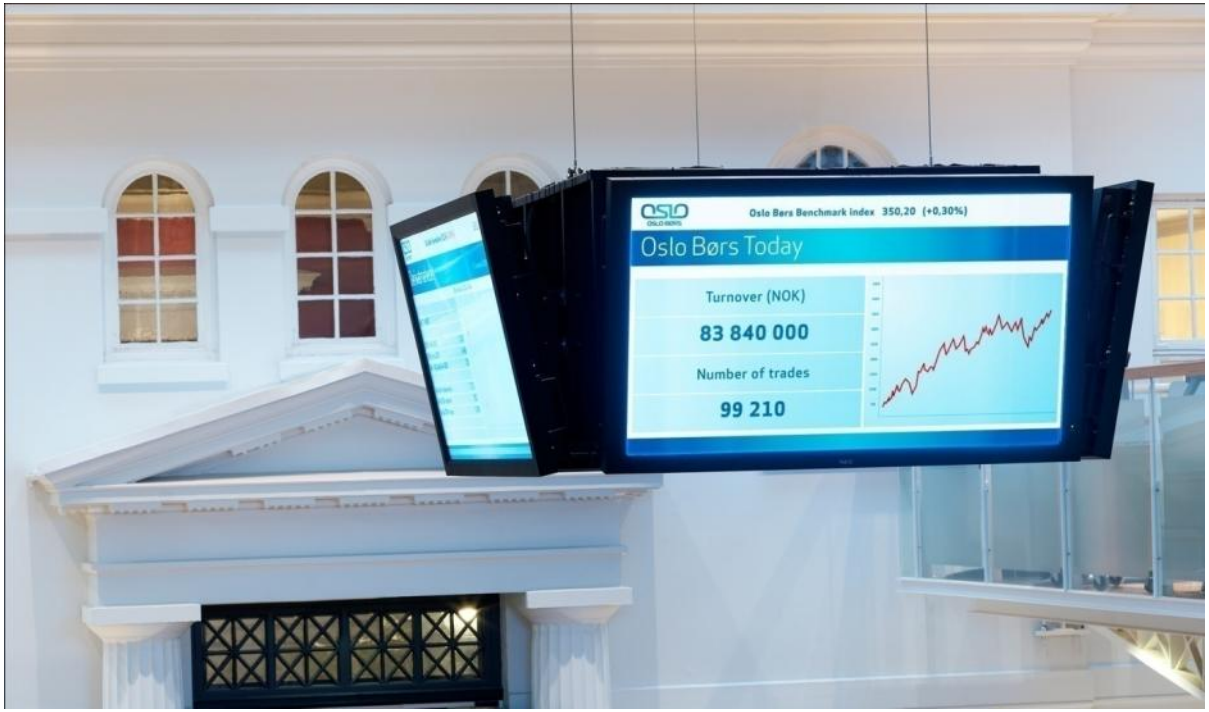
Financials

Gottfred Langseth, EVP & CFO

PGS Capital Markets Day

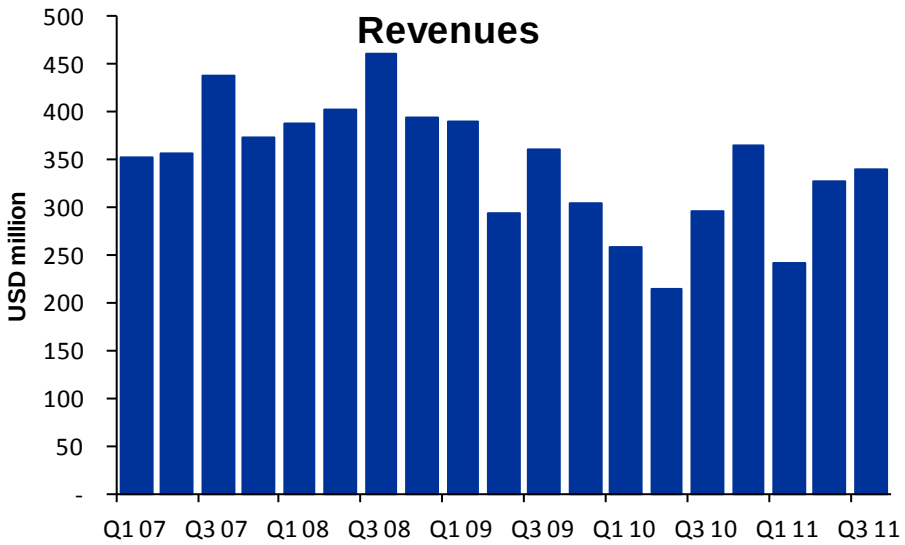
December 16, 2011

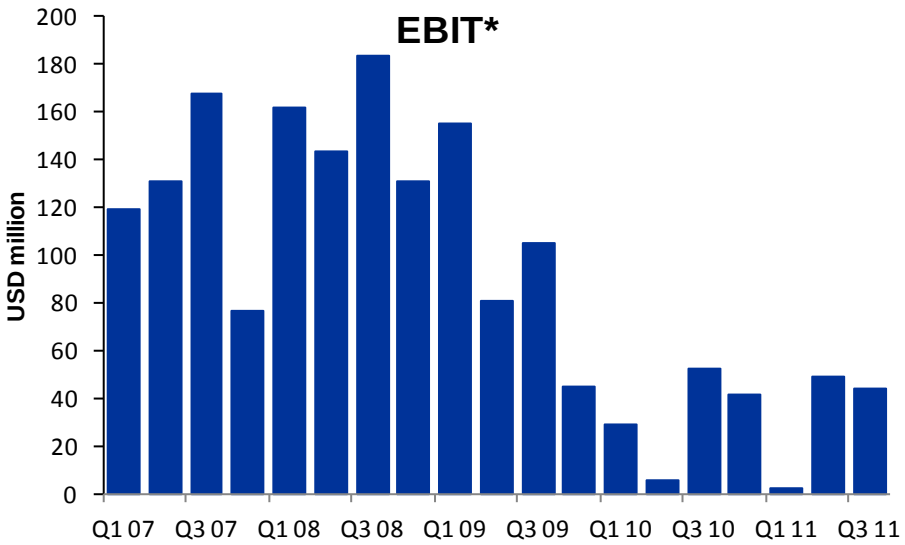
Key Topics

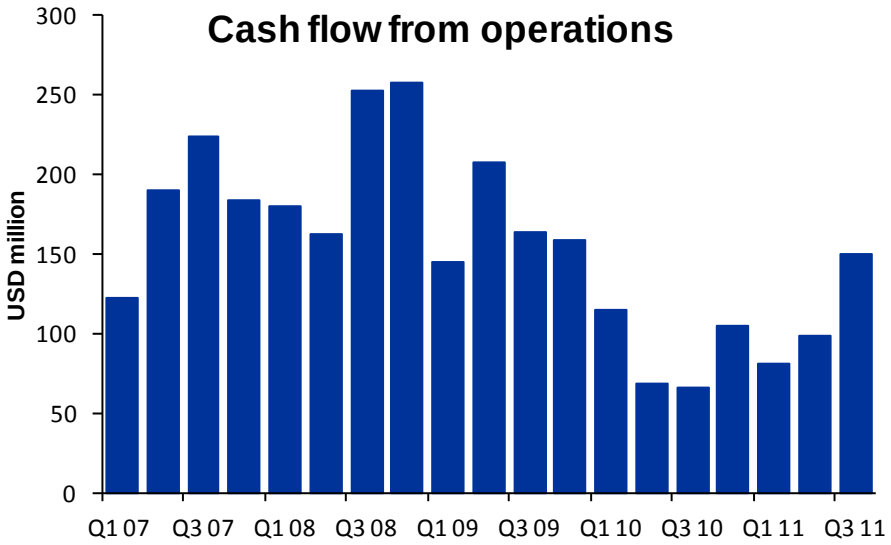


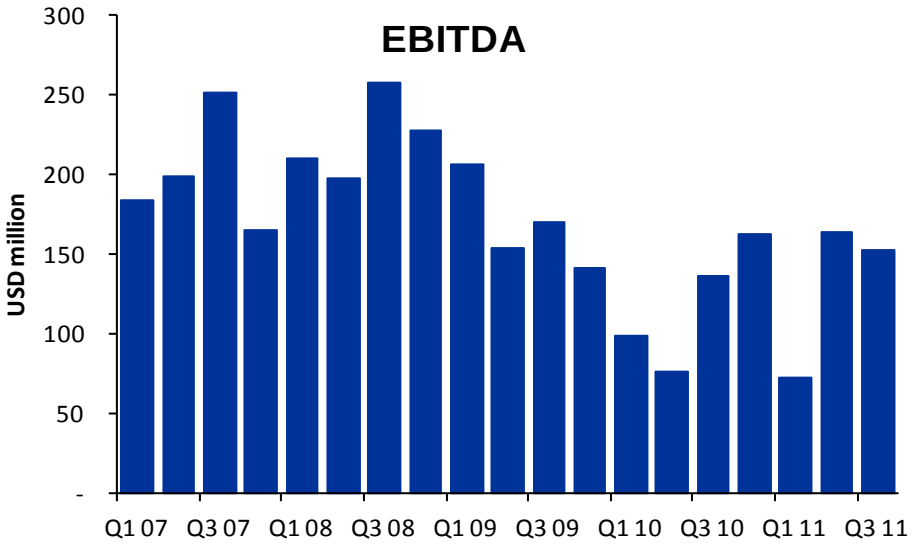
- Financial performance
- Capital structure
- MultiClient and CAPEX trends
- Cost trends
- Tax position
- Foreign currency
- Sensitivities

Financial Performance Through the Cycle



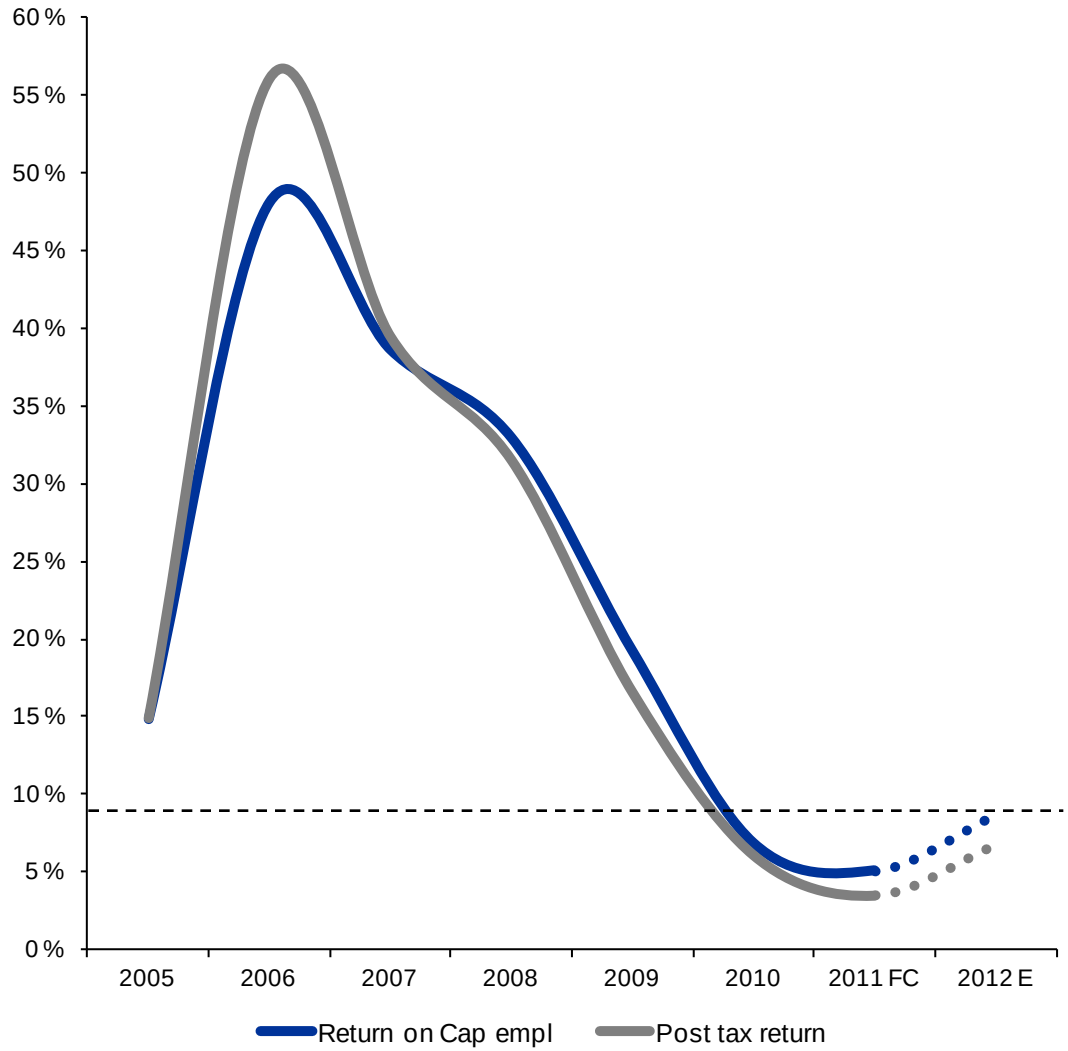






*Excluding reversal of impairment of USD 1.3 million in Q4 2010 and excluding impairments of USD 79.9 million in Q3 2010, USD 0.5 million in Q1 2010, USD 2.4 million in Q3 2009 USD 48.2 million in Q2 2009, USD 50.6 million in Q1 2009, USD 161.1 million in Q4 2008 and excluding gain from sale of *Ramform Victory* of USD 72 million in Q1 2008.

Return on Capital Employed



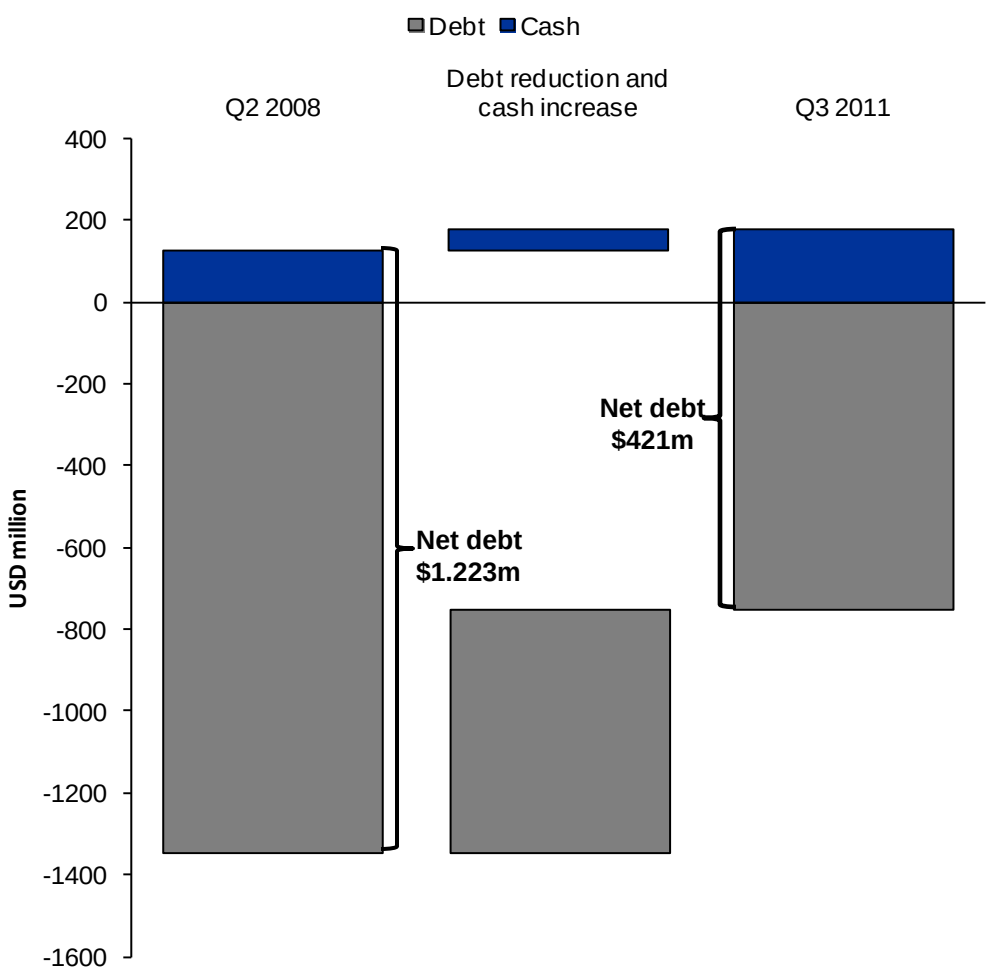
- Historically strong returns over the cycle
- Returns below cost of capital in 2010 and 2011
  - Expected to improve in 2012
- Weighted average cost of capital is estimated to 9-10% (after tax)

Return on capital employed is calculated as EBIT (excluding impairments and other operating income/expense) as a percentage of average net capital employed (sum of shareholder's equity and net interest bearing debt adjusted for net assets on discontinued operations). Post tax return is calculated by deducting the reported tax expense from EBIT. Adjustments have been made to exclude Onshore and Production which have been discontinued in the period. 2005 is N GAAP all other years are IFRS based.

Dividend

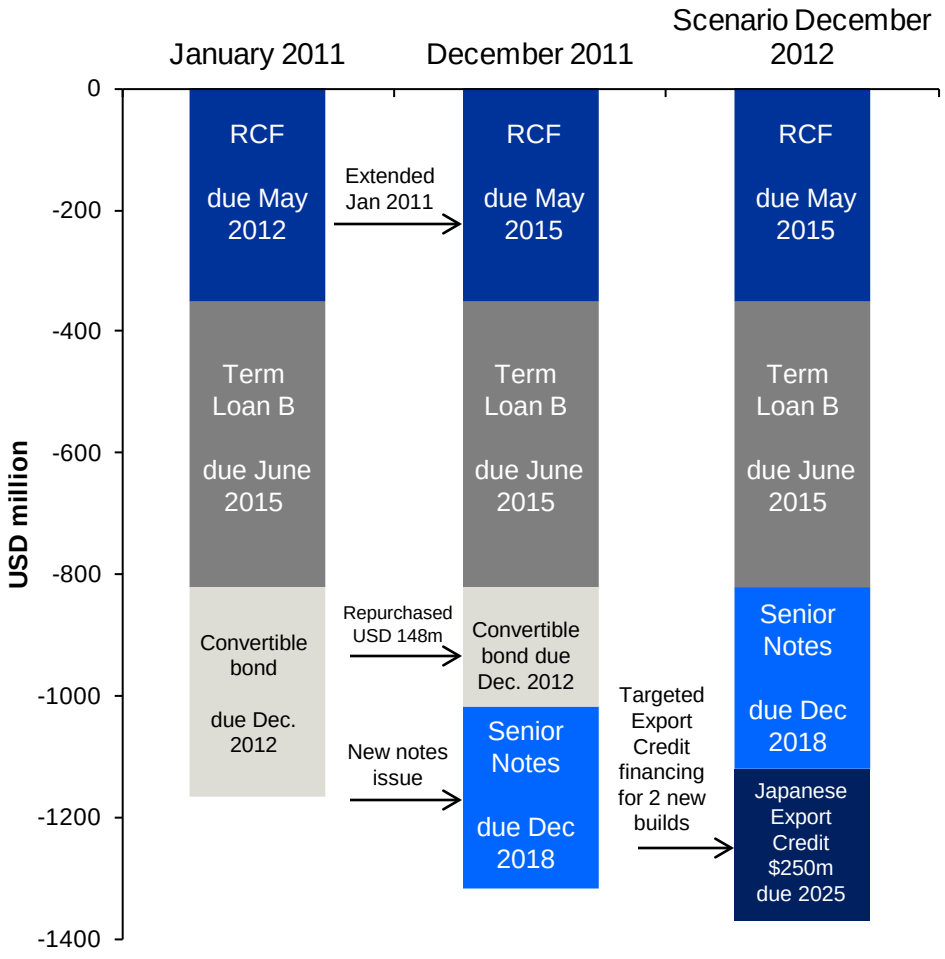
- PGS intends to distribute 25-50% of future net income as dividends
- Dividend capacity has priority
- Approximately USD 40 million to be recommended for the year 2011

Substantial Debt Reduction



- Net interest bearing debt reduced by approximately USD 800 million since 2008
- Liquidity reserve of approximately USD 715 million (Proforma: Q3 actual adjusted for Q4 Senior Notes issue and repurchase of convertible notes)
- Significant unutilized debt capacity
  - Policy to keep net debt below 1 to 2 X EBITDA (2X in the weak parts of the cycle and 1X in strong market)
  - 0.76 LTM end Q3 2011
- Corporate credit rating from S&P and Moody's of BB and Ba2 respectively

Debt Financing – Extended Maturities



Average remaining maturity	2.8 years	3.9 years	4.0 years

- Maturity of USD 350 million Revolving Credit facility extended from 2012 to 2015
- Seven year USD 300 million Senior Notes issued in November 2011
- Proceeds from Senior Notes to be used for general corporate purposes and to repurchase or repay the outstanding principal amount of the Convertible Notes on or before maturity
- The Senior Notes issue extends maturities and establishes PGS in the world's most liquid debt market

Japanese Export Credit Financing of New Builds

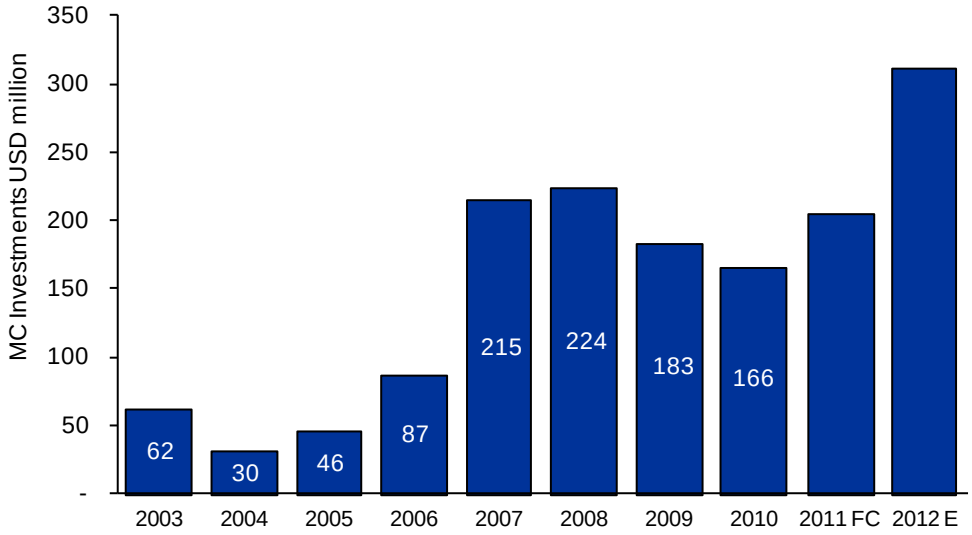
- Working to establish Export Credit Financing of approximately USD 250 million for the two first vessels
- Structured as a term loan facility agreement with repayment over 12 years
- Draw down at vessel delivery
- Purpose is to access long dated debt at favorable terms

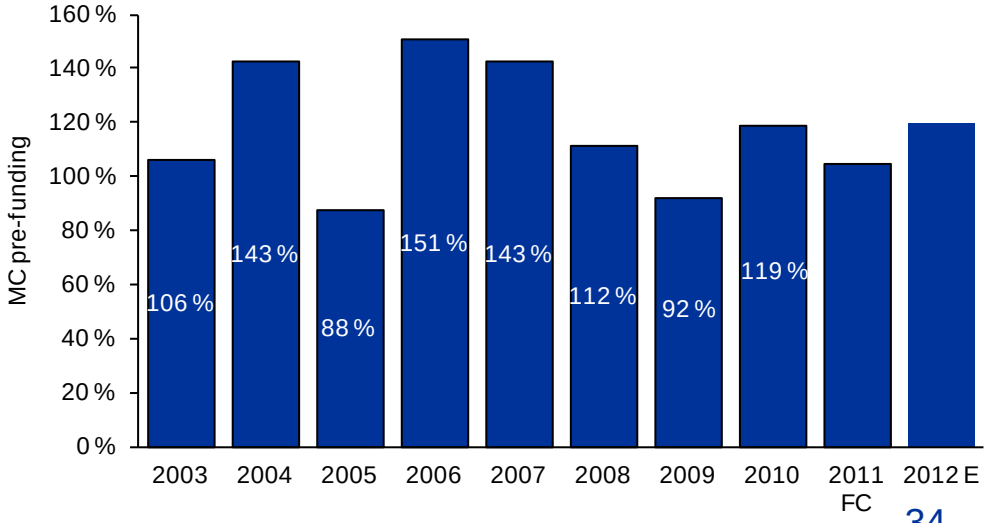
Robust Financing with Good Maturity Profile

Long term Credit Lines and Interest Bearing Debt	Nominal Value Outstanding as of September 30, 2011	Estimate as of December 15, 2011	Total Credit Line	Financial Covenants
USD 600 million Term Loan ("TLB"), Libor + 175 basis points, due 2015	USD 470.5 million	USD 470.5 million		None, but incurrence test: total leverage ratio < 3.00:1
Revolving credit facility ("RCF"), Libor + 225 basis points, due 2015	Undrawn	Undrawn	USD 350 million	Maintenance covenant: total leverage ratio < 2.75:1
USD 300 million Senior Note, coupon of 7.375%, due 2018		USD 300 million		None, but incurrence test : Interest coverage ratio > 2.0:1
USD 400 million convertible bond due 2012, coupon of 2.7% with strike NOK 216.19	USD 293.1 million	USD 196.3* million		None

*USD 96.8 million nominal value bought back so far in Q4 at 99% of par value. Since carrying value in the balance sheet is approximately 96%, repurchases at 99% of par will result in an accounting loss of approximately 3% of the nominal value bought back.

