

UNLOCKING THE POTENTIAL:

OFFSHORE NEWFOUNDLAND AND LABRADOR

Check Against Delivery – Sept. 27, 2017

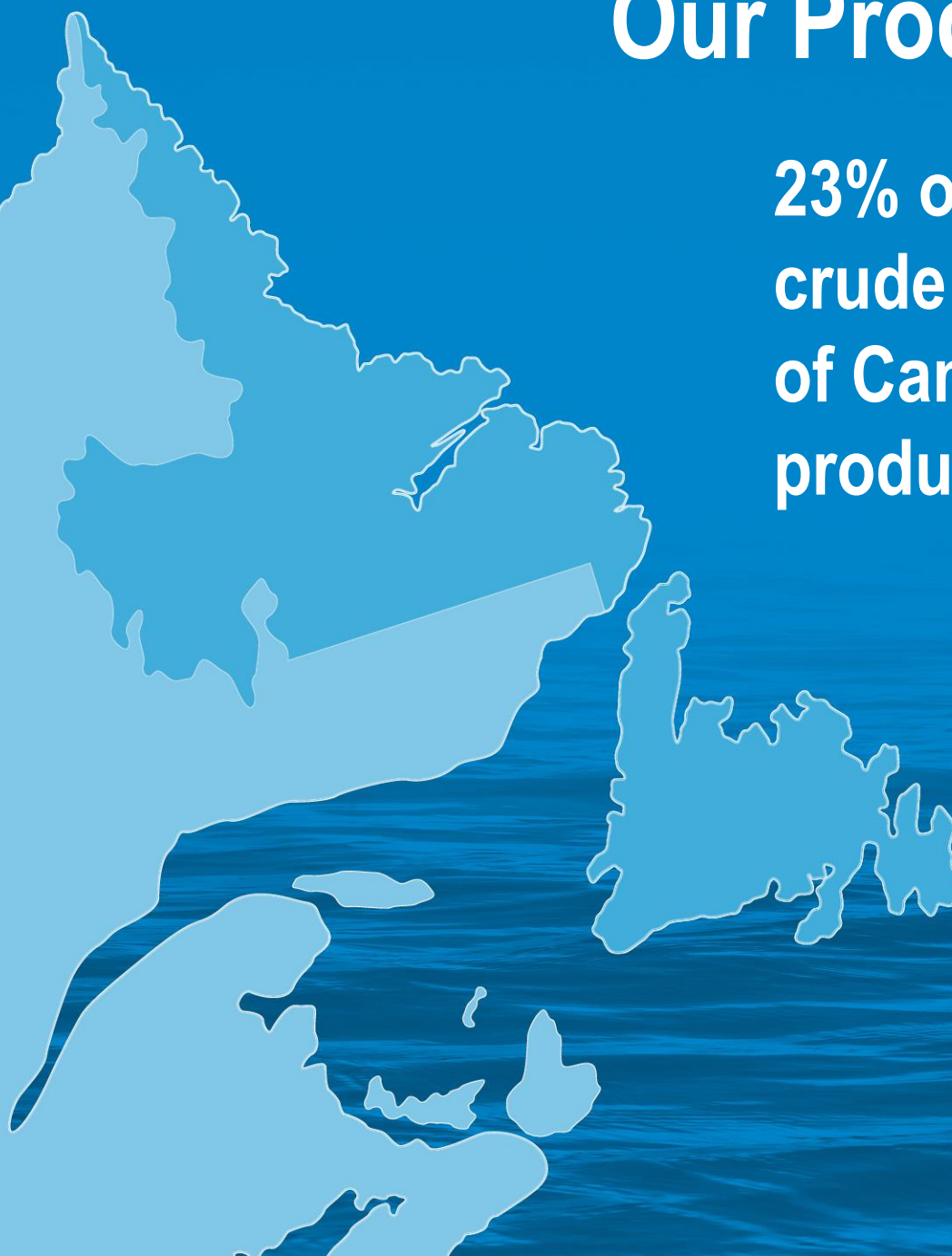


UNLOCKING THE POTENTIAL: OFFSHORE NEWFOUNDLAND AND LABRADOR



Our Producing Fields

23% of Canada's light
crude production; 6.5%
of Canada's total oil
production



 **HIBERNIA**

 **WHITE ROSE**

 **HEBRON**

 **TERRA NOVA**



HIBERNIA, TERRA NOVA, AND WHITE ROSE HAVE PRODUCED

1.6 BILLION
BARRELS OF OIL SINCE 1997



WILL BEGIN
PRODUCING
IN LATE 2017



WILL BEGIN
PRODUCING
IN 2022



BAY DU NORD
WORLD'S LARGEST OFFSHORE
DISCOVERY OF 2013

\$\$\$

OVER
120 BILLION
DOLLARS
OF REVENUE

NEARLY
50 BILLION
DOLLARS
OF INVESTMENTS

PILLARS OF STRATEGY

PROSPECTIVITY

- ✓ New Data (2D/3D seismic)
- ✓ Resource Assessment

FISCAL CERTAINTY

- ✓ Royalty
- ✓ Benefits
- ✓ Equity

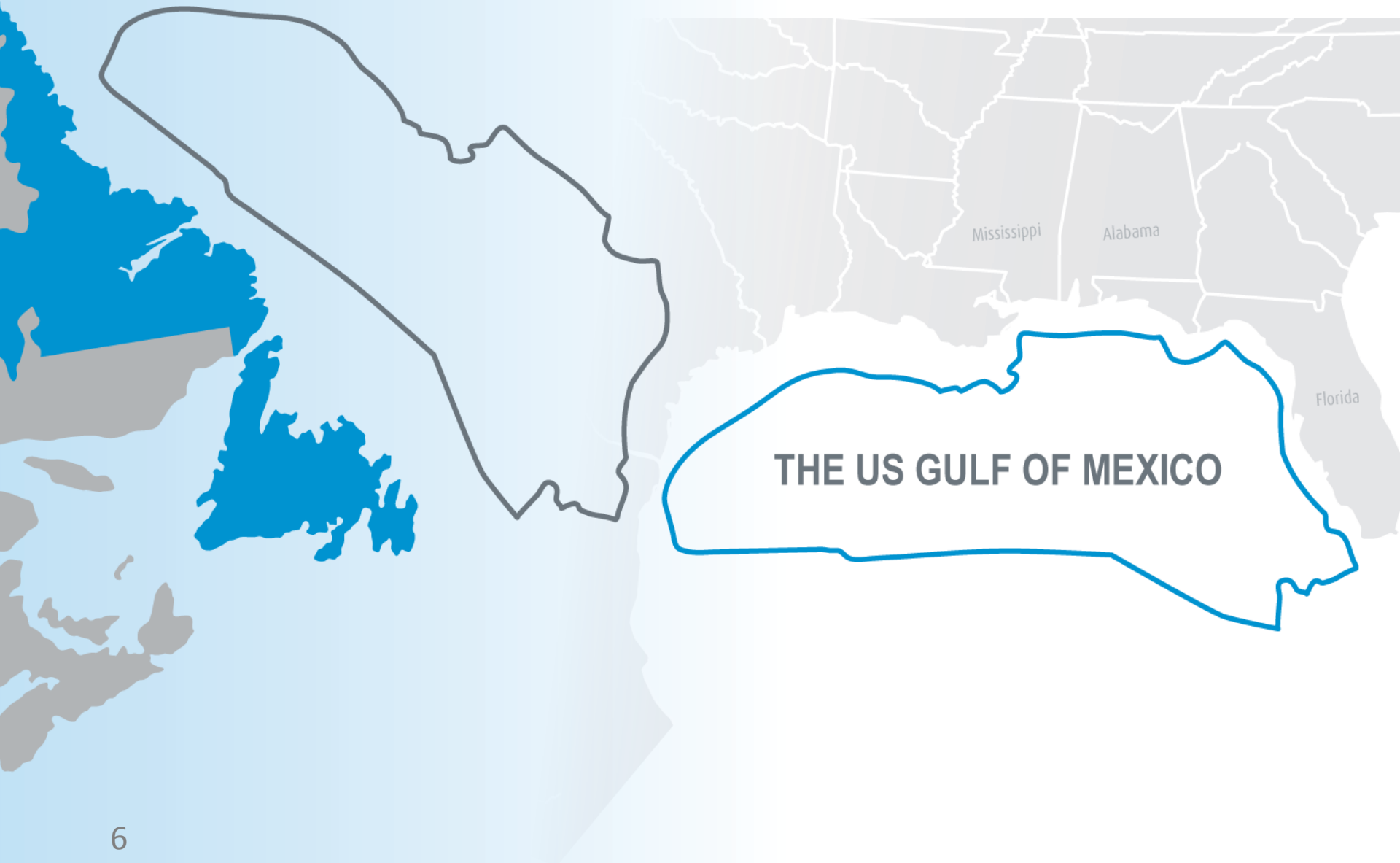
REGULATORY

- ✓ Remove Barriers (CTA)
- ✓ Scheduled License Rounds
- ✓ Proven Pathway to Development

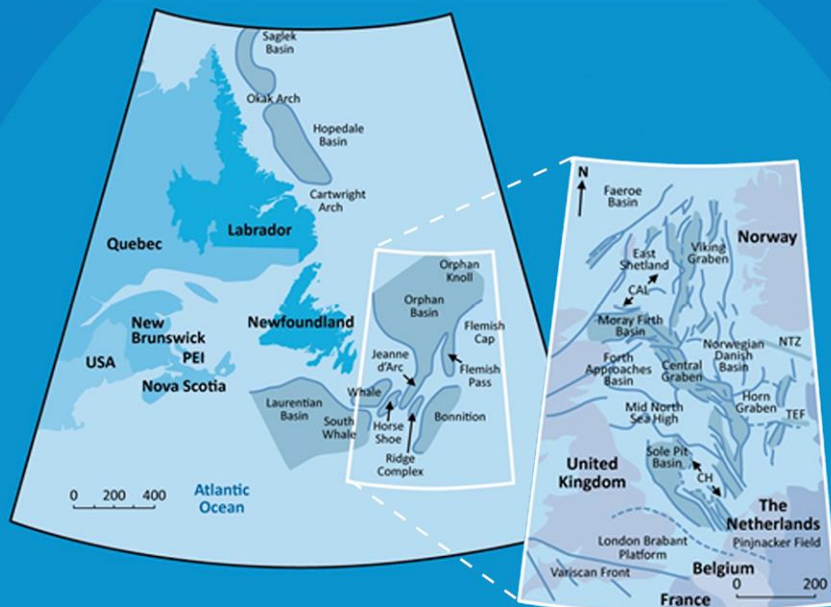
INDUSTRY EXPERTISE

- ✓ Established Supply and Service Base
- ✓ Top-tier Companies
- ✓ Capable and Driven Workforce

OPPORTUNITY OF SCALE



SIGNIFICANT OFFSHORE BASINS



Total Offshore
Sedimentary Basins
Area [km²]