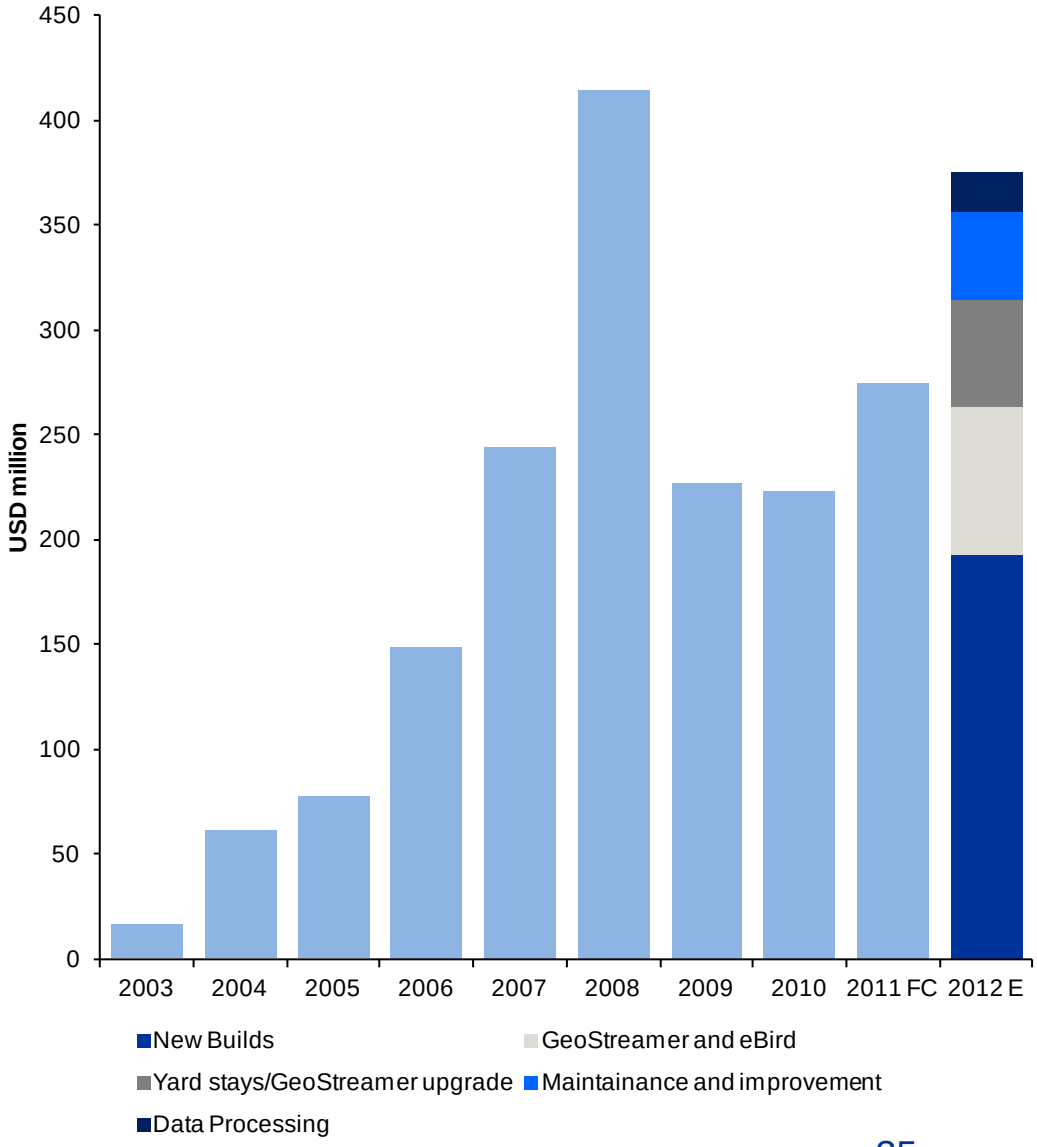
MultiClient Investments – Trends and Projections





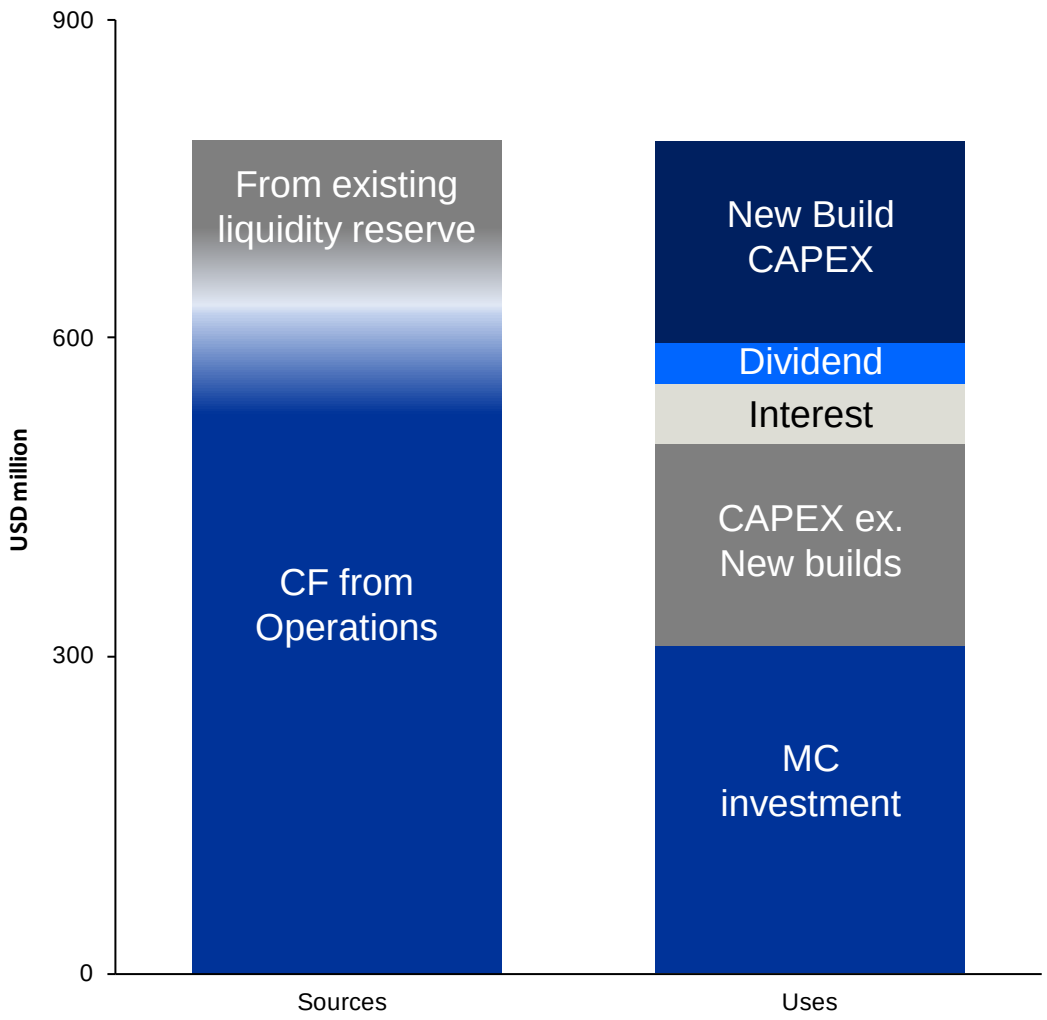
- MultiClient cash investments in 2012 driven by Angola project, North Sea campaign and planned start up of Wide Azimuth in GoM
  - Current estimate USD 300-325 million
  - Includes USD 30-40 million estimated increase of external support and source vessel cost compared to 2011
- 2012 pre-funding level expected above 100%
- Marine 3D capacity used for MultiClient is expected to be approximately 40% of active capacity in 2012

Capital Expenditures – Trends and Projections



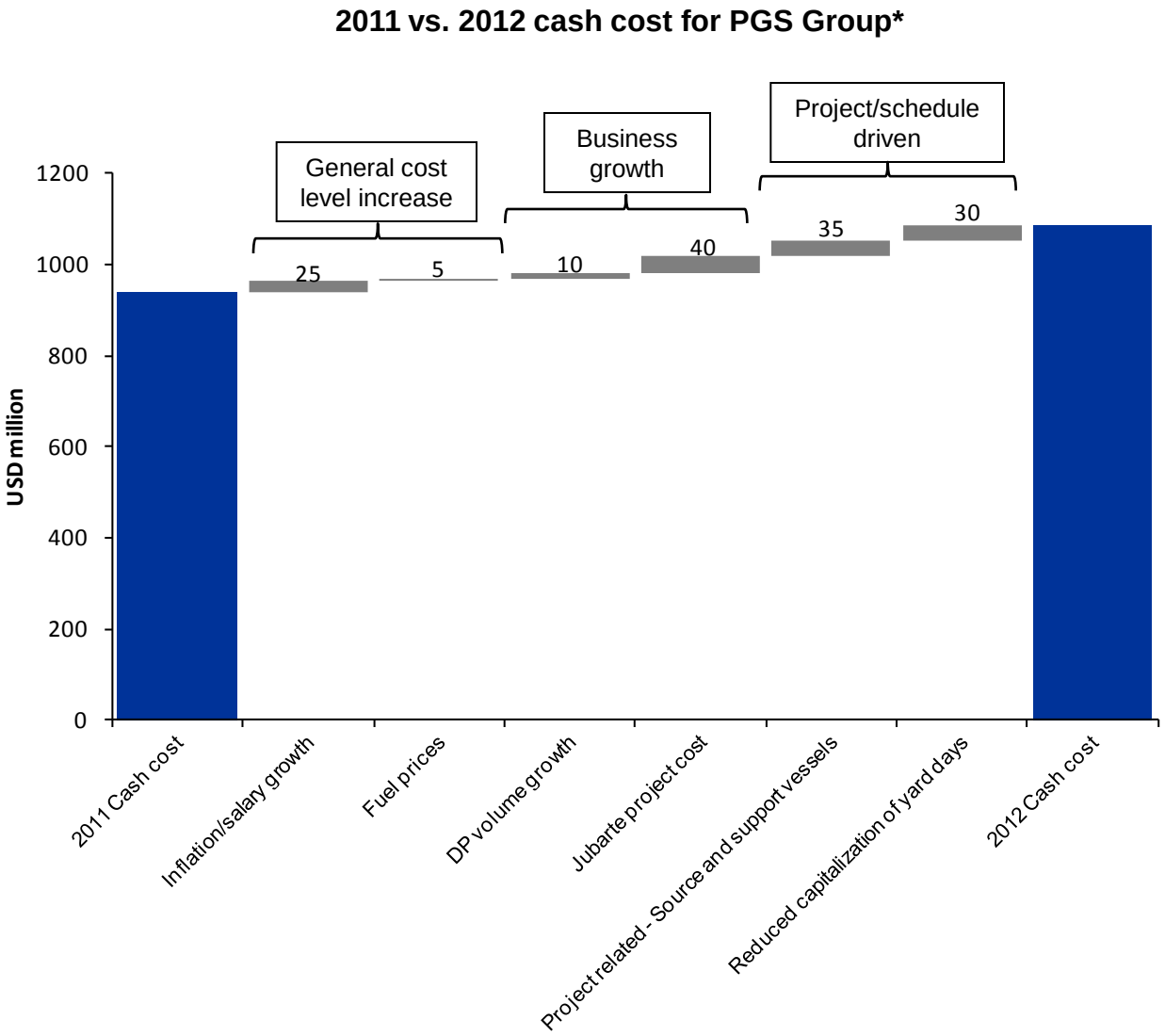
- 2012 CAPEX is expected to be approximately USD 350-400 million, of which approximately USD 200 million relates to new builds
- Approximately USD 70 million related to GeoStreamer and eBird installation
- Run rate maintenance CAPEX is estimated to USD 130-160 million annually, including capitalization of yard stays

2012 Cash Flow to Fund Portion of New Build CAPEX



- Cash flow from operations expected to fund a portion of new build CAPEX
- Ample liquidity reserve to support remaining new build CAPEX

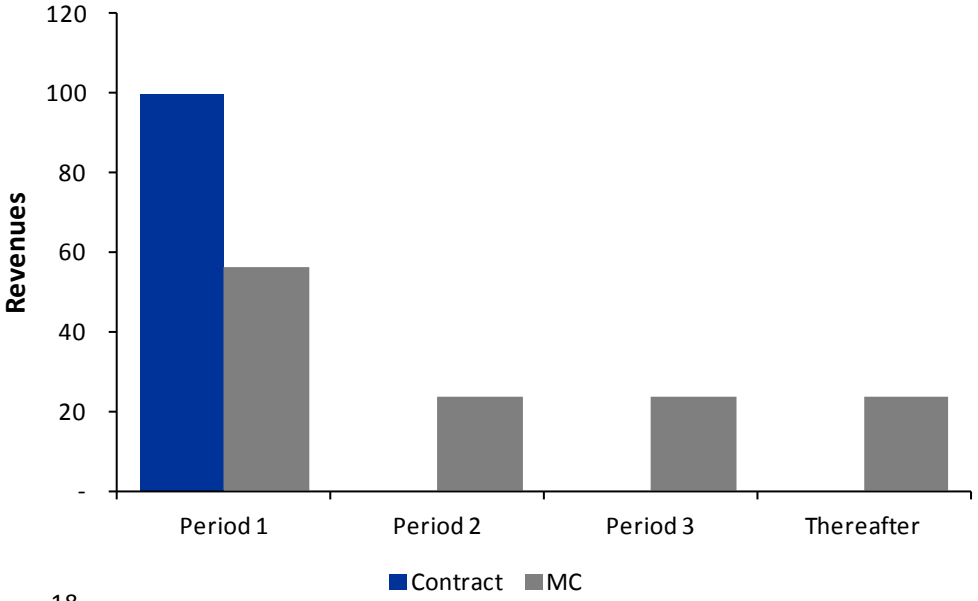
Growth and Project Driven Cost Changes in 2012

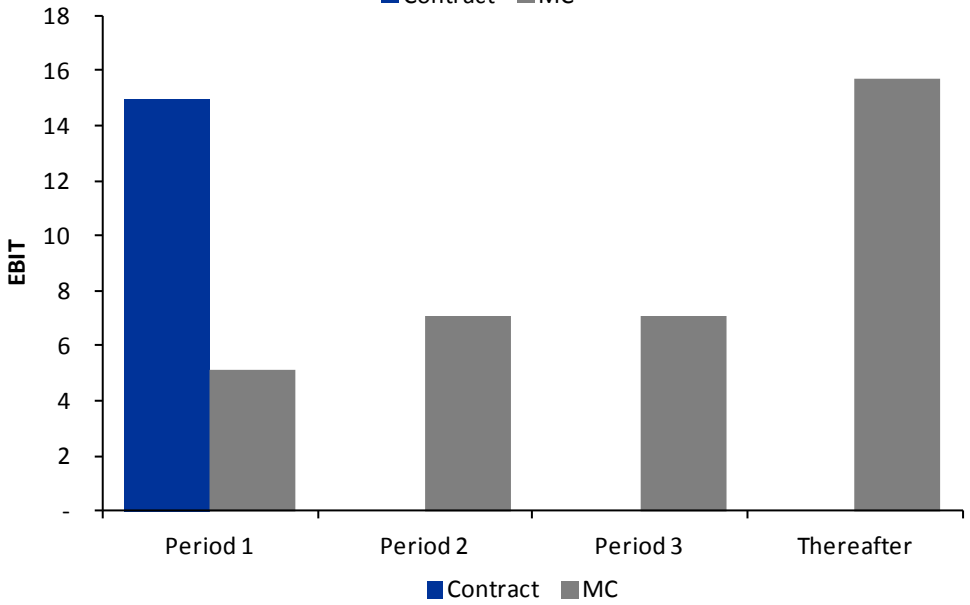


- Modest inflationary cost increase expected
- Project specific cost to increase significantly relating to execution of Jubarte system installation and MultiClient surveys in Angola and Gulf of Mexico
- Growth in Data Processing continues

*Illustration of cost change excludes impact of steaming deferral and employee bonuses.

Example – Contract versus MultiClient





- The capacity mix between contract and MultiClient acquisition has significant impact on revenue and earnings profile
- Increase in MultiClient acquisition typically reduces revenues and, even more, reduces EBIT in the acquisition year
  - Pre-funding level impacts revenues and EBIT, example assumes 110%
  - Opposite effect in subsequent years
- MultiClient projects are acquired based on expectations of higher revenues and better returns over time

Example – Contract versus MultiClient

P&L

Contract seismic	Period 1
Revenues	100
Cash costs	(68)
Depr	(17)
EBIT	15
PGS contract margin	15 %

Multi-client seismic	Period 1	Period 2	Period 3	Thereafter	Total
Pre-funding revenues	56				56
Late sales revenue		24	24	24	71
Amortization	(34)	(14)	(14)	(6)	(68)
Cash costs	(68)	(2)	(2)	(2)	(75)
Depreciation	(17)				(17)
Capitalized cash costs	51				51
Capitalized depreciation	17				17
EBIT	5	7	7	16	35
PGS MC margin	9 %	30 %	30 %	66 %	28 %

Cash flow

Contract seismic	Period 1
Operating cash flow	
Revenue	100
Cash costs expensed	(68)
	32
Investing cash flow	
	-
Net cash flow	32

Multi-client seismic	Period 1	Period 2	Period 3	Thereafter	Total
Operating cash flow					
Revenue	56	24	24	24	127
Cash costs expensed	(17)	(2)	(2)	(2)	(24)
	39	21	21	21	103
Investing cash flow					
Cash investment in MC library	(51)	-	-	-	(51)
Net cash flow	(12)	21	21	21	52

Summary

Contract seismic	Period 1
Agg. Revenues	100
Agg. EBIT	15
Agg. EBIT margin	15 %
Agg. Cash flow	32

Multi-client seismic	Period 1	Period 2	Period 3	Thereafter	Total
Agg. Revenues	56	24	24	24	127
Agg. EBIT	5	7	7	16	35
Agg. EBIT margin	9 %	30 %	30 %	66 %	28 %
Agg. Cash flow	(12)	21	21	21	52

Assumptions

Contract seismic	Period 1
Cash cost mix	80 %
Depreciation	20 %
PGS contract margin	15 %

Multi-client seismic	Period 1	Period 2	Period 3	Thereafter
Amortization rate	60 %			
Capitalization rate on cash costs	75 %			
Capitalization rate on depreciation	98 %			
Prefunding as a percent of capitalized cash costs	110 %			
Late sales as a percent of capitalized investment:	0 %	35 %	35 %	35 %
Late sales cost percent (all years)	10 %			

Beneficial Tax Position

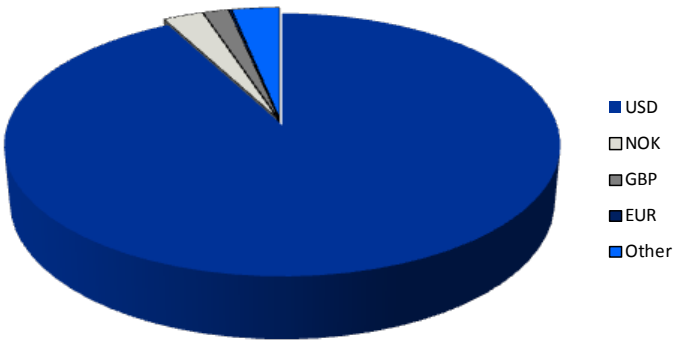
- Deferred tax assets
  - Deferred tax assets of USD 192 million end Q3 2011 will continue to benefit current tax expense for the coming years
  - Current tax mainly relates to withholding taxes and local taxation in countries of operation where PGS has no deferred tax assets. Will vary significantly depending on area of operation

- Tax free regimes
  - Operations of most vessels in tax free regimes have positively impacted tax expense in 2008, 2009 and 2010. Low impact in 2011 since size of benefit is depending on market - higher savings in a stronger market

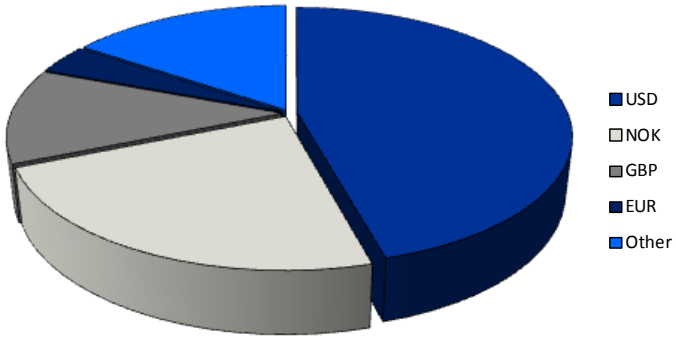
- Effective tax rate
  - Fluctuates due to various reasons: foreign exchange movements, utilization and recognition of deferred tax assets, size of impact from vessel operations inside tax free regimes and other permanent differences. Average effective reported tax rate of approximately 25% should be representative over longer periods

Foreign Exchange and Sensitivity

Cash receipts relating to operations



Cash outflow relating to operating payments



- On an annual basis
  - A 10% change of the USD vs. NOK has an annual net EBIT impact of USD 20-24 million before currency hedging activities. A 10% change vs. GBP has an effect of USD 9-11 million
- The Company hedges
  - Material monetary balance sheet items in non-USD currencies
  - Specific material firm commitments, e.g. ship building contracts
  - Operational cash flow up to the duration of the contract backlog
- Hedging of operational cash flow has been reduced
  - Currently approximately NOK 265 million and GBP 4 million bought on forward contracts
  - Significant reduction when compared to previous years
  - Hedge of BRL 104 million in place against the exposure arising from cash deposit held in Brazil, approximately 65% of the original deposit
  - Vessel new build contracts are USD denominated

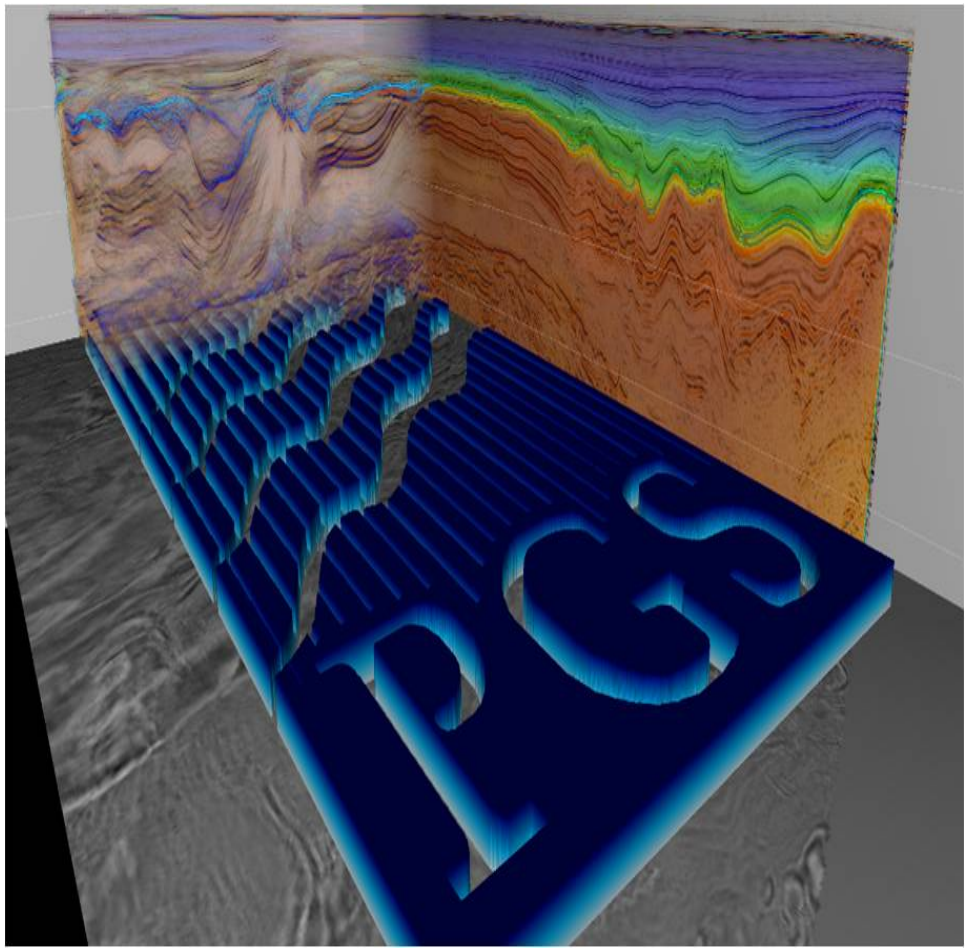
.

Key Sensitivities

- Technical downtime
  - One month for high capacity vessel could amount to USD 10 million +risk of schedule impact and equipment cost
  - Small event may have significant consequence due to time required for retrieval/ deployment
- Contract versus MultiClient
  - One more 3D vessel month on MultiClient versus contract corresponds to a reduced EBIT of approximately USD 1.0 million* in investment period
- MultiClient late sales
  - Sensitive to oil price and legislative changes
  - Regional variability from quarter to quarter
- Fuel price
  - 10% change represents USD ~1 million per month of operating cost
  - Price risk is placed with the customer on a majority of contract work
- Marine contract margin
  - One percentage point increased marine contract EBIT margin approximates USD 7 million in increased EBIT/year

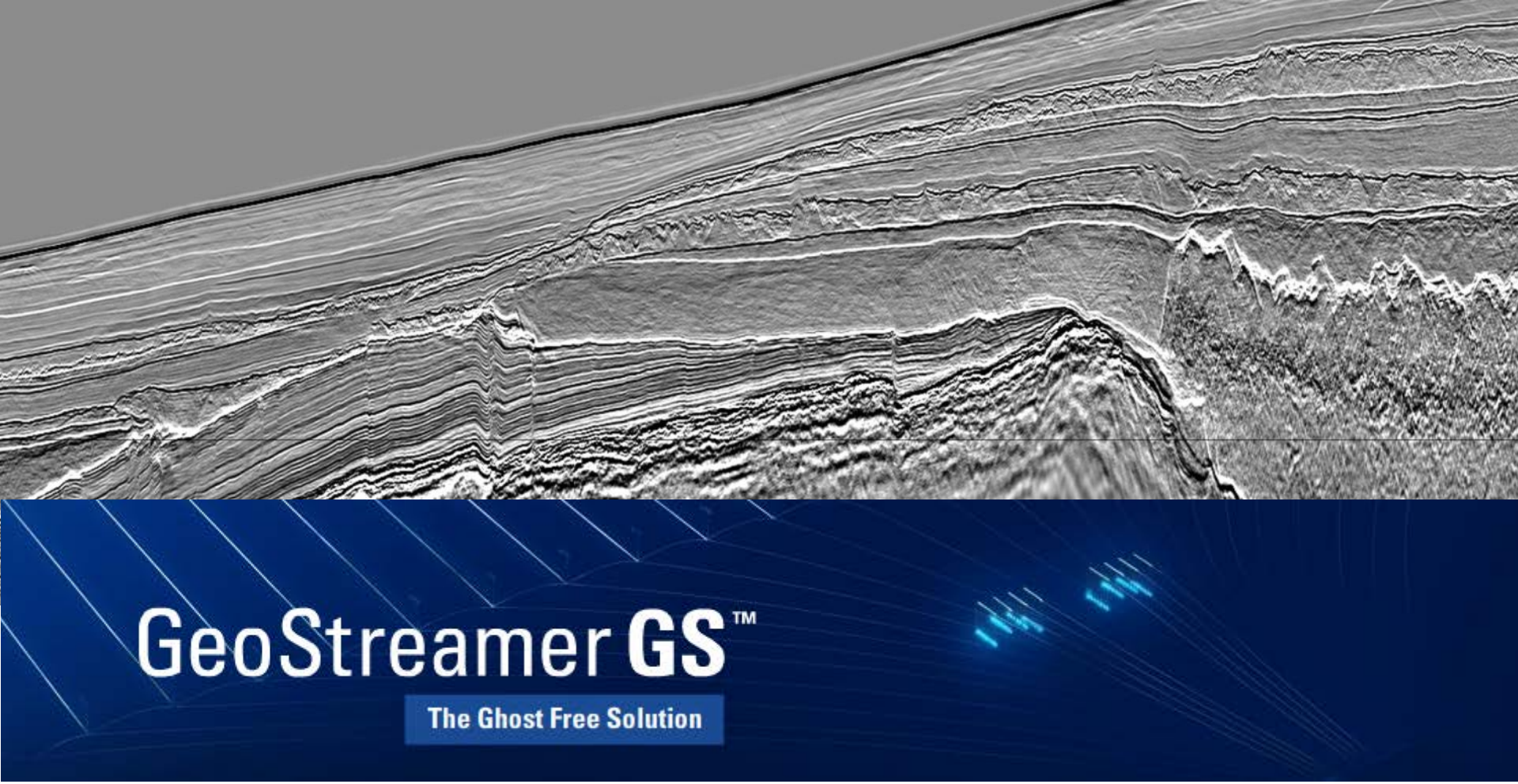
*Assuming 100% pre-funding, amortization rate of 60% and Marine contract EBIT margin of 15%.

Robust Cycle Management



- Investment in growth drivers with competitive advantage based on technology and productivity
- Solid financial profile and liquidity reserve
- Robust financing with attractive terms and duration – funds available for CB maturity in 2012
- No significant maturities before 2015
- Flexibility to handle a changeable market

Robust Performance Through the Cycle - Reducing Cyclical Exposure



MultiClient

Sverre Strandenes, Executive Vice President

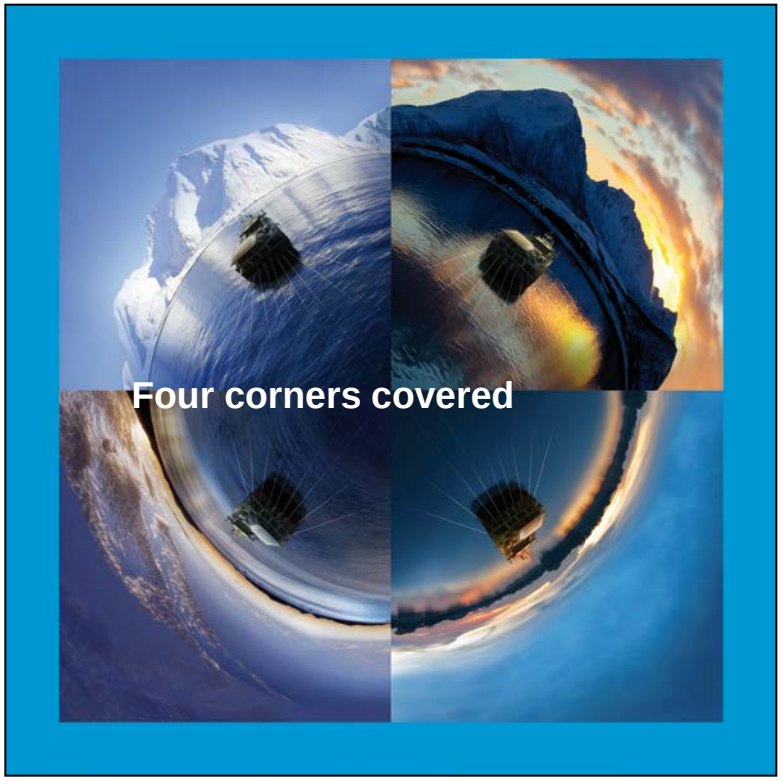
PGS Capital Markets Day
December 16, 2011

MultiClient – What Does the Business Unit Do?

MultiClient acquires and processes seismic data to be included in the Company's data library. PGS invests in MultiClient projects which are marketed and sold to multiple customers on a non-exclusive basis

MultiClient: Outline

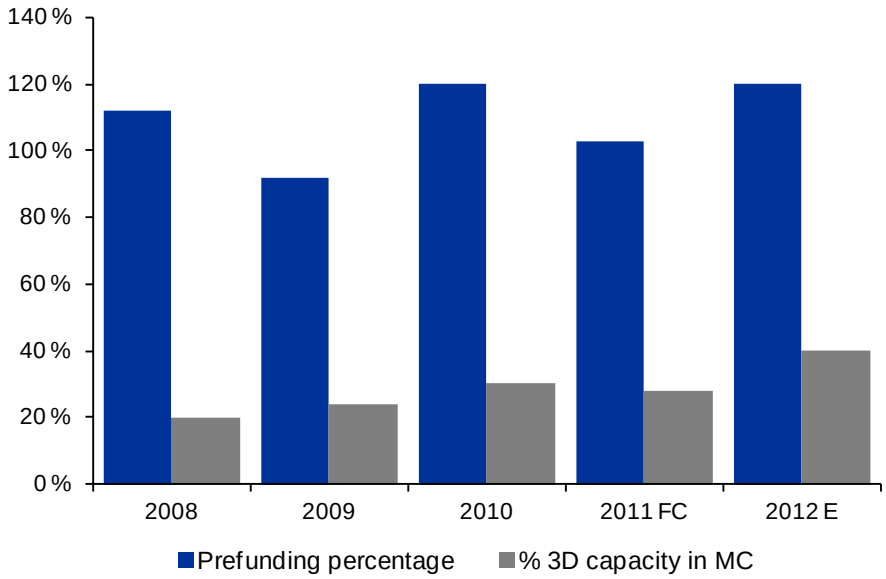
- **MultiClient enables robust performance through the cycle**
- **GeoStreamer and Prospectivity are key MultiClient drivers**
- **Opportunities in four corners of the world**



MultiClient – Supporting our Clients' Exploration Success

- **Ambitions:**
  - The first port of call for oil companies' exploration needs
  - Helping oil companies to find hydrocarbons faster and more cost effectively, with less risk
- **Investment rationale:**
  - We acquire (and interpret) data where we believe there are hydrocarbon prospects
- Exploration knowledge through 80 + staff in Reservoir
- Innovative technology deployment
- Flexible business models and solutions

PGS MultiClient: What is it and Why ?



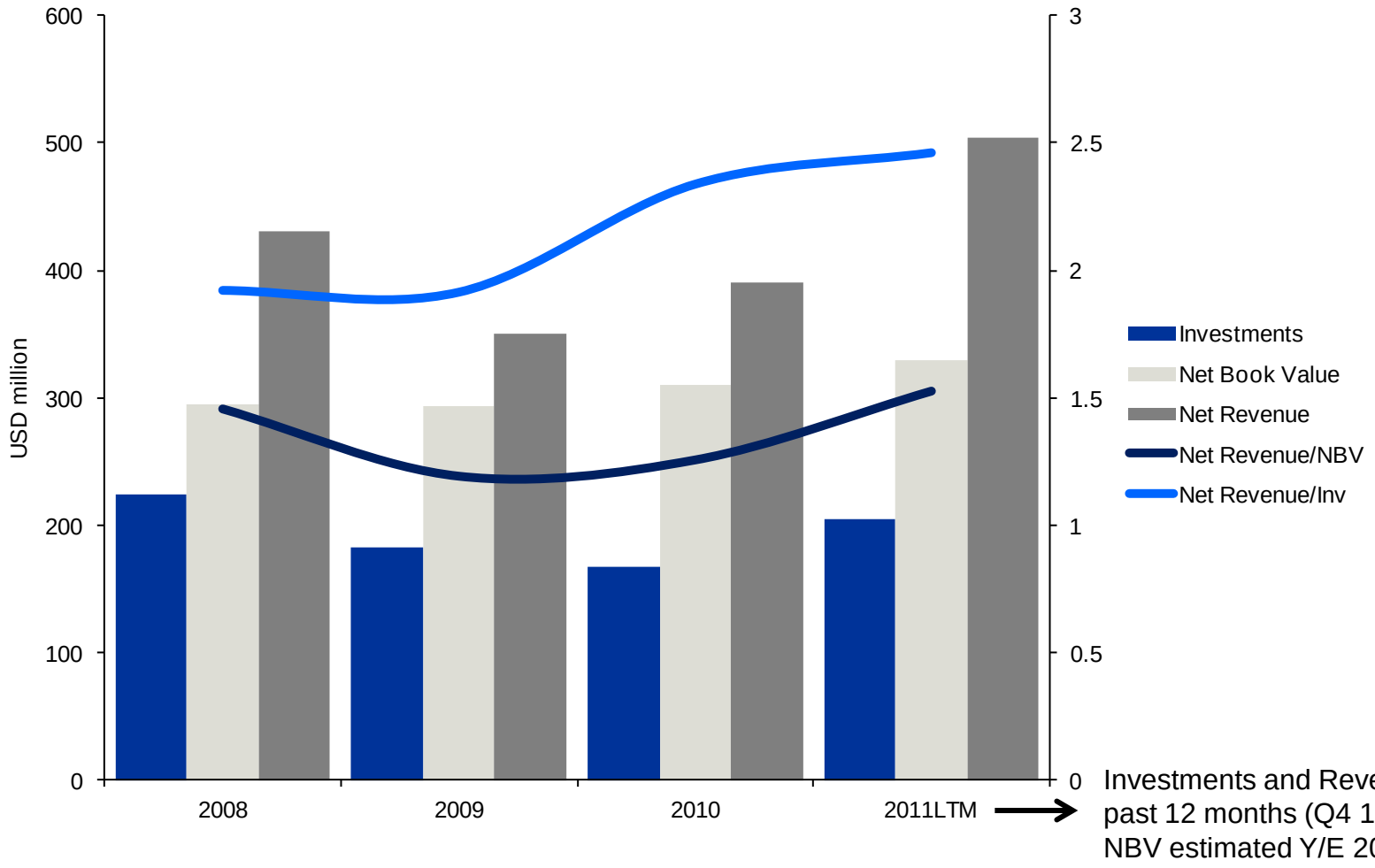
Consistent, high pre-funding levels

- Combining several seismic surveys into one larger survey to reduce unit cost
- Frontier area exploration
- Risk mitigation through pre-funding from oil companies
- PGS owns / has exclusive rights to license the data to oil companies, under a variety of different business models

- Basis for wide and flexible range of opportunities
- Can yield significant returns over and above conventional contract projects
- Improved earnings through pro-active capacity management over the cycle

Significant, long term earnings potential – helps managing business over the cycle

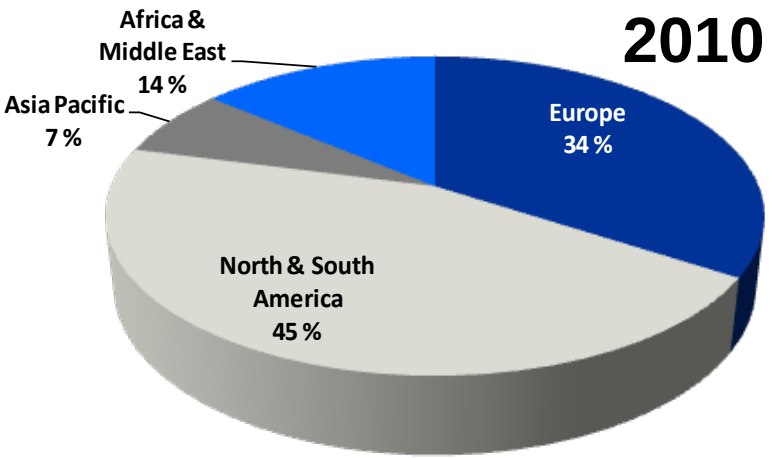
Robust Library Performance
Conservative Amortization Policy

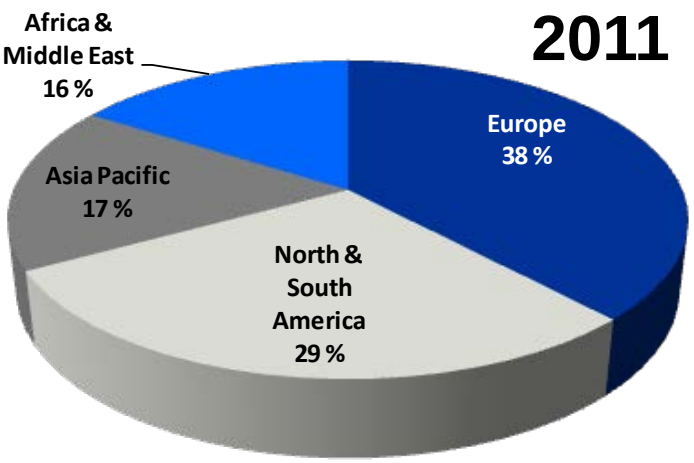


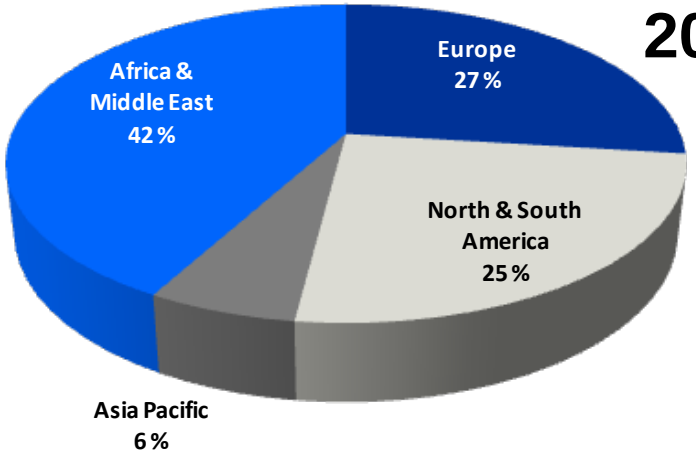
Investments and Revenues
past 12 months (Q4 10 – Q3 11)
NBV estimated Y/E 2011

Healthy and robust sales performance, net book value and investment level

Geographical Distribution of Revenues

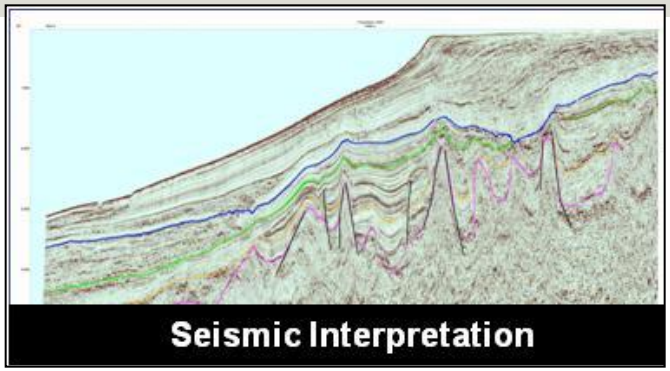


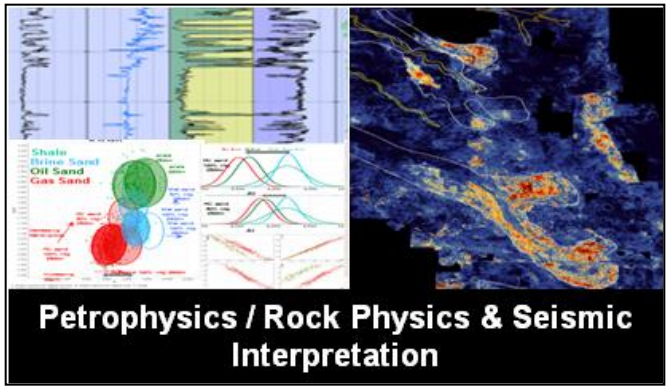




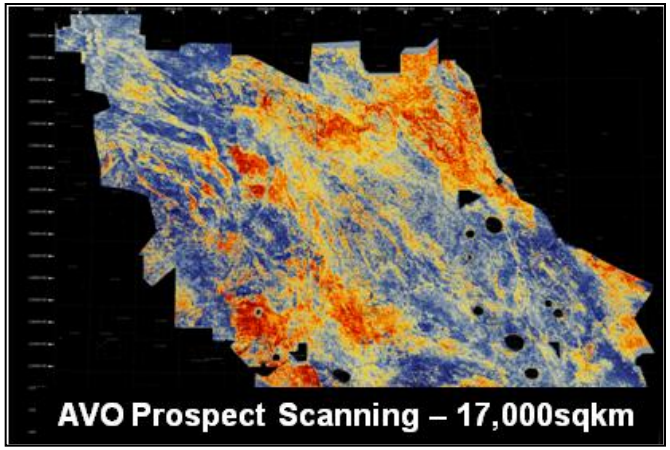
Diverse portfolio – driven by PGS local presence and basin prospectivity

Advanced Prospectivity Understanding Plays into MultiClient


Seismic Interpretation



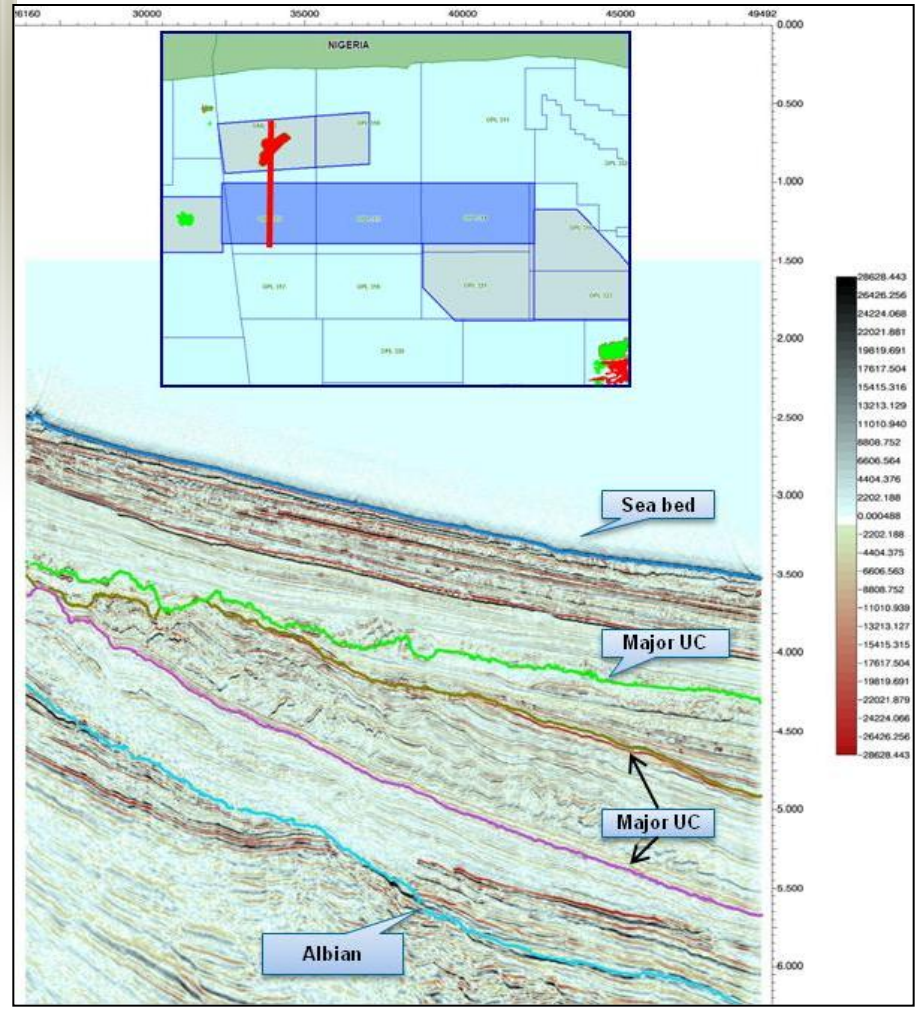
Petrophysics / Rock Physics & Seismic Interpretation

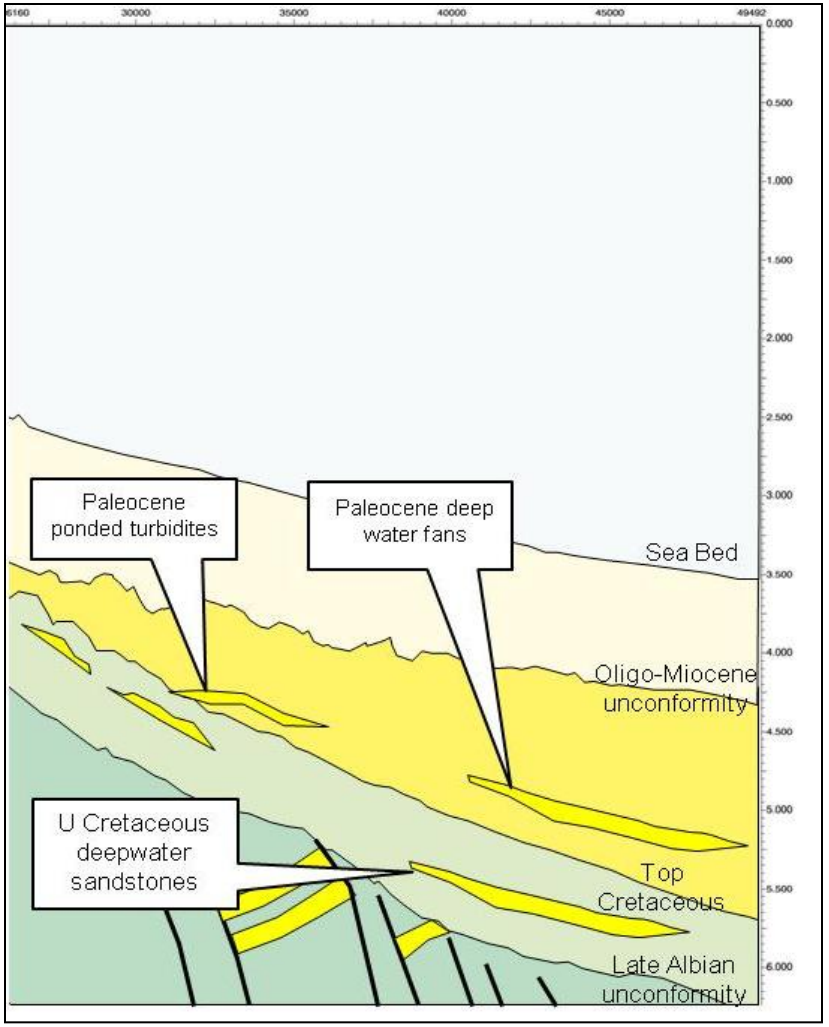

AVO Prospect Scanning – 17,000sqkm

- With over **80 Geoscientists** in the Reservoir Group, PGS has the exploration expertise equal to that of many medium sized oil companies
- **Prospectivity is the key**
  - MC data have limited value unless there is prospect of finding oil or gas
  - Thus, prospectivity drives the value of the MultiClient library
- **Basin to Reservoir focused interpretation**
  - Locating potential hydrocarbon reservoirs
- **Reservoir characterization**
  - Characterizing reservoirs and increasing confidence