545,169



657,929



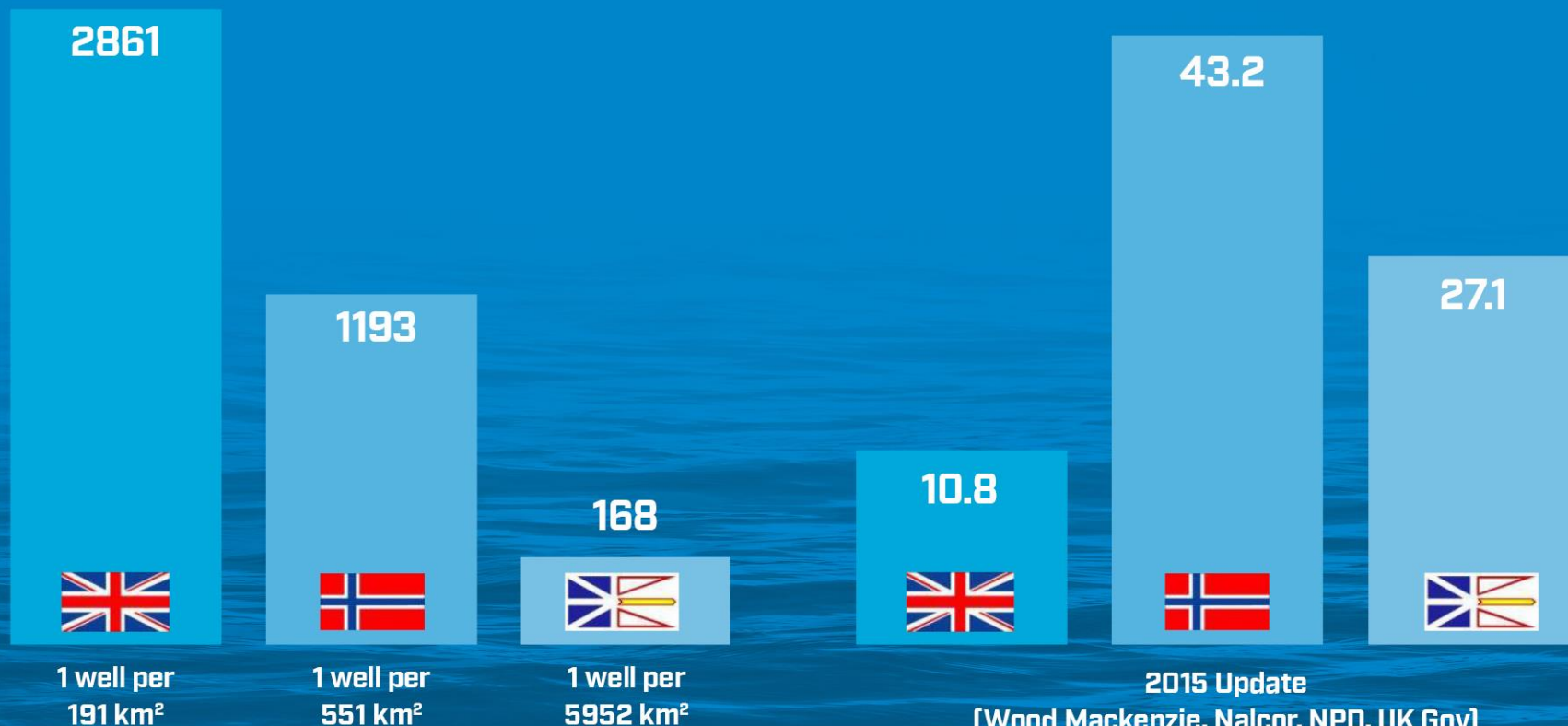
1,000,000



FAR FEWER WELLS...BUT SIMILAR SUCCESS

Exploration Wells

Average MMBO discovered per
Exploration Well

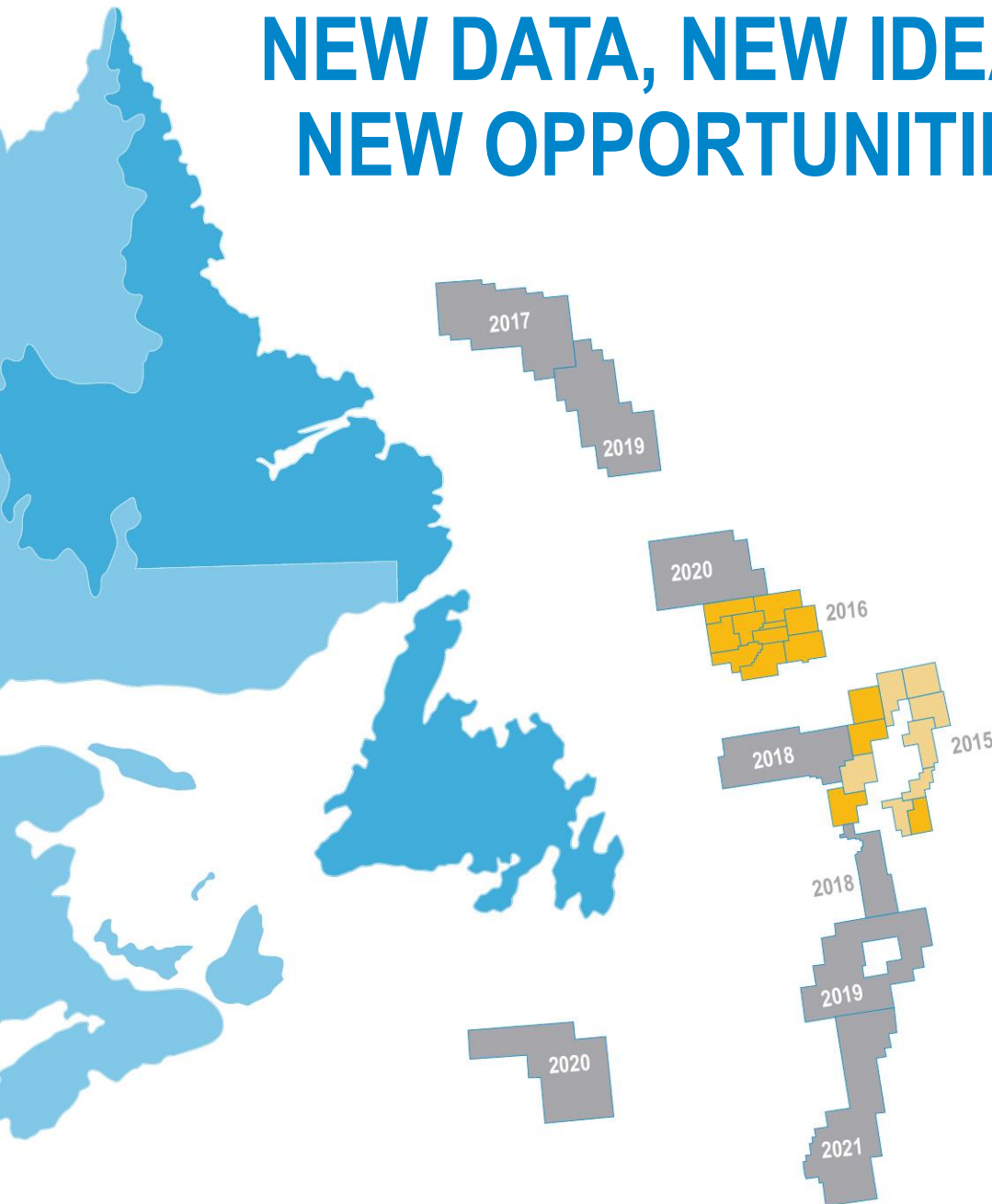


HIBERNIA FIELD = ~150 KM²

NEW DATA, NEW IDEAS, NEW OPPORTUNITIES

UNDERSTANDING OUR RESOURCES

- Approx. 1.5 million km² of offshore area
- Less than 7% licensed
- Multi-client 2D and 3D seismic data available
- Detailed resource assessments conducted and results released prior to bid closing





Survey covers over
145,000 line kms (2011-
2016)

From regional 60x60km
grids to detailed 5x5 km
grid in license round
areas

EXPLORING OUR VAST POTENTIAL

Since 2010, Nalcor has pursued a multi-year Exploration Strategy founded in the collection of geoscience data to evaluate Newfoundland and Labrador's offshore slope and deepwater basins for oil and gas potential. The exploration work to date has resulted in the collection of significant quantities of 2D and 3D data, and revealed the potential of substantial resources.