Nigeria Transform Margin – GeoStreamer MC3D

From Seismic Data ➡ to Geology and Prospectivity

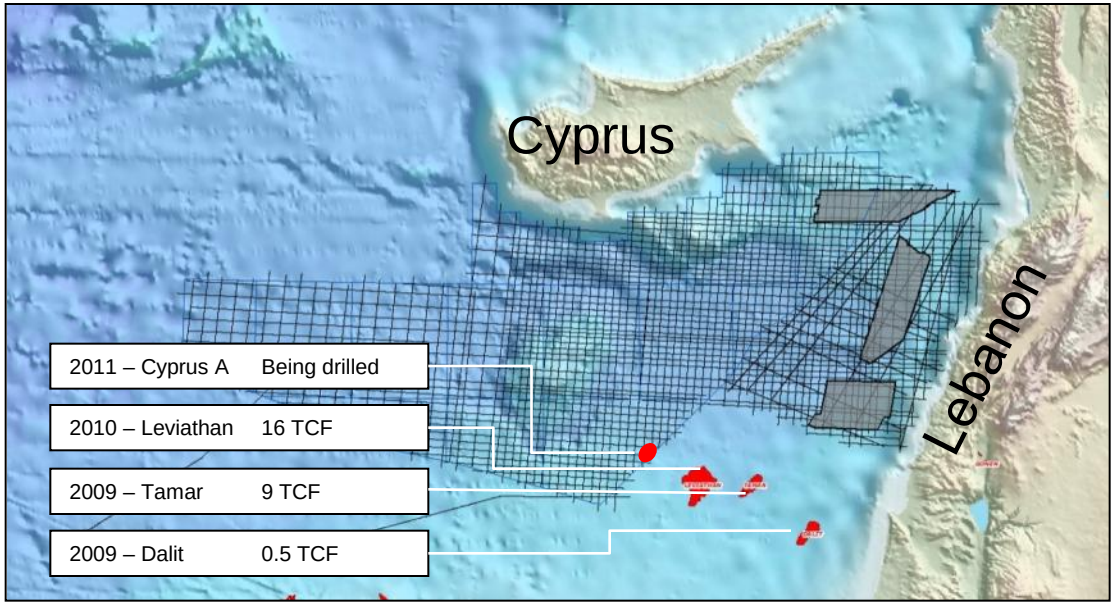




GeoStreamer based interpretation

Schematic geological cross-section

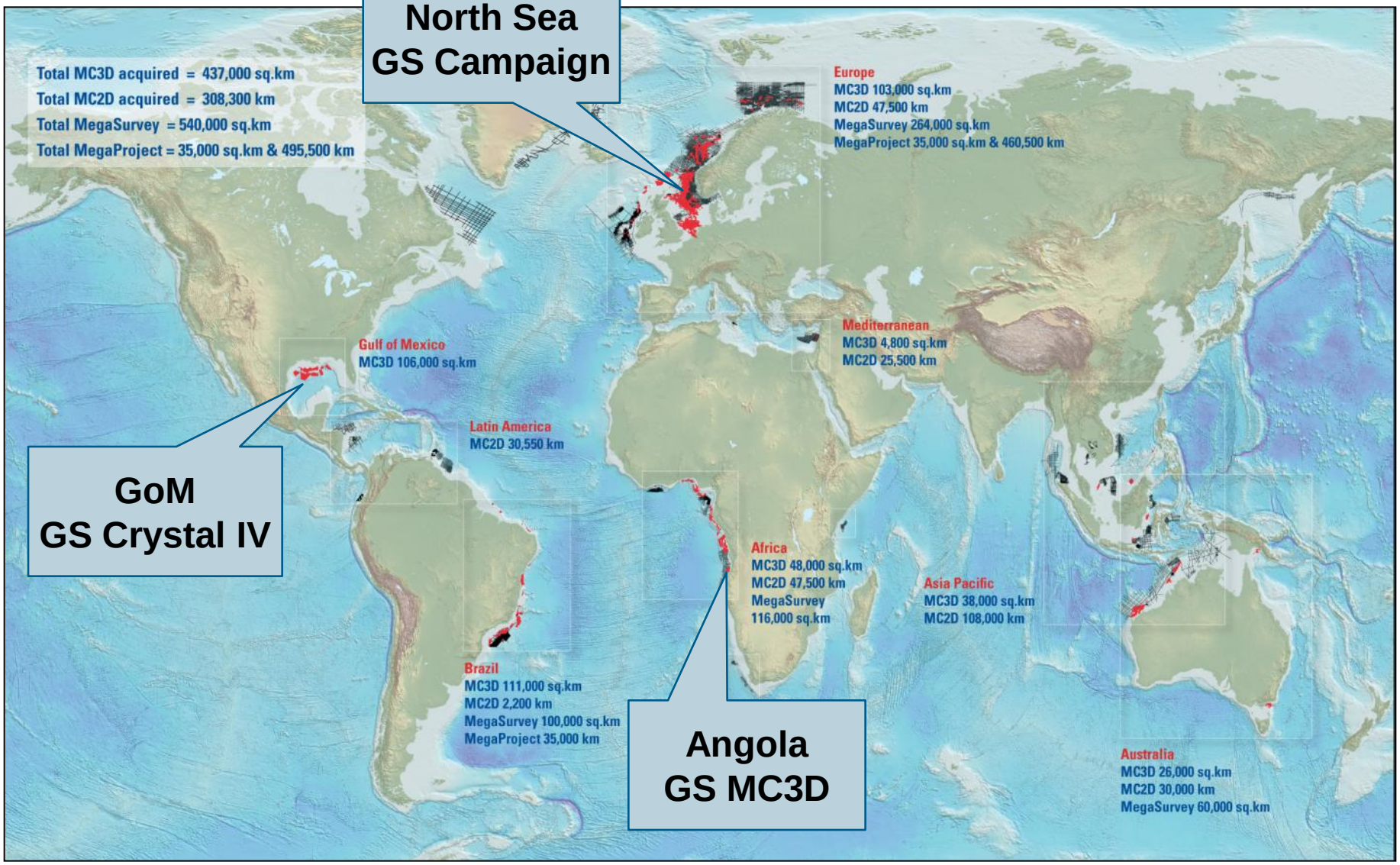
Driving MultiClient through Prospectivity: Eastern Mediterranean



- **Understand prospectivity**
- **Build relationships**
- **Early entry – 1st mover advantage**
- **Among the best performing MC regions for PGS**
- **Significant potential, including license award uplifts**

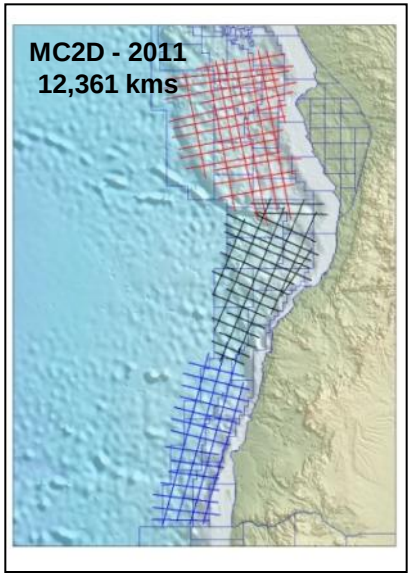
- **Initial Industry view:** Limited prospectivity
- **2006-2008:** Acquisition of 25,000 line km of MC2D and 3,000 km2 MC3D – driven by PGS prospectivity studies
- **2009:** Tamar discovery offshore Israel – 9 TCF of gas, industry interest booming
- **2010:** Leviathan discovery offshore Israel – 16 TCF of gas
- **2011 Q1:** 1,500 km2 of MC3D and 4,500 line km of MC2D
- **2011 Q3:** 3-9 TCF of gas estimated in Cyprus A, currently being drilled
- **2011 Q4:** 2,500 km2 MC3D in progress
- Cyprus and Lebanon ramping up for new license rounds: PGS in driving seat as key data provider

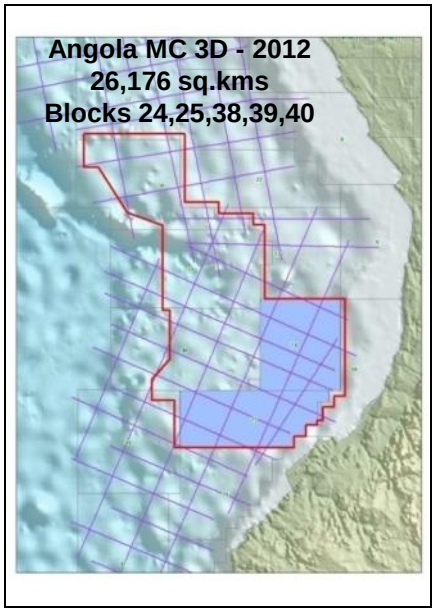
MultiClient Global Library: Key Investments 2012



Angola MC3D GeoStreamer

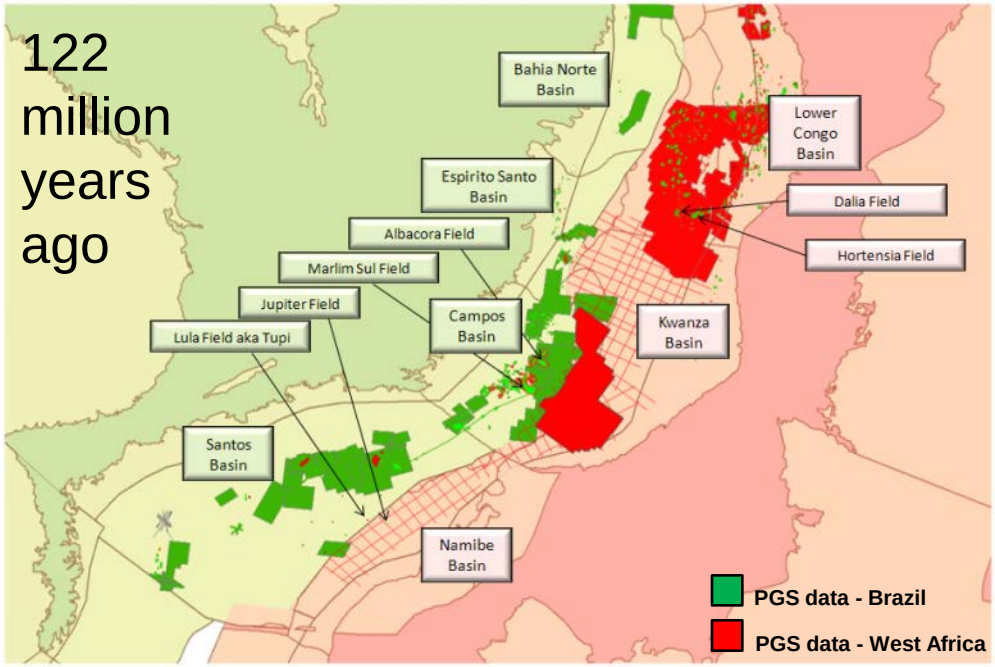
- **PGS MC3D GeoStreamer survey: 26,000 km2**
  - Fully pre-funded
  - Acquisition starts December 2011
  - 2 vessels, 20 vessel months
  - Technology - GeoStreamer 3D, MAZ, Depth Imaging using hyperBeam
  - Existing MC3D Data available on Blk 24 & 25 to be used for “fast track” and MAZ processing
  - Dedicated PGS Project Management
- **PGS in Angola**
  - Working with Sonangol since 1995
  - Data processing facility in Luanda since 2005
  - Interpretation centre in Luanda for Pre-salt study with Sonangol
  - Long term strategic agreement with Sonangol to work on Pre-salt prospectivity

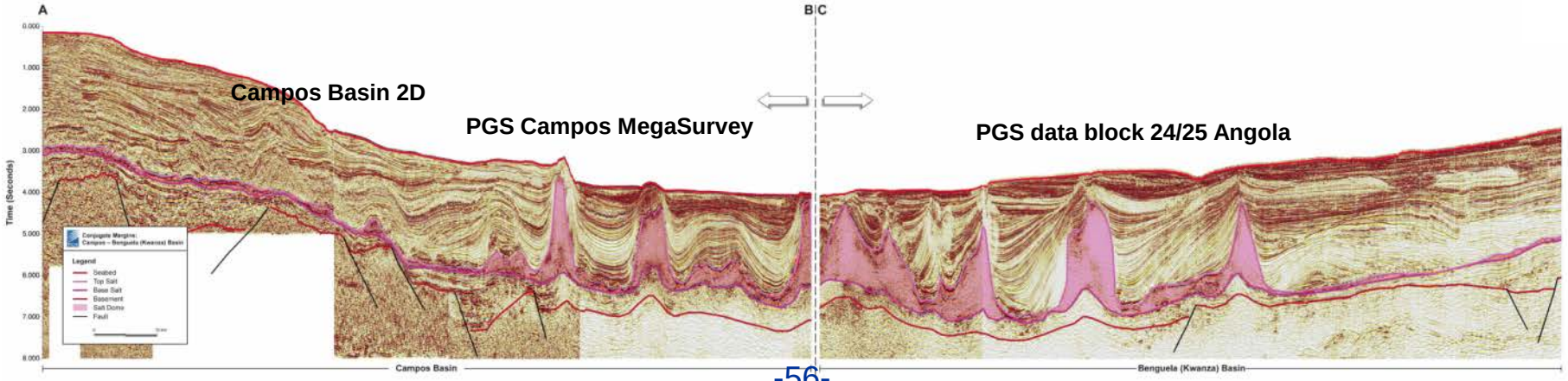




Prospectivity - South Atlantic Conjugate Margin

- PGS has the most extensive MultiClient libraries on both sides of the South Atlantic
  - Brazil, 200,000 km² 3D, 300,000 km 2D
  - West Africa, 180,000 km² 3D, 35,000 km 2D
- Recent advances in tectonic reconstruction enables PGS datasets to be positioned as they were before continental drift
- Combined African and Brazilian 2D seismic lines will be interpreted along the coasts:
  - Increasing understanding of analogue plays
  - Contributing to improved tectonic modelling
  - Improving planning of GeoStreamer surveys for pre-salt definition

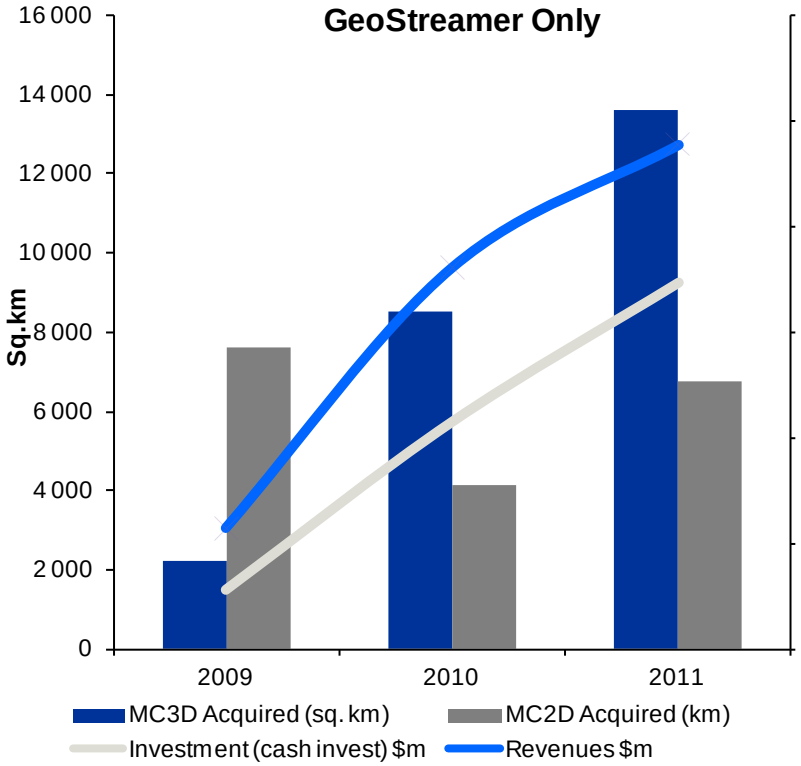




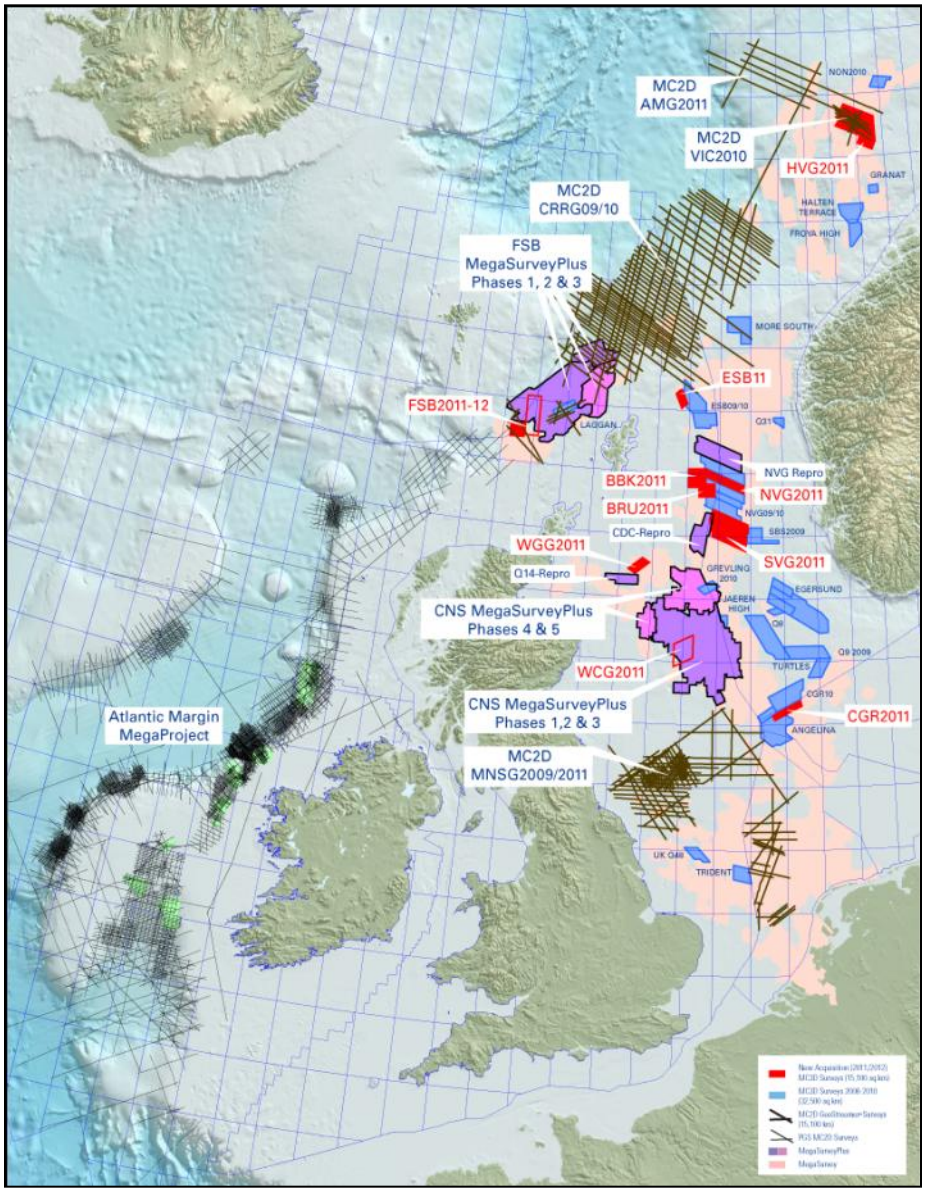
PGS MultiClient data - Campos Basin, Brazil – Benguela Basin, Angola

GeoStreamer North Sea Campaign Continues

- Deliberate decision to allocate all GeoStreamer capacity to MC North Sea campaign 2011
- GeoStreamer represents the new definitive database

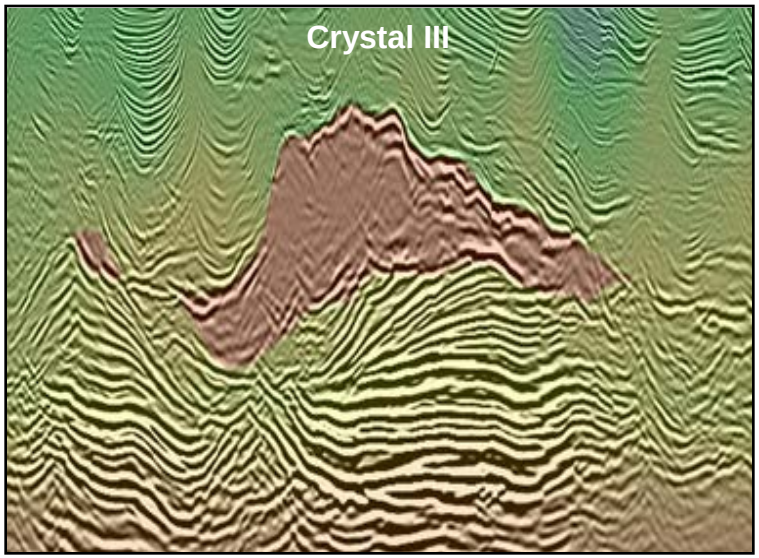


- MC2D yielding new insight in to Atlantic Margin basalt areas and the Mid North Sea High



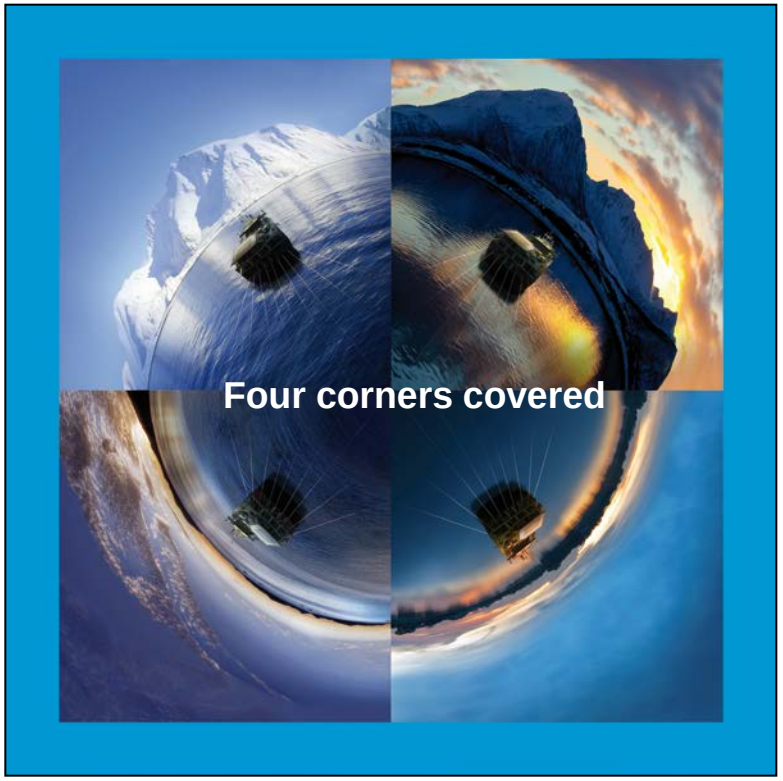
Gulf Mexico MultiClient – Delivering post-Macondo

- The world's largest MultiClient market continues to deliver in the post-Macondo world
- Crystal III completed in time for Western GoM lease sale #218 December 14th - ahead of business plan
- Acquisition (g&g) permits flowing & drilling activity increasing with recent high-impact discoveries from Anadarko, XOM (500Mbo ea), CVX & Statoil
- Technology the key differentiator in a highly competitive market – GeoStreamer and hyperBeam/high-end imaging
- Crystal IV permit approved by BOEM, pursuing the Western GoM Lower Tertiary frontier play
- Draft 5 year leasing plan (2012-2017) published, first Western GoM sale anticipated August 2012
- Crystal IV full finite difference modeling the next generation GeoStreamer WAZ
- Planned Crystal IV mobilization H2 2012



Conclusions

- MultiClient enables robust performance through the cycle
- GeoStreamer and prospectivity are key MultiClient drivers
- Opportunities in four corners of the world



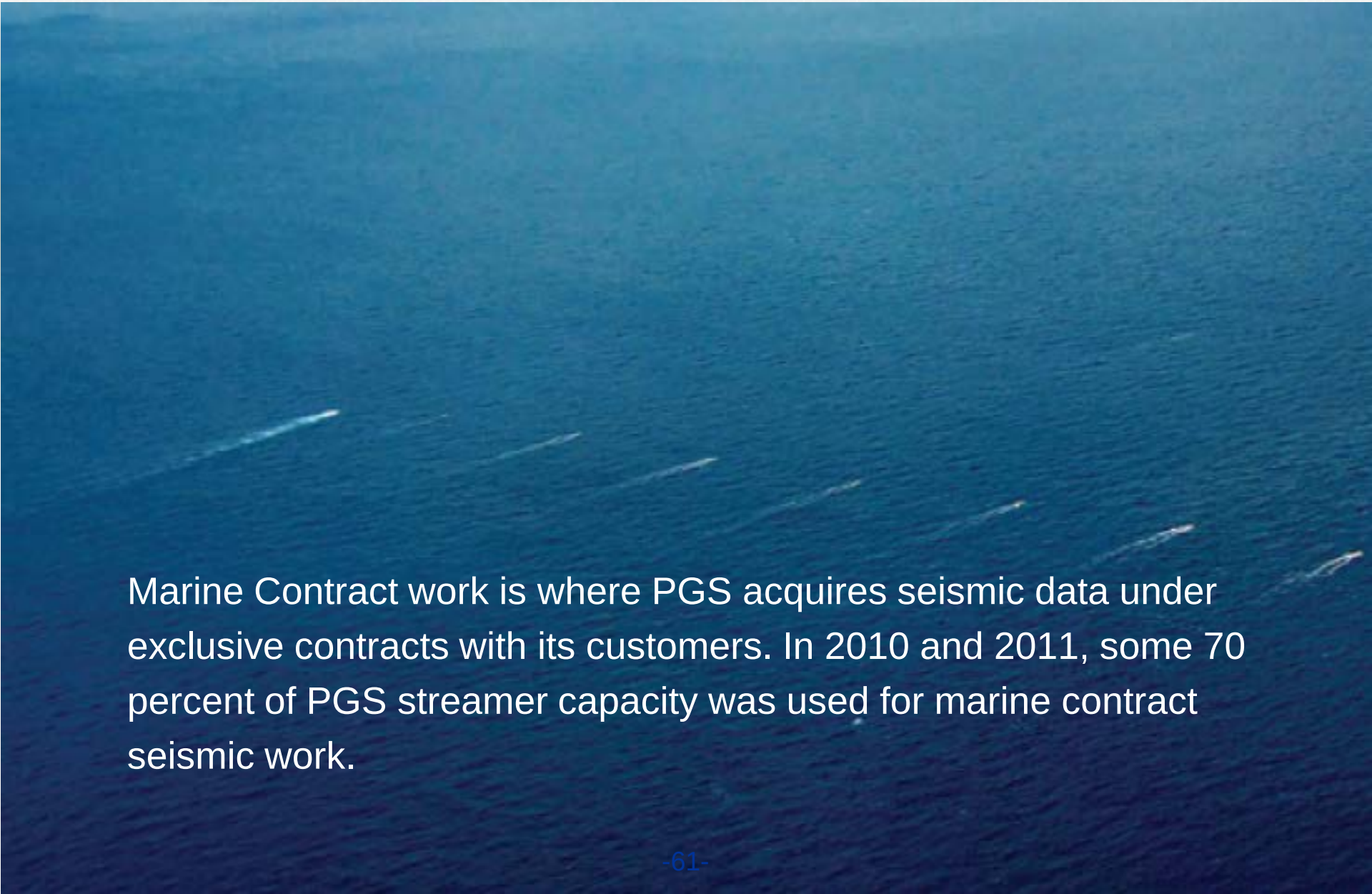
Marine Contract – Moving Out of the Trough

Per Arild Reksnes, Executive Vice President Marine Contract

PGS Capital Markets Day

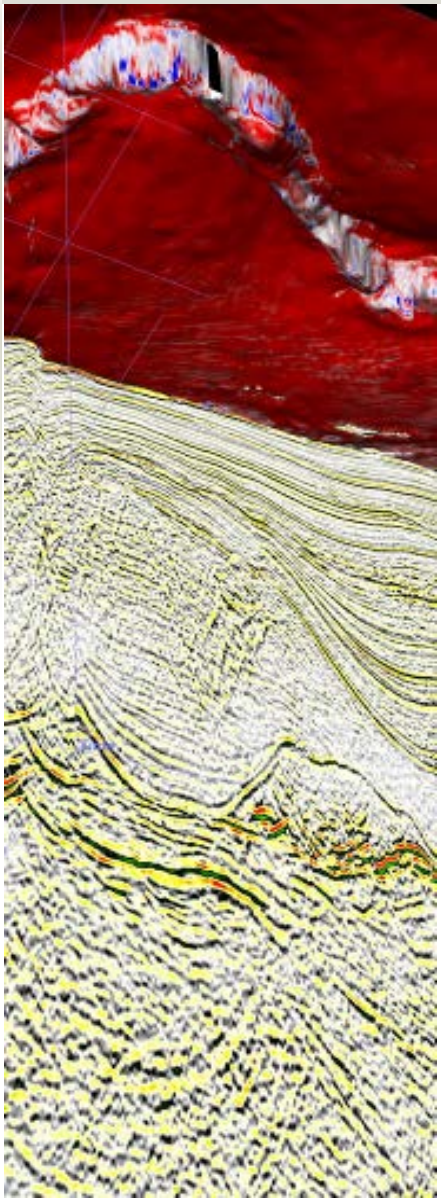
December 16, 2011

Marine Contract – What Does the Business Unit Do?



Marine Contract work is where PGS acquires seismic data under exclusive contracts with its customers. In 2010 and 2011, some 70 percent of PGS streamer capacity was used for marine contract seismic work.

Agenda

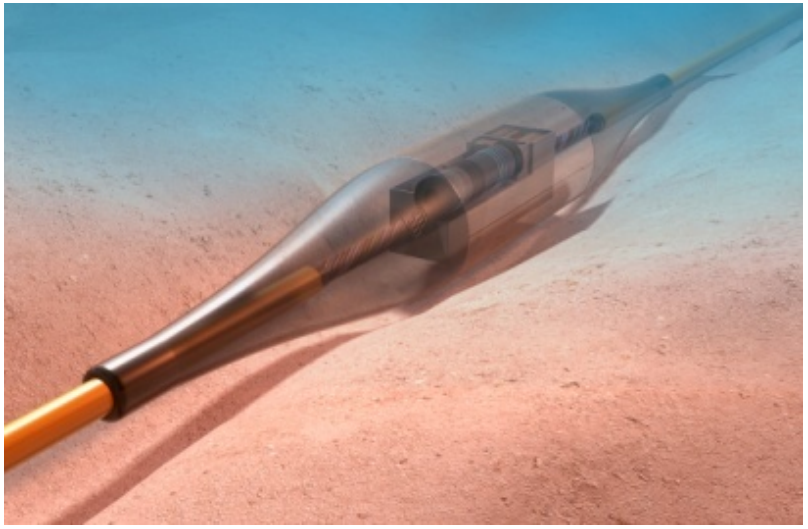


- Marine Contract's mission and ambition
- Market outlook
- PGS's competitive position
- Emerging services: EM and Permanent Reservoir Monitoring
- Conclusion/summary

Marine Contract Mission

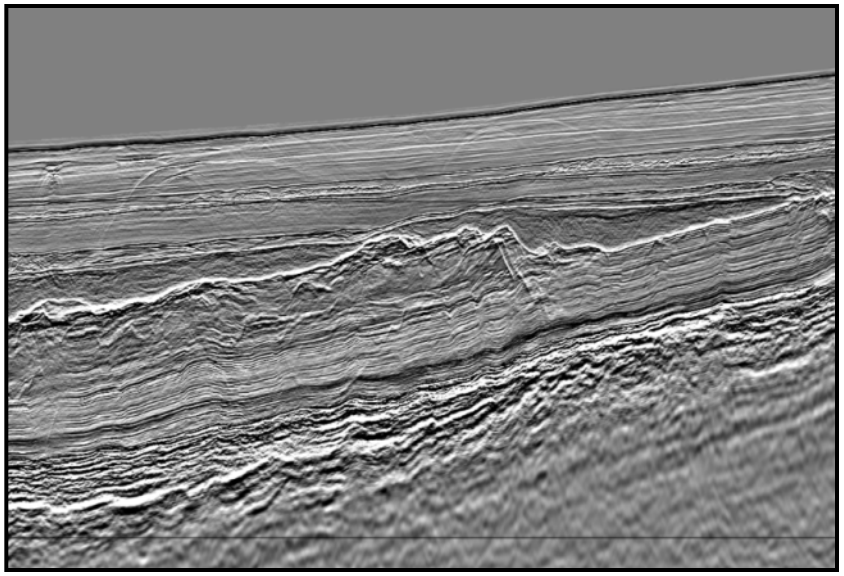
- Meeting our clients needs for new geophysical data that enable them to find and produce more oil and gas

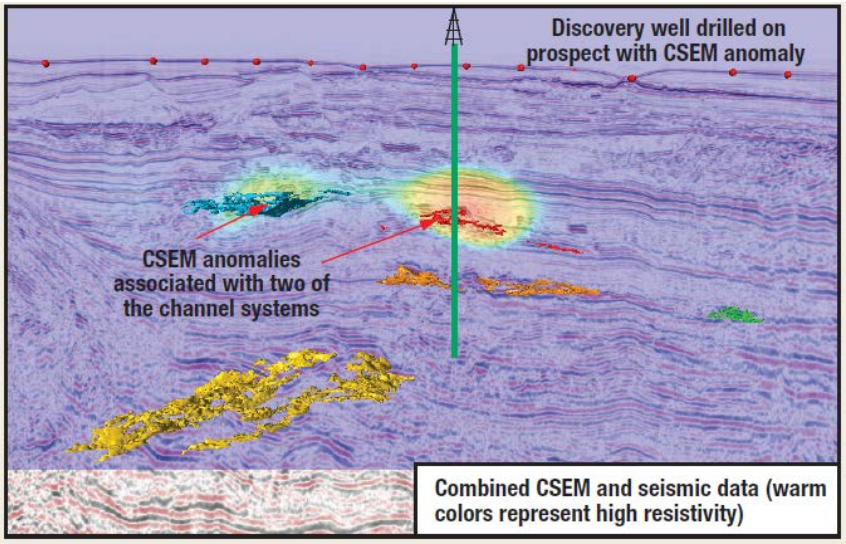
- Creating growth opportunities for PGS through commercialization of new technology and business ideas



Marine Contract Ambition:
The Best Marine Geophysical Data Provider

- Safe and environmentally sound
- Positive experience for our customers
- Reliable, on-time, on-budget provider
- Global reach
- Leading technology – higher data quality, more efficient acquisition
- Flexible and innovative solutions to survey requirements
- Leading profitability





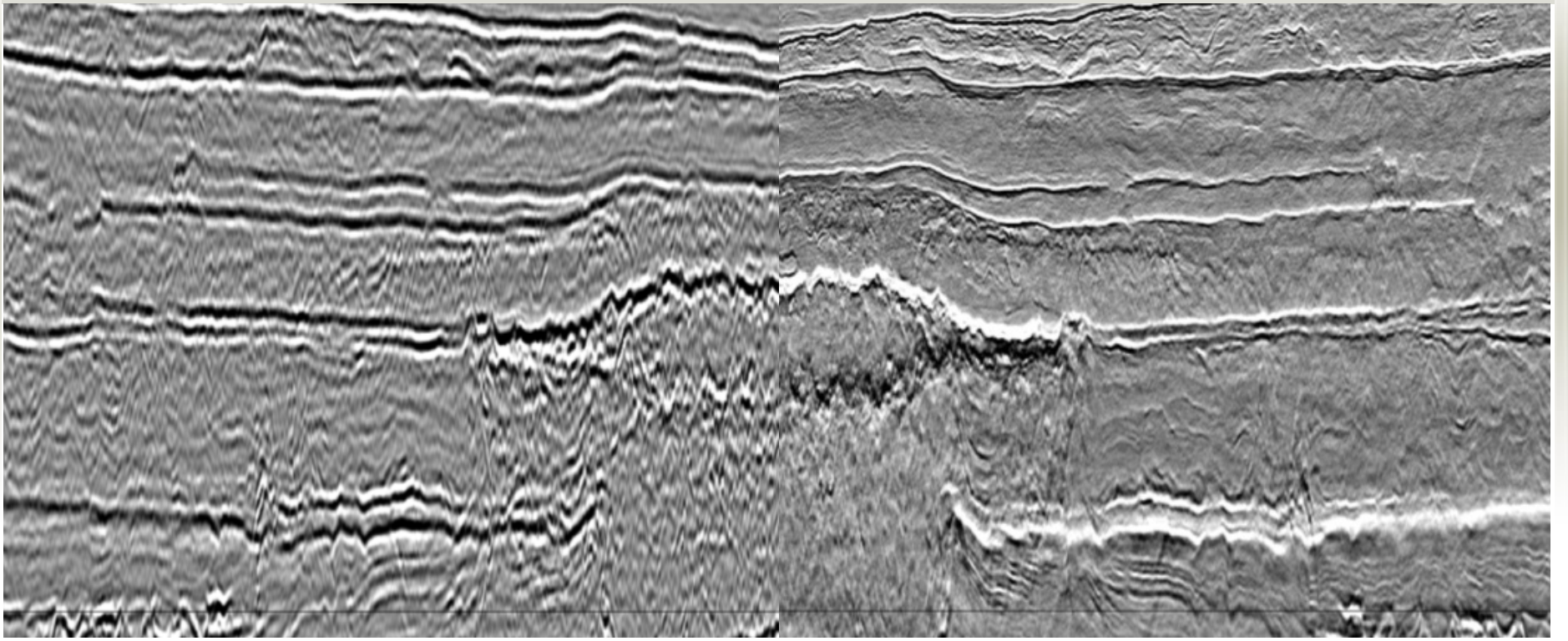
Market Outlook Marine Contract Seismic 2012

- PGS' contract margins will benefit from:
  - Less vessel time spent at shipyards
  - Tougher cost discipline
  - Increased number of GeoStreamer projects
  - Less low-end capacity in fleet
  - Increased productivity compared to 2011

- GeoStreamer margin expected to be 12-15 percentage points above comparable conventional projects

- Low-end conventional fleet unlikely to command good margins

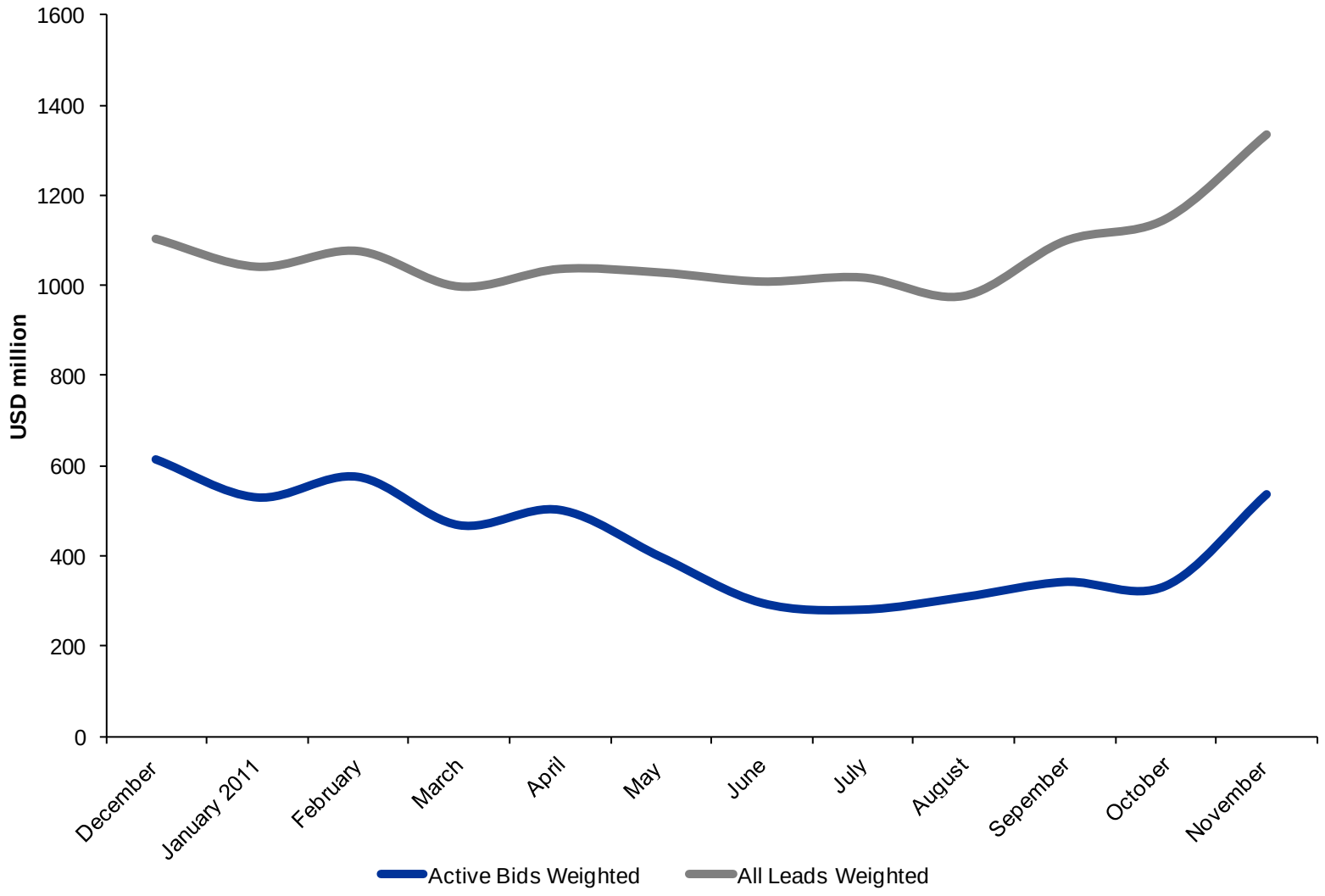
GeoStreamer Data Justify Price Premium



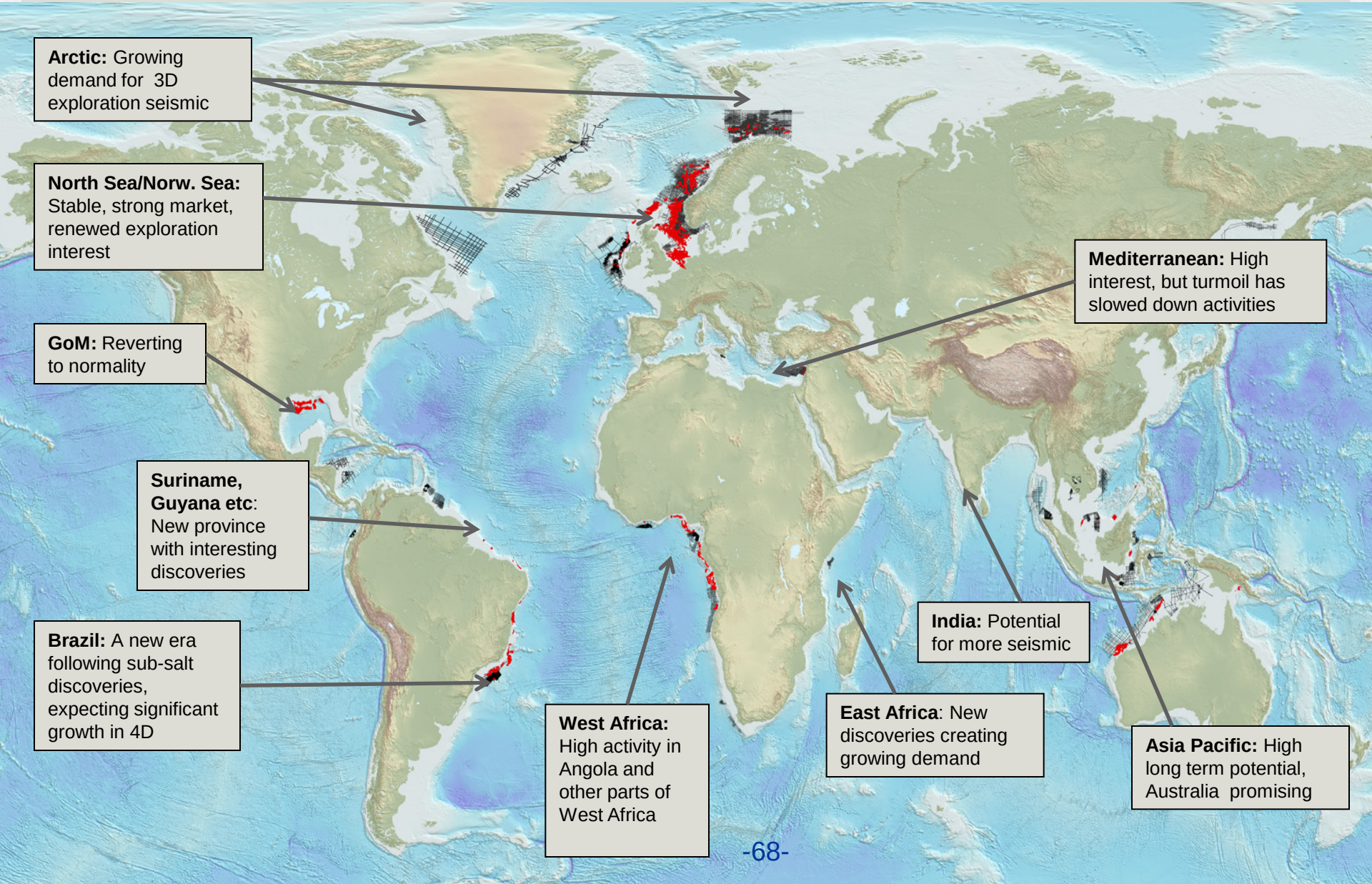
Conventional | GeoStreamer GS

Giving our customers a clearer image of the subsurface

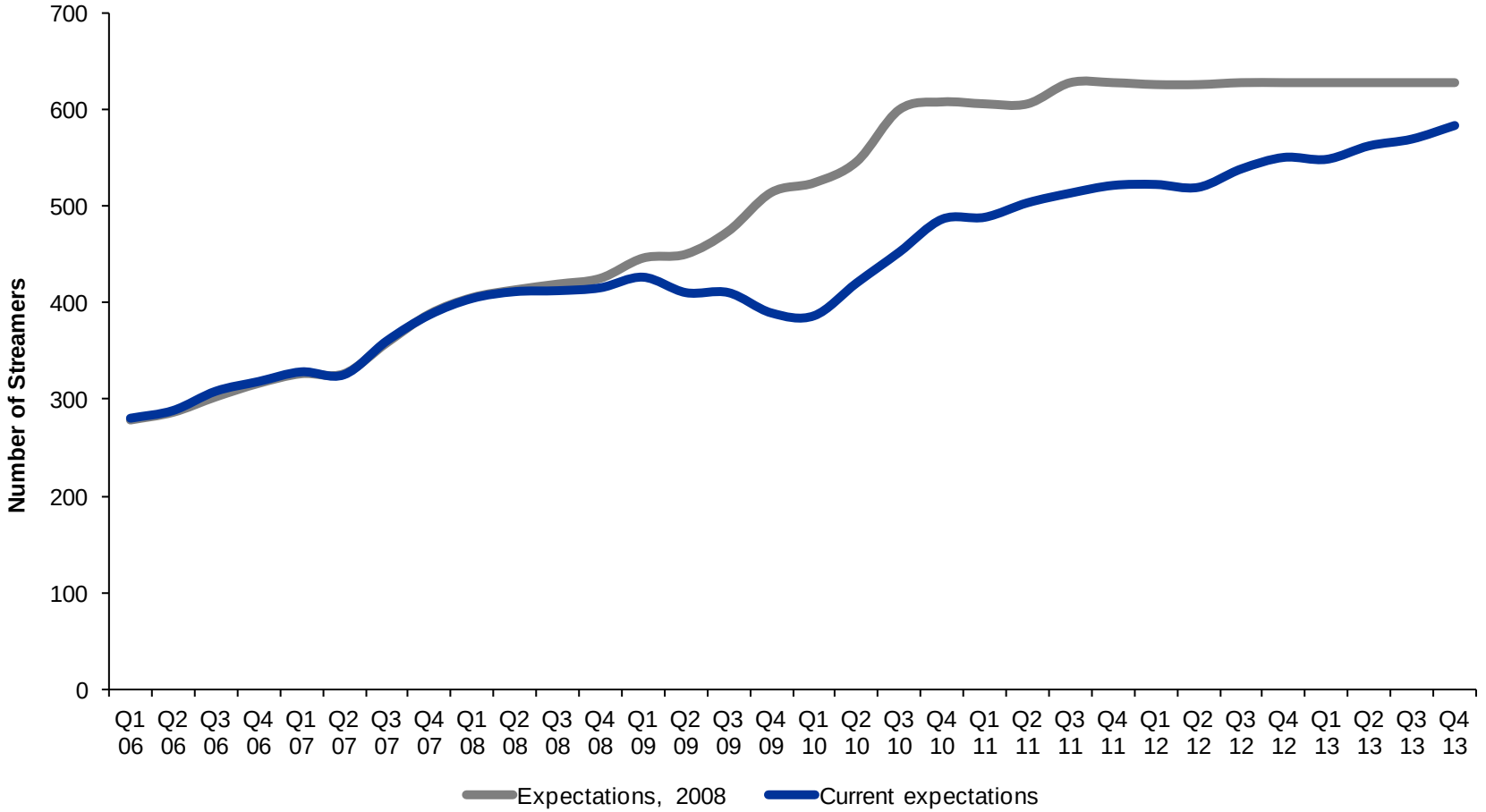
Bidding Activity is Increasing



Seismic Demand Expected to Continue to Grow in 2012



Supply Growth Flattening Out 2011 - 2012



Supply increase of 7% in 2011, 6% in 2012 and 6% in 2013

Source: PGS Internal Estimate. The “Current expectations” are derived from announcements made regarding stacking/scrapping and anticipation of capacity that will be laid off and added. The graph shows 3D streamers only, and the growth figures are compared from Q4 one year to Q4 the next year.