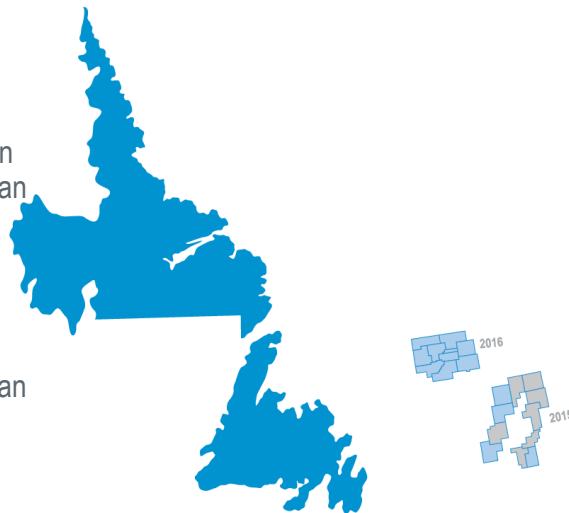
Resource Assessments

2016

25.5 billion barrels of oil and 20.6 trillion cubic feet of gas potential identified in an independent study covering blocks on offer in the West Orphan Basin.

2015

12 billion barrels of oil and 113 trillion cubic feet of gas potential identified in an independent study covering blocks on offer in 2015 license round.



UNDERSTANDING OUR RESOURCES



Area

- Approx. 1.5 million km² of offshore area.
- Over 20 basins mapped
- Less than 7% licensed.



Seismic Program

- One of the largest in the world.
- More than 145,000 line km of new 2D multi-client data acquired by the end of 2016.
- Over 9,000 km² of 3D data currently being collected.



License Rounds

- Established in 2013.
- Predictable and structured.
- Resource assessment results released prior to bid closing.

UNLOCKED POTENTIAL



Orphan Basin

Cape Freels

St. John's



CAPE FREELS PROSPECT

300 kilometres off the coast of Newfoundland.

Within **200 mile limit**.

Located within the **West Orphan Basin**.

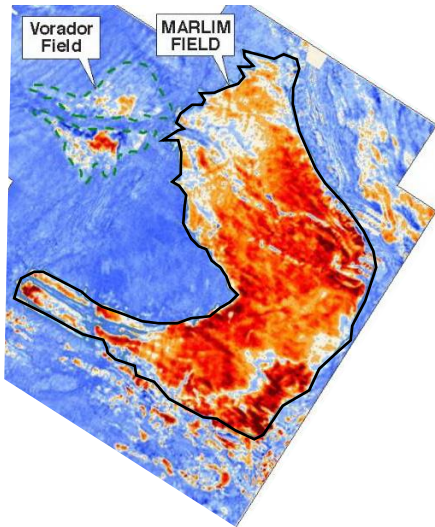
Focus of the **2016 License Round**.

One of the largest undrilled prospects globally.