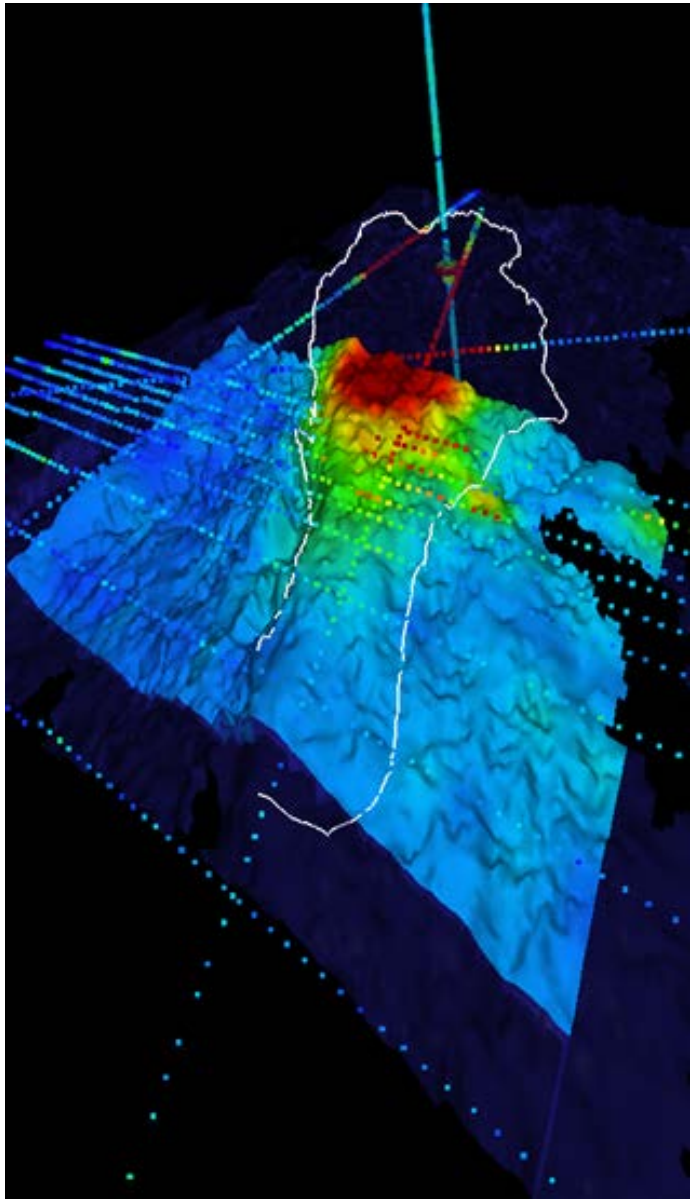
PGS's Competitive Position

- PGS primary strengths based upon GeoStreamer delivering superior data quality and the high-end fleet's flexibility, productivity and capacity:
  - GeoStreamer gives 20% productivity uplift in harsh weather areas in addition to quality uplift
  - V-class and S-class enable surveys ideal for efficient HD3D/4D *and* exploration surveys, e.g. using
    - 14 streamers x 100m
    - 12 streamers x 120m
    - 20 streamers x 50m

- PGS' uniquely positioned to meet Arctic growth:
  - 4 years of experience in 2D and 3D seismic, acquired almost 50,000 kms of 2D and 12,000 km2 of 3D in Arctic waters
  - 2011: The northernmost 3D ever carried out!

PGS ElectroMagnetics:
The Towed Solution for Resistivity Mapping

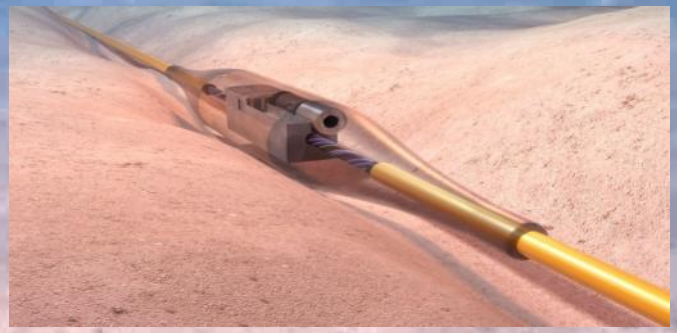
- On track for commercial services H2 2012
- High interest from clients because of combination of high quality and efficient operations
- Ongoing discussions / feasibility studies over a variety of prospects in both frontier and mature basins
- Excellent data quality from latest tests
  - Consistent noise performance over all offsets (from 800-8000m)
  - Effective noise reduction processing
- New source power equipment
  - Delivering stable source sequences



Fiber Optic Technology: Basis for Future Business

Permanent Reservoir Monitoring:

- PGS OptoSeis system will be installed on Jubarte, Brazil 2012
  - Deep water DNV certified design < 3000m water depth
  - High channel count, long durability and high reliability
- Tender activity for several commercial projects ongoing
- 4 to 5 projects expected to be tendered next 2 years



Land seismic acquisition:

- Development project with Shell – game changing system with high potential

Summary and Conclusion

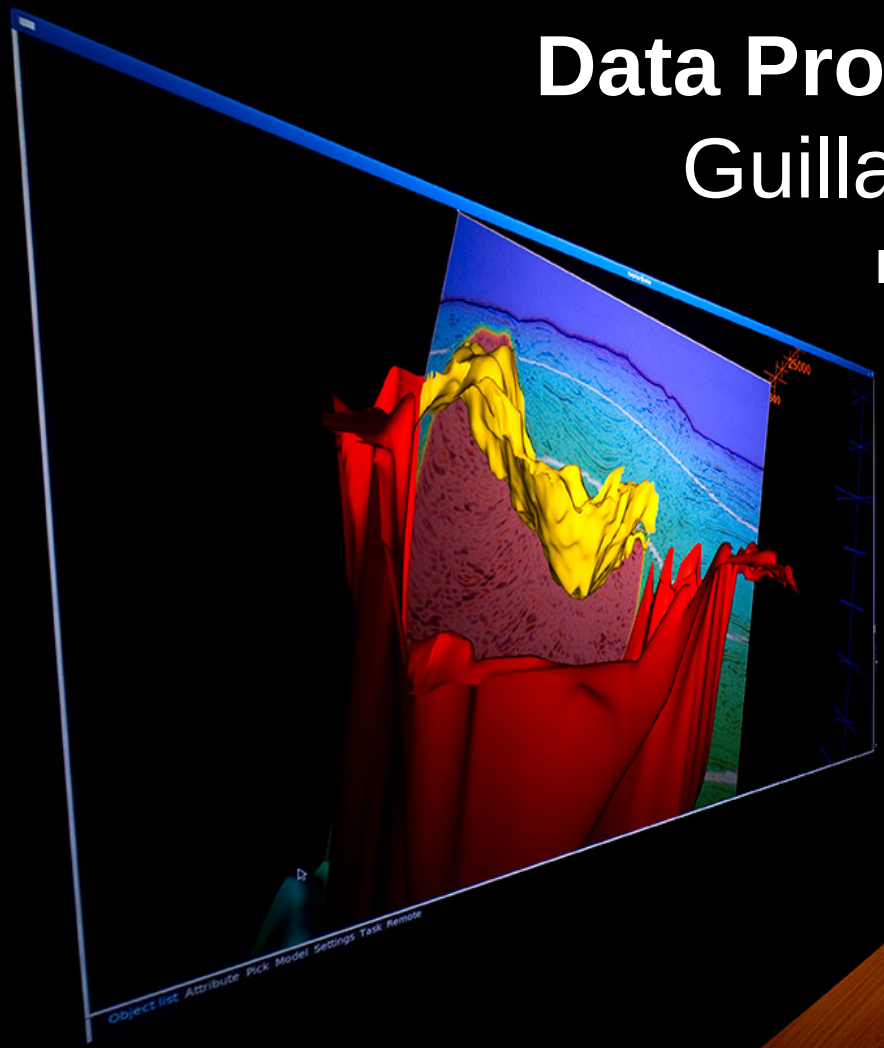
- PGS has competitive advantages through cost effective acquisition and new technology that deliver better data to customers
- Further improved productivity benefits and better supply – demand balance expected in 2012
- Strong enablers for future growth

Data Processing & Technology

Guillaume Cambois, EVP

PGS Capital Markets Day

December 16, 2011

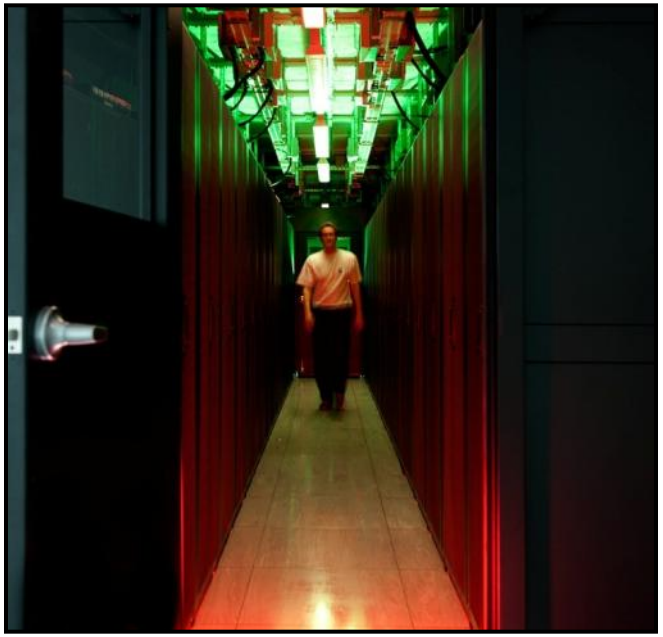


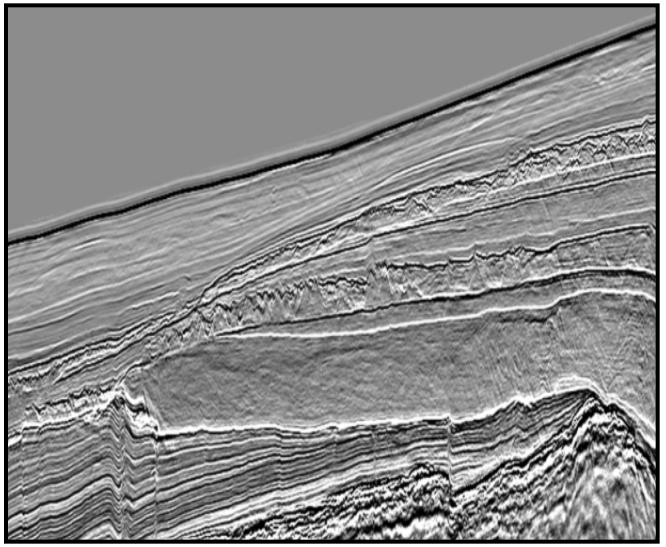
Data Processing and Technology – What Does the Business Unit Do?

Data Processing and Technology has two departments: Data processing provides a full range of processing, advanced imaging, and reservoir-related processing services to a global exploration and production customer base - and to PGS' MultiClient business. Geoscience & Engineering constitutes PGS' R&D center.

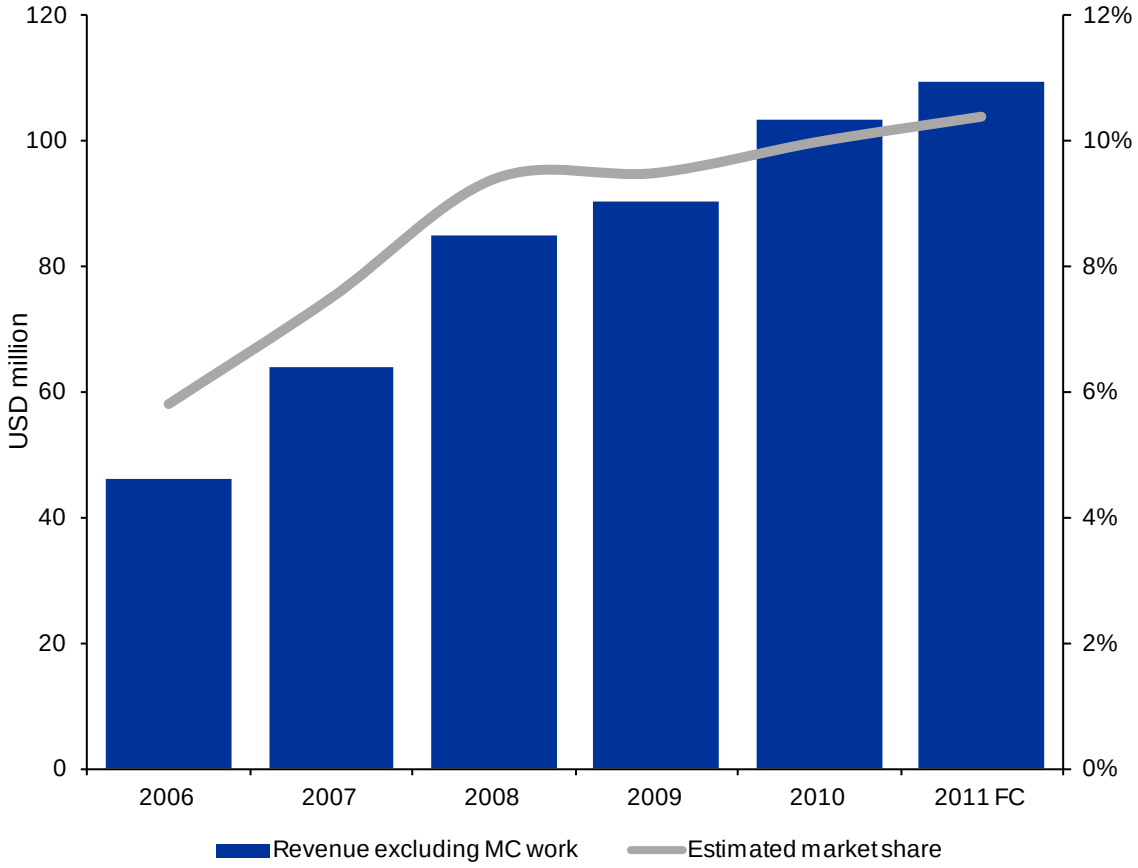
Data Processing &Technology: Managing Growth

- Data processing growth
  - Market buoyant with increased demand for high-end imaging and broadband solutions
  - Capacity increase to capture more of the growing market
- GeoStreamer: the reference technology in a growing number of basins
- GeoStreamer GS: a second layer of differentiation
- Continuously improving fleet efficiency:
  - Successful deployment of eBirds
  - Towards a full inline GeoStreamer solution





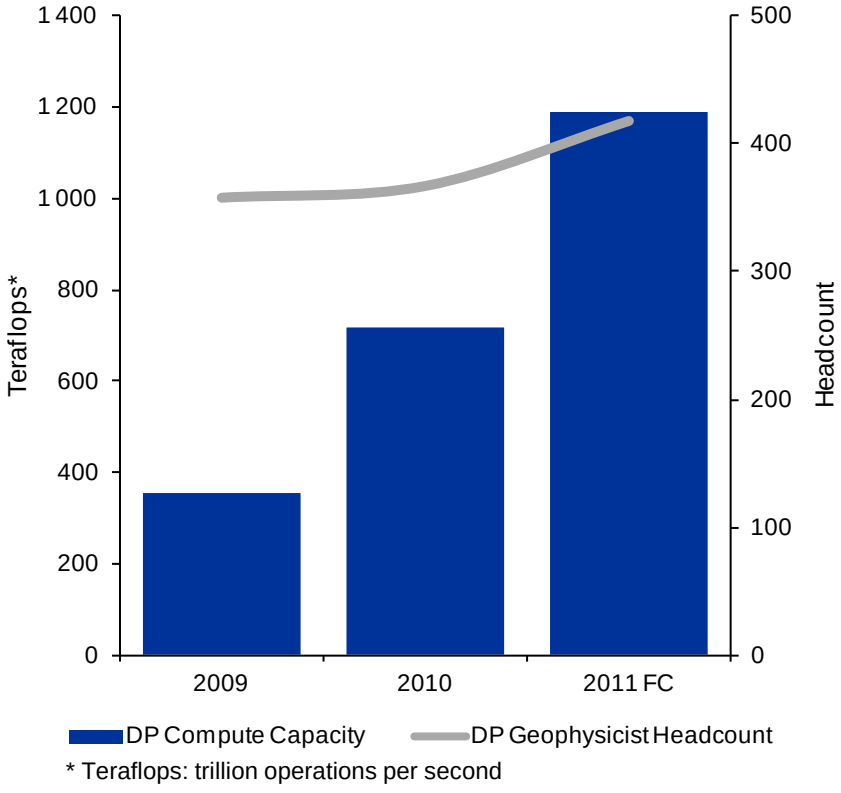
Growth in DP External Revenue and Market Share

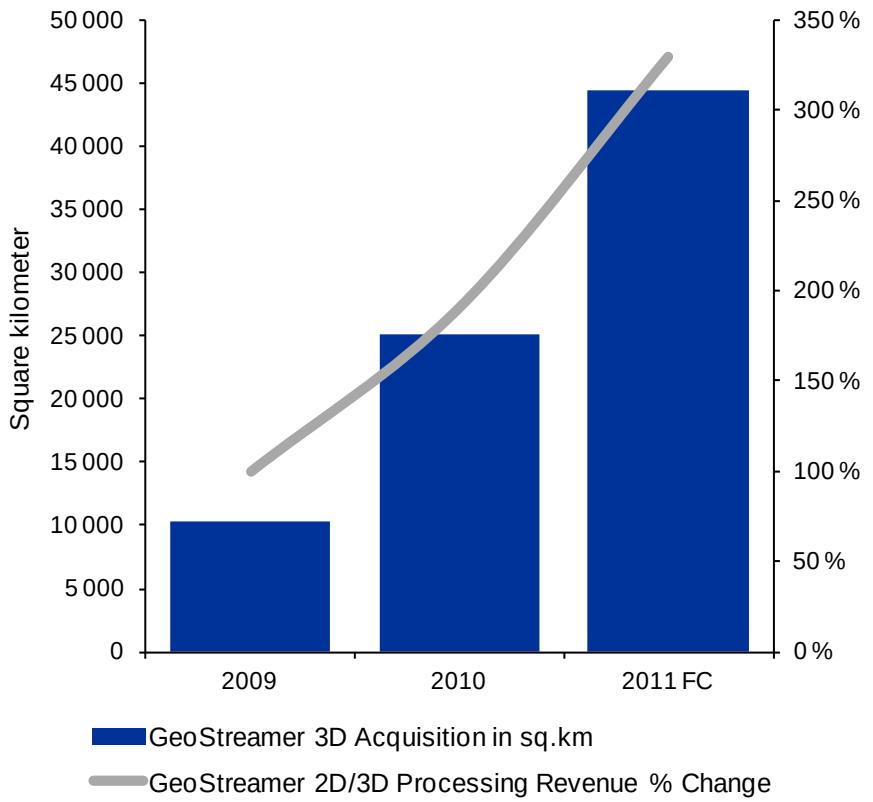


- From approximately 6% to 10% market share in 5 years
- More than doubling external revenues over 5 years – 19% annual compound growth rate
- Recognized expertise in GeoStreamer processing

Growth supported by GeoStreamer, high-end imaging and productivity improvements

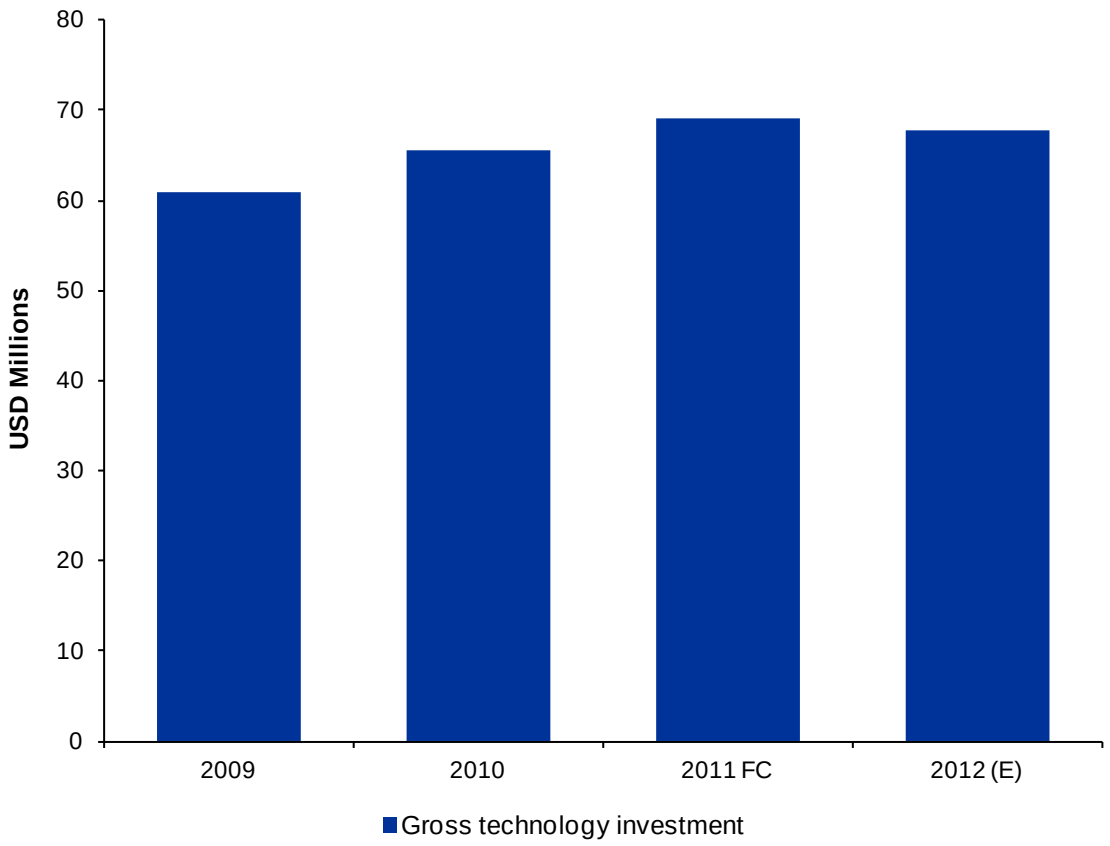
Growth in Capacity and GeoStreamer Revenues





Growth supported by high-end imaging and GeoStreamer

R&D Focus – Leadership in Efficiency and Technology



- GeoStreamer GS
- Continuous improvement of fleet efficiency
- Data Processing: High-end imaging and automation
- Increased reservoir focus
- Towed EM
- Fiber optic research

Focus on maintaining and optimizing investments

GeoStreamer Proven Benefits in Various Basins

Arctic:

- Clear efficiency gains due to increased weather window
- 5,300km^2 of 3D data and 18,150km of 2D data acquired since 2009
- Northernmost ever 3D survey acquired in 2011

North Sea:

- Improved resolution and reservoir characterization
- 28,500km^2 of 3D data and 53,500km of 2D data acquired since 2009
- Directly associated with two major recent discoveries

Mediterranean:

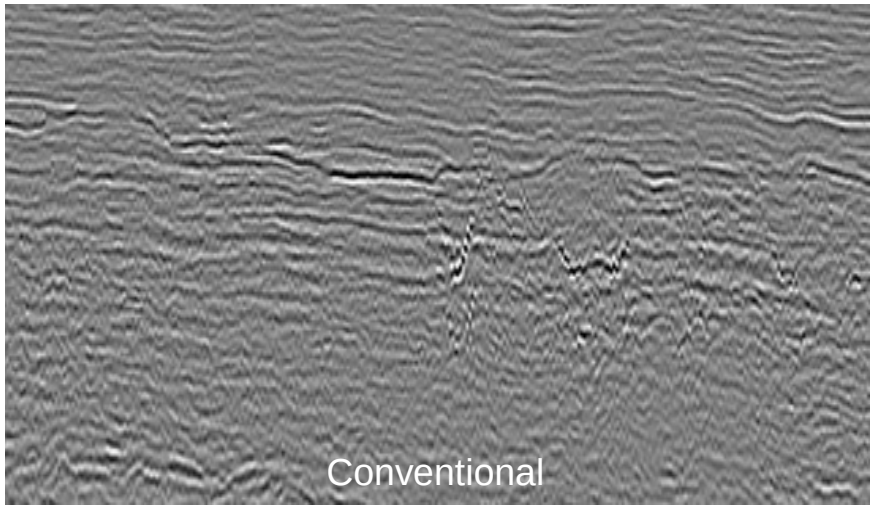
- Improved imaging below the Messinian evaporite
- 5,900km^2 of 3D data and 24,200km of 2D data acquired since 2009
- Significantly upgraded prospectivity in Cyprus and Lebanon

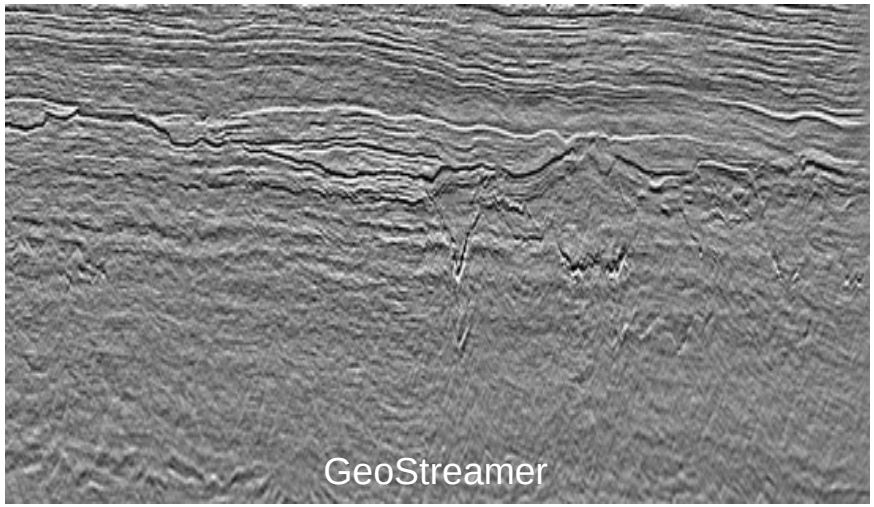
New areas:

- Northwest Shelf Australia: 10,500km^2 of 3D data acquired since 2010
- West Africa: 18,900km^2 of 3D data acquired since 2010
- Brazil: 5,050km^2 of 3D data acquired in 2011

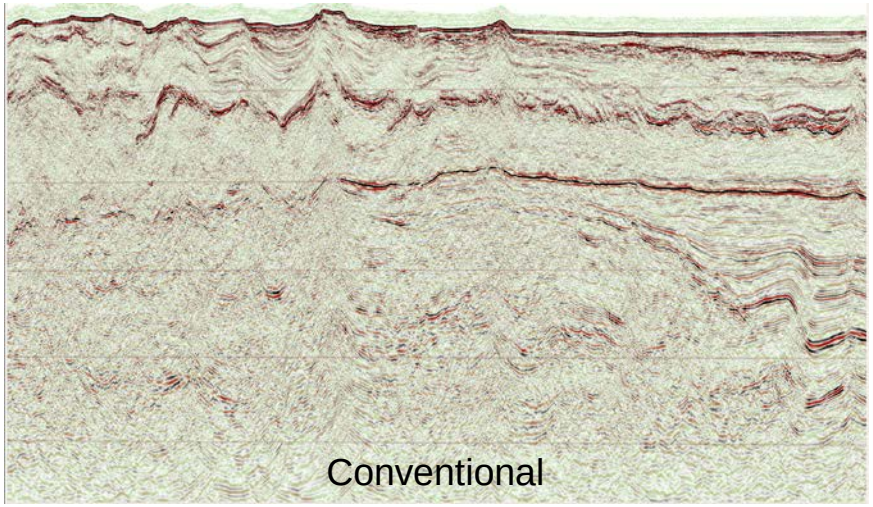
GeoStreamer: The Reference Technology in The North Sea and the Mediterranean

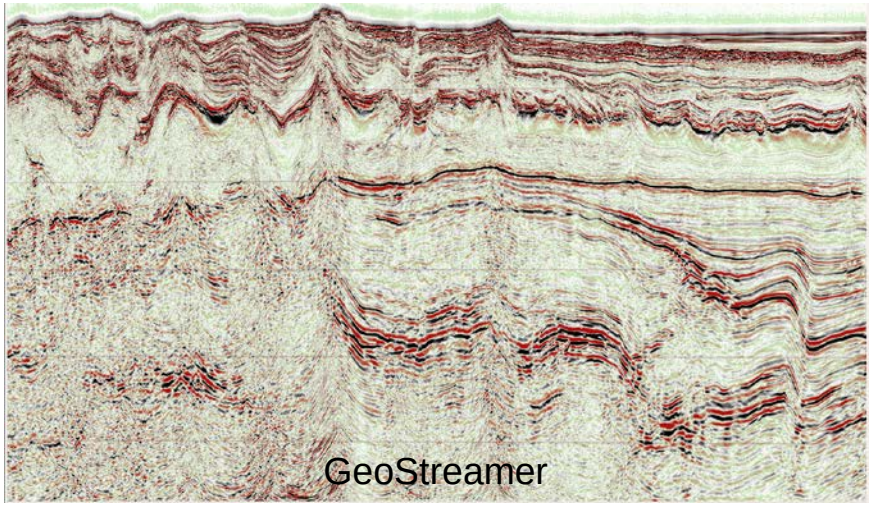
Improved resolution in the North Sea



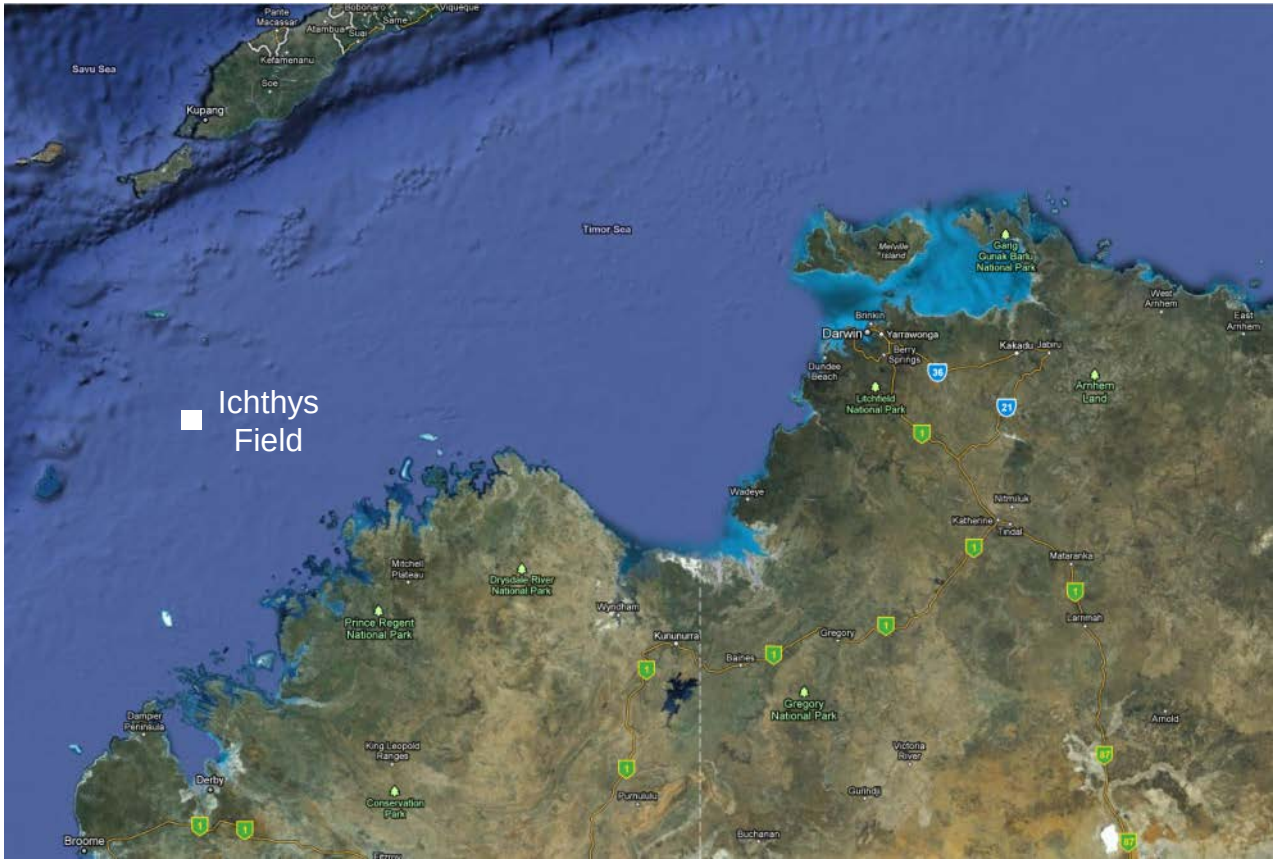


Deeper imaging in Cyprus





Northwest Shelf Australia: Inpex Ichthys Field

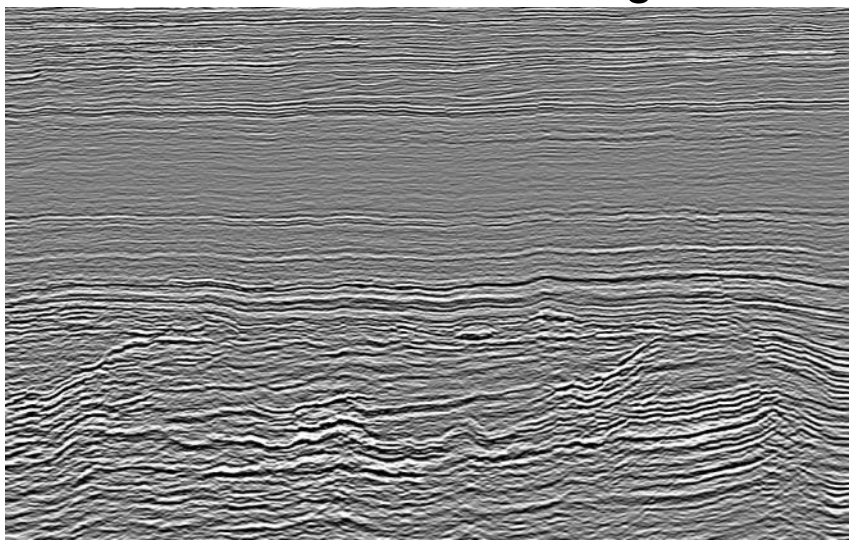


Challenge: Improve reservoir imaging below complex overburden

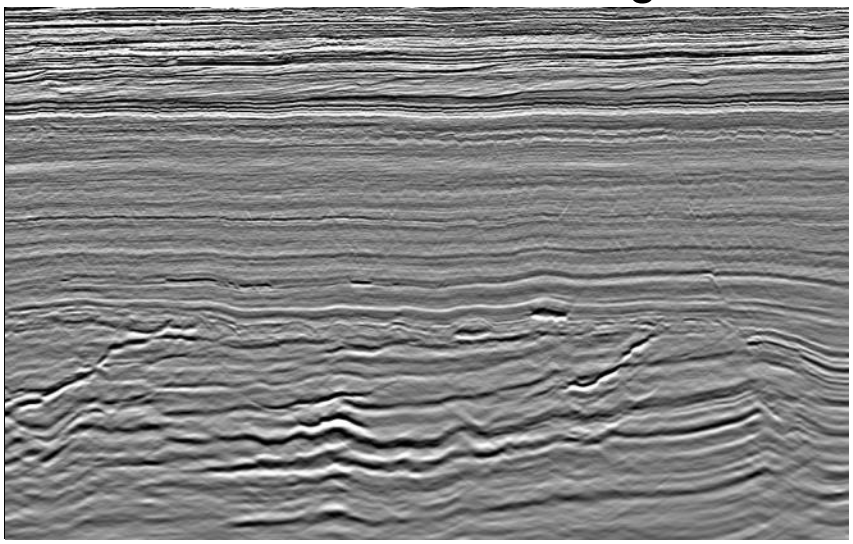
Ichthys: GeoStreamer Clearer Image

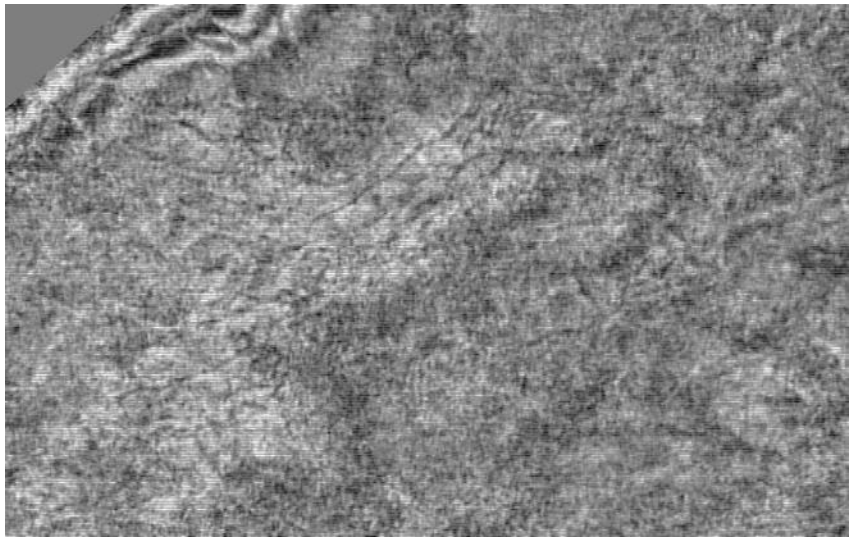
Courtesy of INPEX

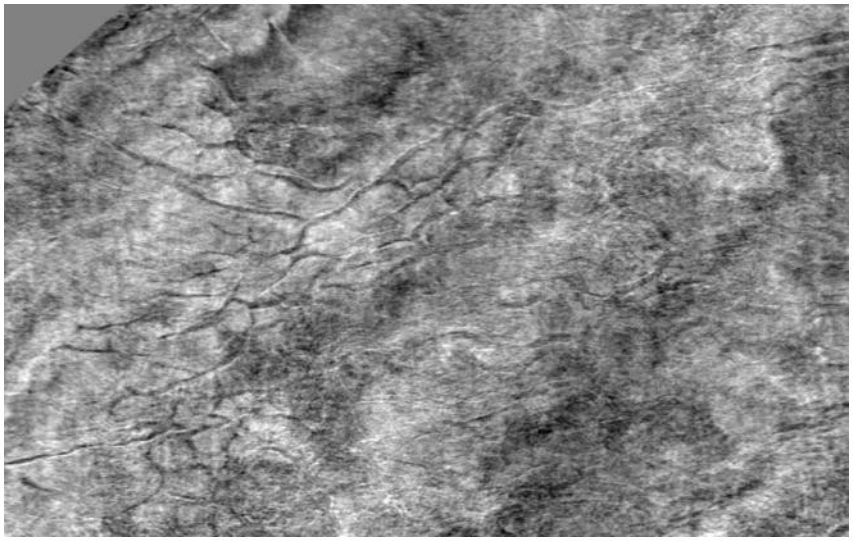
Conventional image



GeoStreamer image



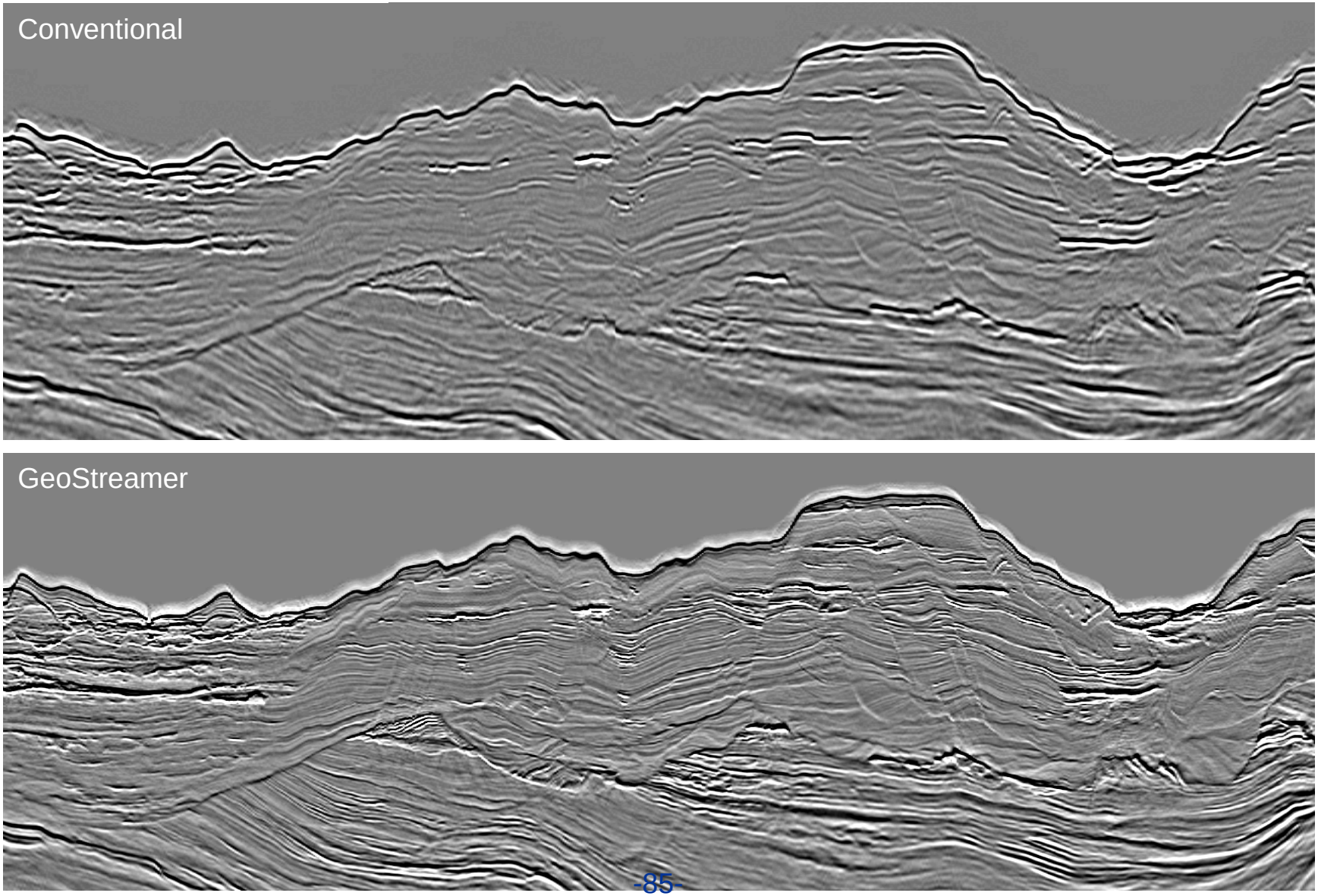




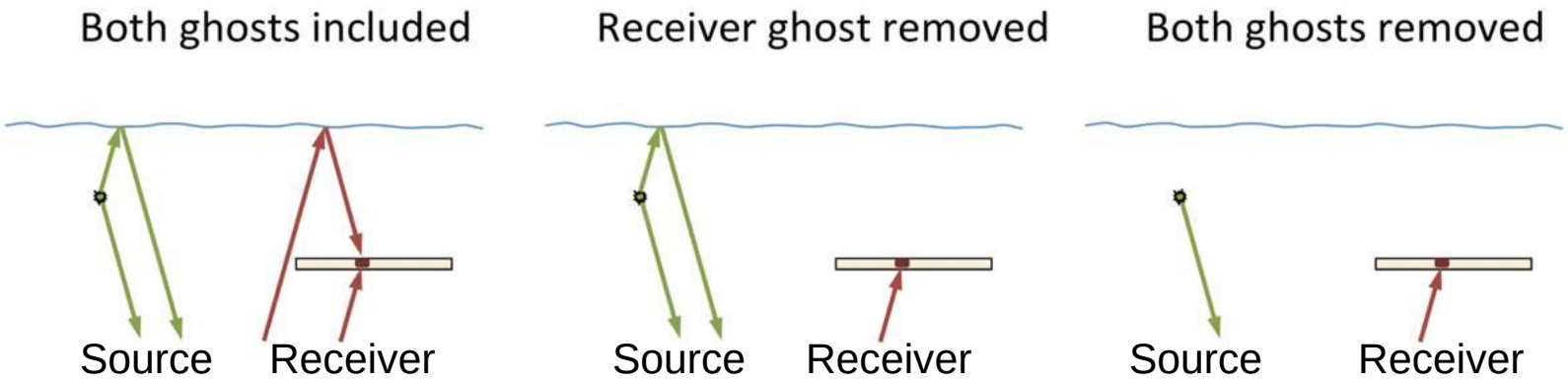
Brazil Camamu Basin

Challenge: Improve image resolution in structurally complex area

Camamu: GeoStreamer Clearer Image



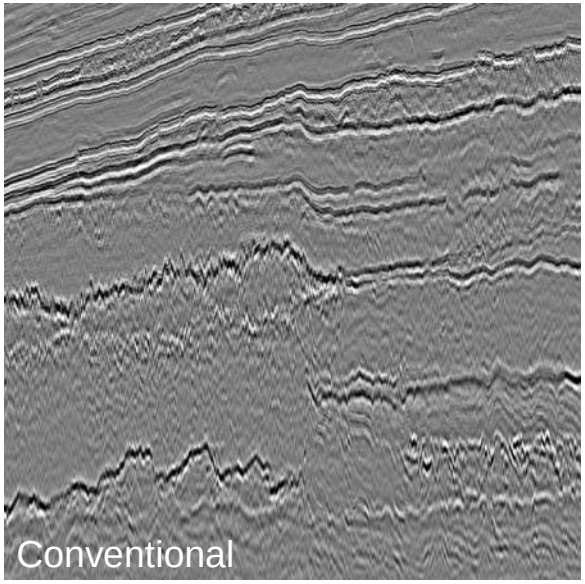
GeoStreamer GS
A Second Layer of Differentiation

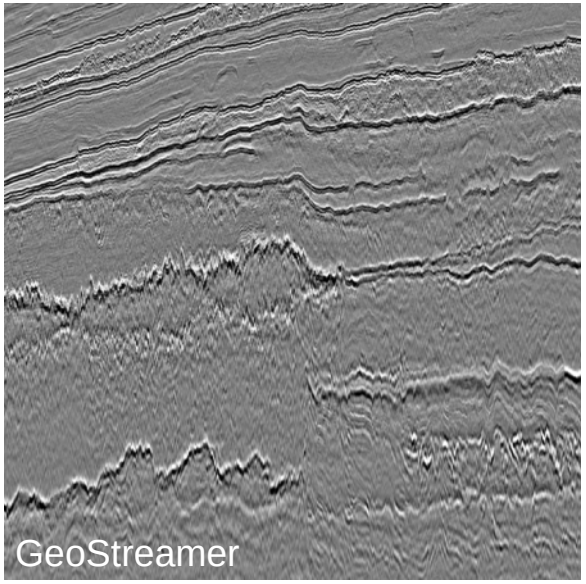


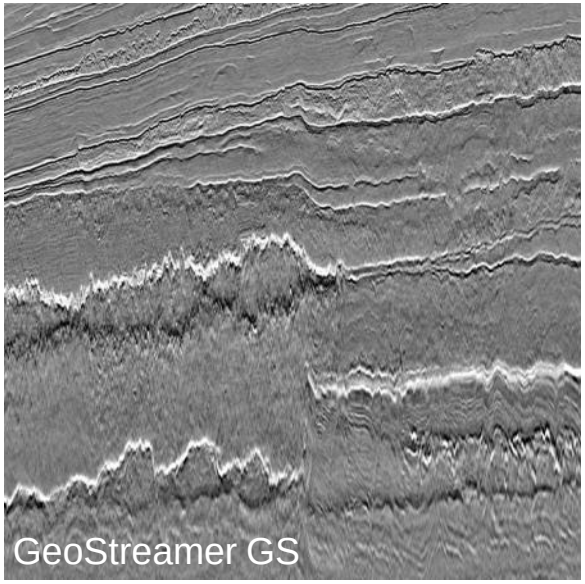
- Ghost reflections generate notches in the frequency spectrum
- GeoStreamer GS removes both source and receiver ghosts
- The resulting data have notch-free spectra yielding high definition images
- CAPEX for modifying source arrays to be GeoStreamer GS compatible is approximately USD 1 million per vessel
- End 2012 all GeoStreamer vessels will be equipped with GeoSource (GS)

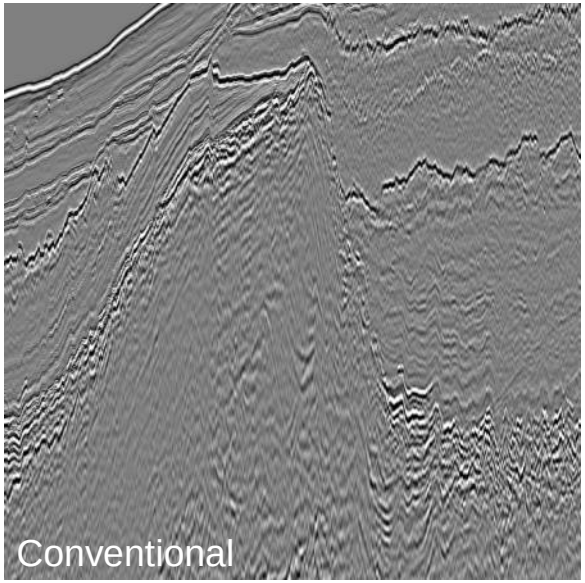
A step change in bringing higher resolution and better seismic images to clients

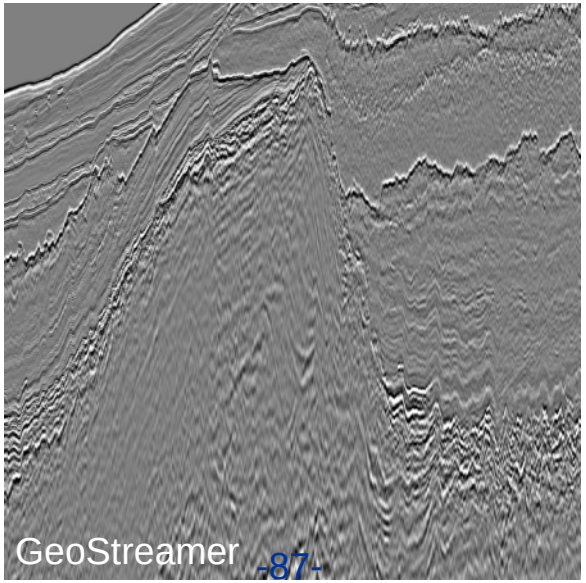
GeoStreamer GS: A Second Layer of Differentiation

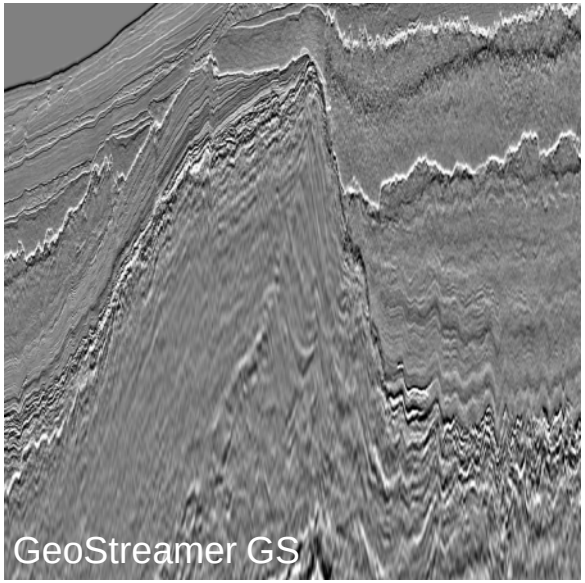










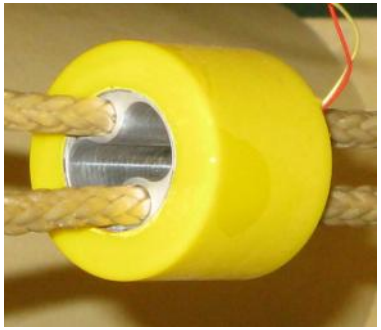


Towards a Full Inline GeoStreamer Solution

Full inline GeoStreamer solution

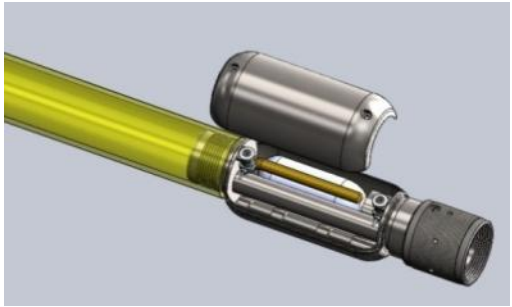
- Standard steering devices, acoustic pingers and retrievers are externally mounted on streamers
- The new eBirds wings are attached directly to GeoStreamer
- Next generation retrievers and acoustic pingers to be integrated within GeoStreamer
- Having all devices inline means:
  - Less drag
  - Less noise
  - Fewer barnacles
  - More efficient deployment and retrieval

eBird on GeoStreamer



Deployment plan

- eBirds already on *Ramform Challenger; Valiant* and *Vanguard* to be equipped in 2012
- Inline acoustic pingers and retrievers to be available at the end of 2012



Data Processing &Technology Setting the Standard

- Steady DP growth in a buoyant market
  - Global presence
  - GeoStreamer proprietary processing
  - High-end data processing capabilities
  - Increased productivity reduces cycle time for customers
  - Growth in processing capacity (geophysicists and computers)

- GeoStreamer benefits established in a growing number of basins
  - Unrivaled efficiency in harsh environment
  - Reference broadband solution in the North Sea and the Mediterranean
  - Becoming the reference in Northwest Shelf Australia, Brazil and West Africa
  - More basins to be upgraded as GeoStreamer fleet expands

- GeoStreamer GS further improves reservoir image quality

- Toward a full inline GeoStreamer solution

Safe and Efficient Operations

Magne Reiersgard, Executive Vice President Operations

PGS Capital Markets Day

December 16, 2011

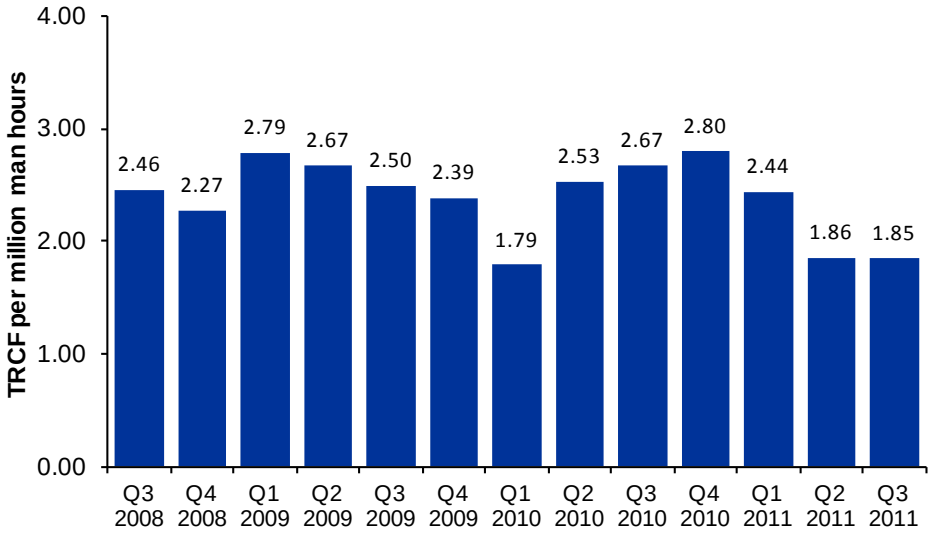
Operations – What Does the Business Unit Do?

Operations supports both Marine Contract and MultiClient with reliable and efficient production as well as resource planning and fleet renewal strategies

Outline

- Risk reduction and system focus in HSEQ
- PGS most sustainable competitive advantage – the fleet to beat
- Ramform productivity
- GeoStreamer and GeoStreamer GS roll-out
- Profit Improvement Plan
- Fleet Update
- 5th Generation Ramform Status
- Summary

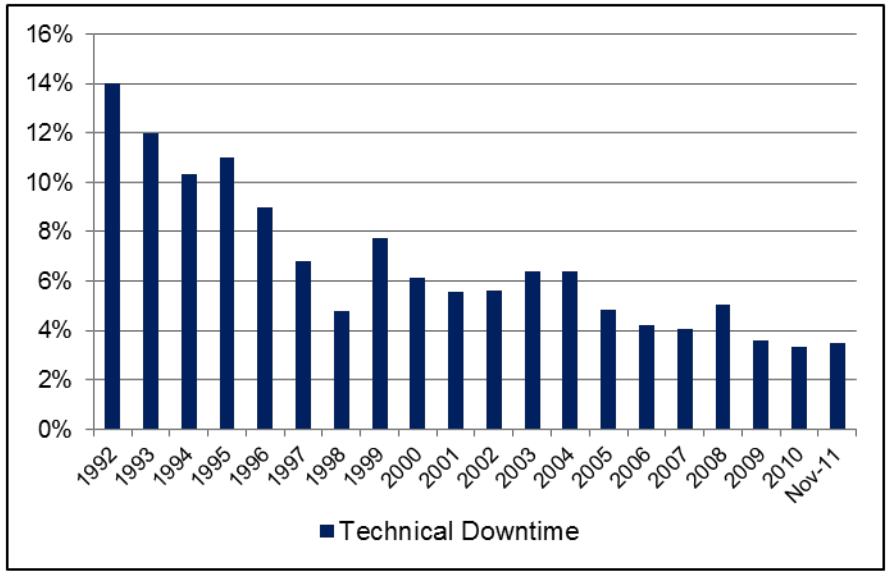
Continuous Focus on Risk Reduction and Systems Improvements in HSEQ

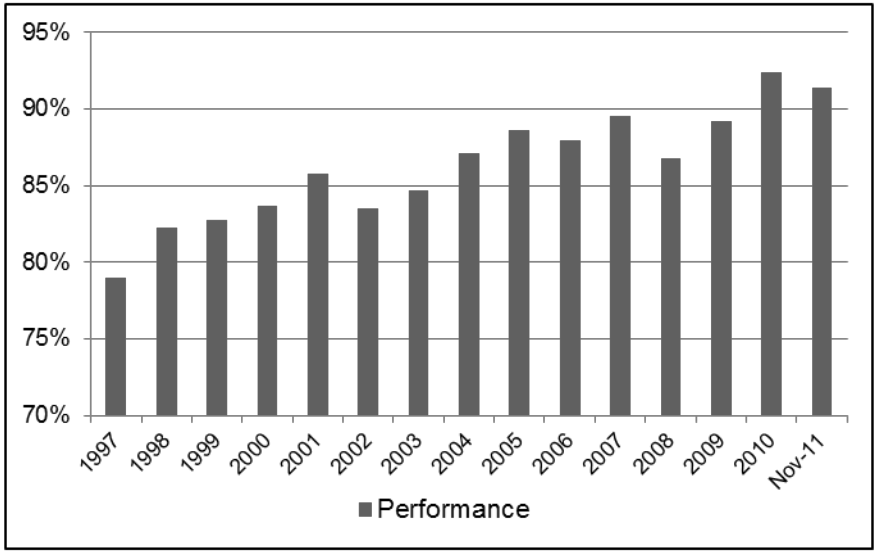


PGS HSEQ Management Systems sets the framework for high quality product and service:

- Continuous focus on risk assessment of all operations and job tasks
- Obtained OSHAS 18001 certification December 2011
- Reviewing and improving systems/processes in preparation for certification to ISO 14001
- Reduction of exposure to personnel by new designs of vessels and equipment
- Communication of our Corporate Responsibility efforts

The Best Performing Fleet in the Industry





- Continuous focus on reducing **technical downtime**
- Maintaining “best in class” operational **performance**

2011 performance influenced by supplementary maritime work and repeat single seismic equipment failure

5th Generation and GeoStreamer GS to deliver further sustainable improvements

Ramform Sustainable Productivity

Ramform Sovereign

- Progressed on year 3 (of 4) on Brazil HD4D work, mapping the world's largest oil fields
- Towing 14 streamers each 8100m @ 50m separation

Ramform Sterling

- Currently towing the worlds largest spread (footprint) in Asia Pacific
- 12 streamers each 8100m @120m separation
- More than 1,750 sq.km. acquired in first 2 weeks of operation

Ramform Vanguard

- 17 streamers each 3,600m @ 50m in the North Sea
- Repeat of 2008 4D survey acquired by *Ramform Sovereign*

On Track Towards Full GeoStreamer Deployment – GeoStreamer GS Deployment During 2012

Current GeoStreamer operations

- 3D
  - *Atlantic Explorer* (6 str*)
  - *Ramform Challenger* (10 str*)
  - *Ramform Valiant* (12 str*)
  - *Ramform Explorer* (10 str*)
  - Ramform Viking (12 str*)
  - Apollo (10 str*)
- 2D
  - *Sanco Spirit*
  - *Nordic Explorer*
    - *(From end December)*

Planned GeoStreamer rollout

- Additional 3D vessels
  - *Ramform Vanguard (12 streamers*)* scheduled for GeoStreamer upgrade Q2 2012
  - *Ramform 9 (16 streamers) scheduled for GeoStreamer Q1 2013*
  - *Ramform 10 (16 streamers) scheduled for GeoStreamer Q4 2013*

* In exploration mode with 100 meter streamer separation

GeoStreamer rollout plan driven by strong demand

Profit Improvement Plan 2012

- Yard-stay Management:
  - Costs
  - Quality
  - Duration
- Ongoing procurement initiative targeting both CAPEX and OPEX reductions
- Reduce non productive vessel time
- Support vessel cost reduction through targeted initiatives on fleet renewal and fuel efficiency
- Reorganization of Operations

Lower Capacity Fleet Management

- *Harrier Explorer* (2D) redelivered to Seabird following successful North Sea season
- *Nordic Explorer* being converted from conventional 6 streamer 3D to GeoStreamer GS 2D vessel in Q4/2011
- Secured option for up to 12 months of 2D/ source vessel capacity with Seabird, to be exercised within next 36 months
- Further reduction in conventional 6 streamer fleet being considered, as part of 5th generation Ramform delivery

Continuously Ahead of Competition

	1992 - 1996	1998 - 1999	2007 - 2009	2012 - 2014
Competition	4 – 6 streamers	6 – 8 streamers	8 - 12 streamers	10 - 14 streamers
PGS	8 - 12 streamers	12 - 18 streamers	12 – 22 streamers	14 - 24 streamers

Improved safety and cost efficiency

More streamers, longer streamers and wider & denser streamer spreads

HD3D market growth and GeoStreamer demand

5th Generation Ramform – Excellence in Productivity

PGS started the evolution of efficient seismic vessels based on traditional hulls

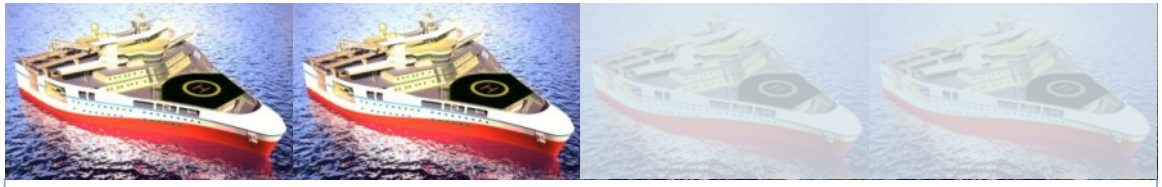
Through high capacity Ramform vessels with unmatched productivity merits

To the 5th Generation Ramform technology - Taking efficient seismic acquisition to the next level

Fleet Overview

Ramforms

5th Gen



2 ordered & option on 2 more

S-class

Ramform Sterling

Ramform Sovereign

V-class

Ramform Valiant

Ramform Viking

Ramform Vanguard

Ramform Challenger

Ramform Explorer

Conventional

PGS Apollo

Atlantic Explorer

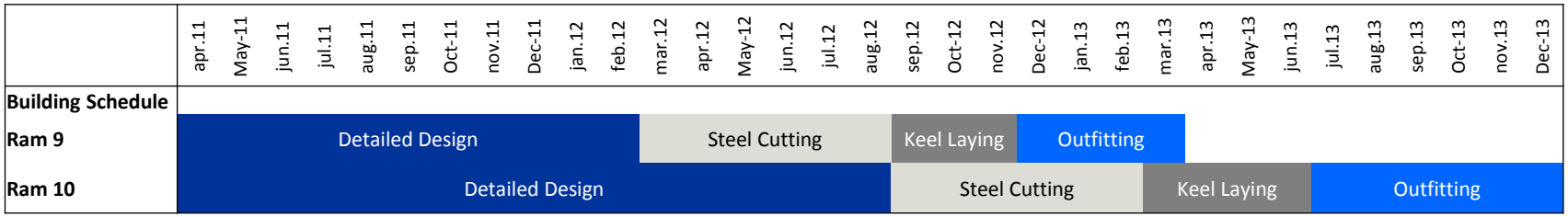
Pacific Explorer

2D

Nordic Explorer

Sanco Spirit

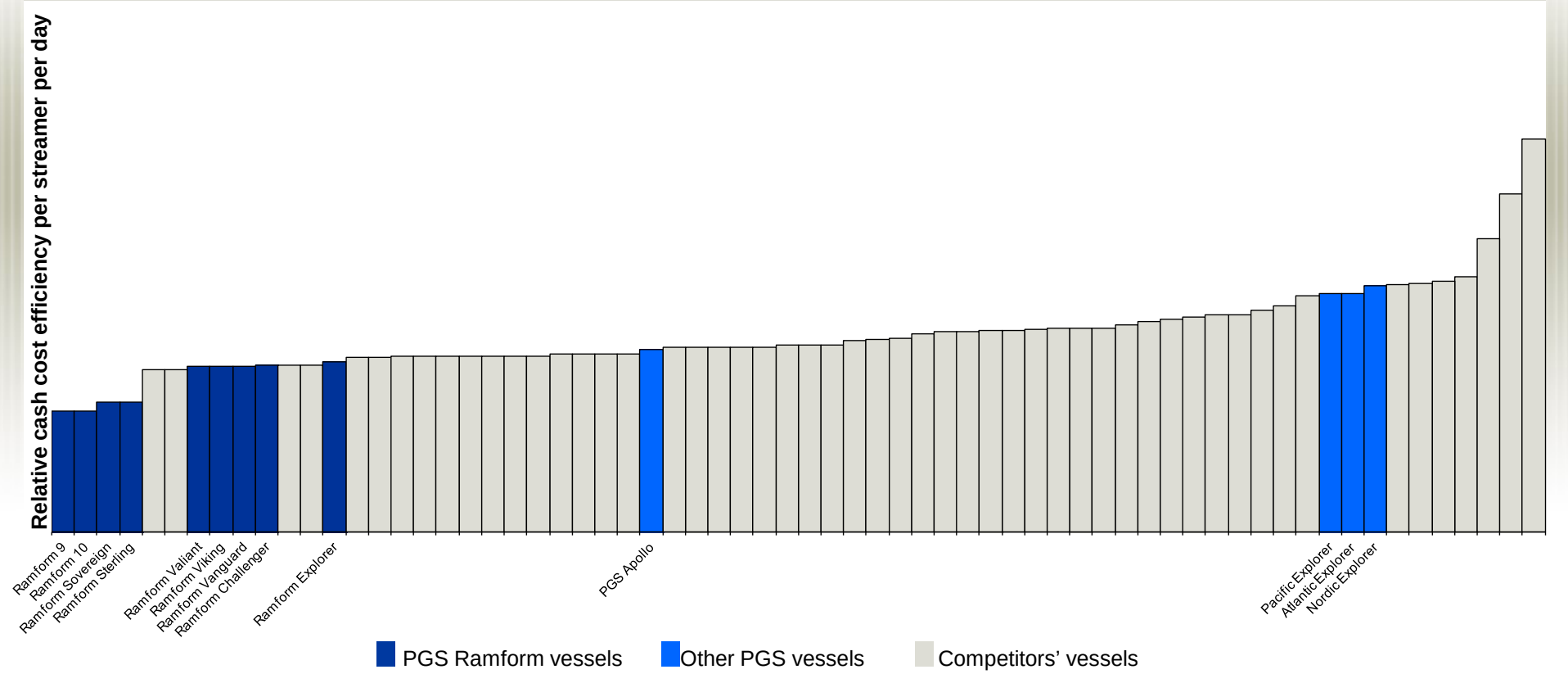
5th Generation Ramform – Delivery & Installments



- Both vessels on budget and on time
- Payment schedule:

2011	2012	2013
USD 50M	USD 200M	USD 250M

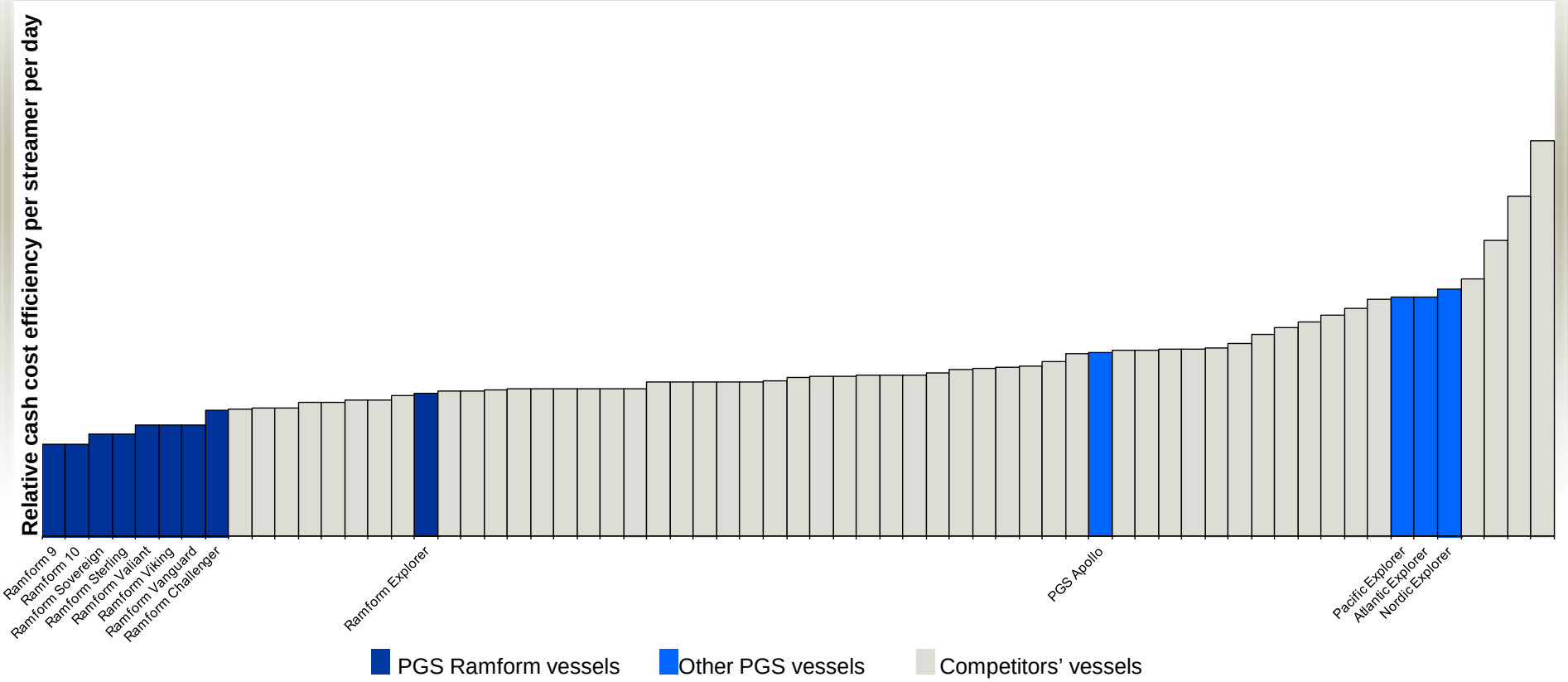
Favorably Positioned on the Industry Cost Curve



PGS fleet is positioned to generate the industry's best margins

Source: The cash cost curve is based on PGS' internal estimates and typical number of streamer towed, and excludes GeoStreamer productivity effect. The graph shows all seismic vessels operating in the market and announced new-builds. The Ramform 9&10 are incorporated with 15 streamers, S-class with 14 streamers and the V-class with 12 streamers.

PGS Further Increase Cost Advantage with HD3D



PGS fleet is well positioned to take advantage of a growing and more sustainable HD3D market

Source: The cash cost curve is based on PGS' internal estimates and typical number of streamer towed, and excludes GeoStreamer productivity effect. The graph shows seismic vessels operating in the market and announced new-builds. The Ramform 9&10 are incorporated with 20 streamers, S-class and V-class with 18 streamers and *the Ramform Challenger* with16 streamers.

Main Yard Stays Next 6 Months

Vessel	When	Expected Duration	Type of Yard Stay
Ramform Vanguard	Scheduled April-May 2011	Approximately 23 days	Intermediate class and installation of GeoStreamer.

Summary and Conclusion

- **Risk reduction and system focus in HSEQ**
- **PGS most sustainable competitive advantage – the fleet to beat**
- **Ramform productivity**
- **GeoStreamer and GeoStreamer GS roll-out**
- **Profit Improvement Plan**
- **Fleet update**
- **5th Generation Ramform Status**

Competitively Positioned
Performance Through the Cycle
Concluding Remarks

Jon Erik Reinhardsen, CEO and President

PGS Capital Markets Day

December 16, 2011

Leading Marine Geophysical Company

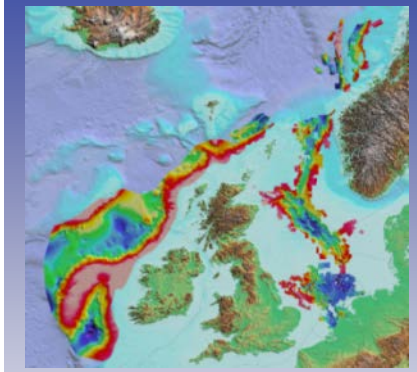
Marine Contract

Marine market leadership

ca 50% of Q3 2011 LTM Revenues

Marine Contract acquires seismic data exclusively for oil and gas exploration and production companies

MultiClient



Diverse MultiClient library

ca 40% of Q3 2011 LTM Revenue

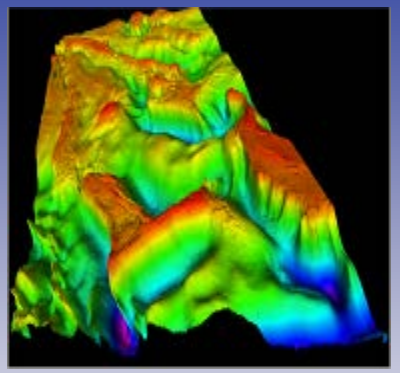
MultiClient initiates and manages seismic data PGS acquires, markets and sells to multiple customers on a non-exclusive basis

Operations

Productivity leadership

Operations supports Marine Contract and MultiClient with vessel resources and manages fleet renewal strategies

Data Processing & Technology



Technology differentiation

ca 10% of Q3 2011 LTM Revenue

DP&T processes seismic data acquired by PGS for its MultiClient library and for external clients on contract and manages research and development activities

Client focus ● Global presence ● Innovation leadership

Strategic Positioning:
An Industrialized Player in a Growing and Maturing Market

- Conservative balance sheet with ability to handle challenging market conditions
  - Ability to invest in technology, library and capacity through the cycle
  - Ability to pay dividend
- A cost effective and modern fleet that attracts customers and delivers profitability
- Differentiation through technology
- Proactive allocation of capacity between Marine Contract and MultiClient to optimize profitability and cash flow
  - High MultiClient pre-funding as driving rule

2012 Guidance

- EBITDA in the range of USD 650-700 million
  - Corresponding to a Marine Contract EBIT margin in the range of 10-15%
- MultiClient cash investments in the range of USD 300-325 million
  - Pre-funding level above 100%
  - Approximately 40% of effective 3D streamer capacity allocated to MultiClient (GeoStreamer only)
- Capital expenditures in the range of USD 350-400 million
  - Of which approximately USD 200 million to new build program

PGS – A Focused Marine Seismic Company

- Productivity & scale
  - Building new 5th generation Ramform vessels
  - Leading 3D MultiClient library return
- Leading edge Data Processing capabilities
- Strong operational capabilities
- Technology differentiaton
  - GeoStreamer GS
  - Fiber optic monitoring
  - Electromagnetics
- Proactive financial management

Competitively Positioned – Performance Through the Cycle

Competitively Positioned
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