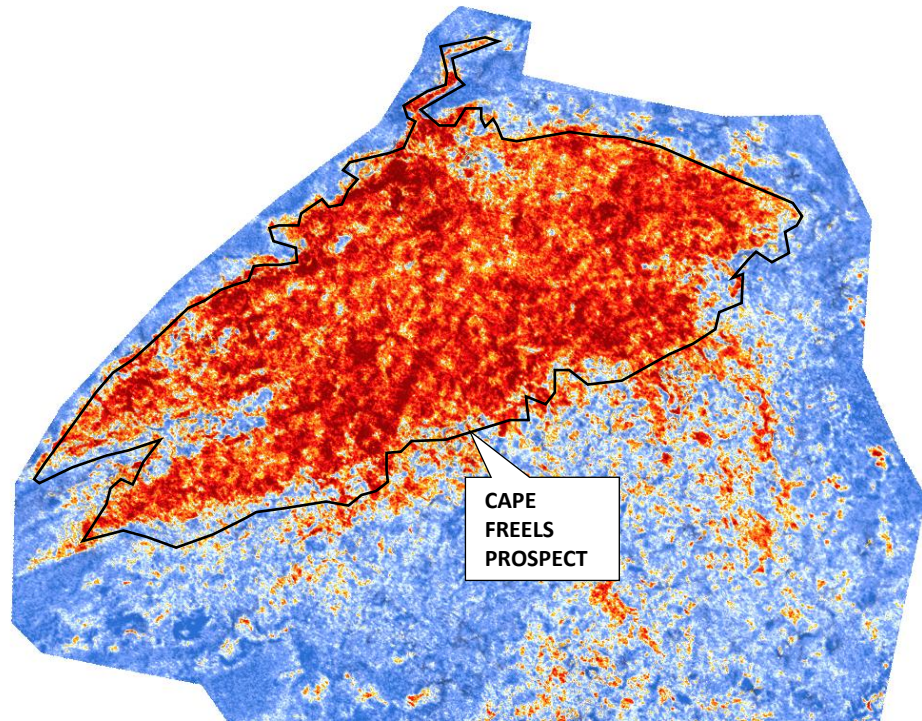
GEOLOGICAL ANALOGUES

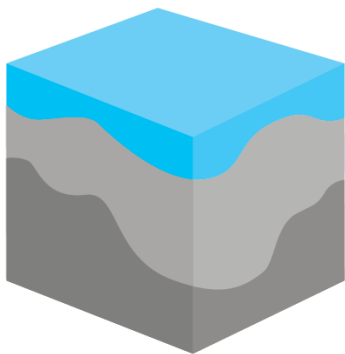
Same Scale

Marlim Field, Brazil



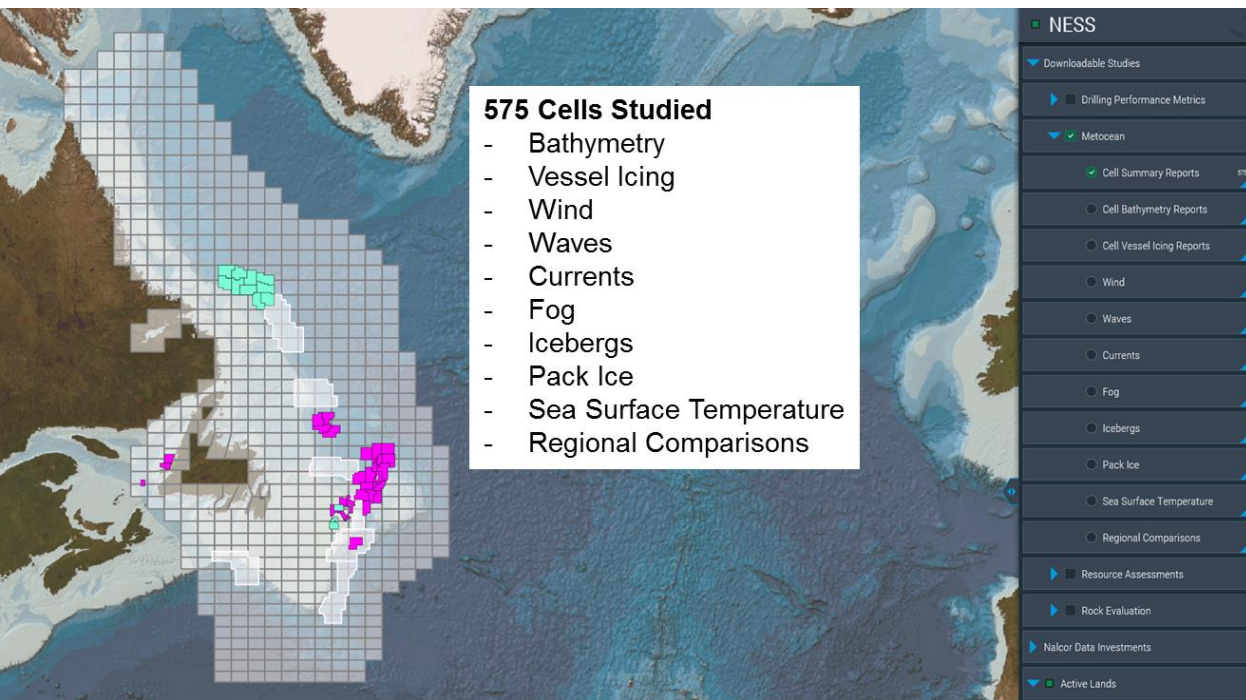
Cape Freels





NESS

Nalcor Energy Exploration Strategy System®



NESS HIGHLIGHTS



2.3 million km² of metocean analysis



112 offshore wells analyzed



866 satellite scenes



23 mapped offshore basins



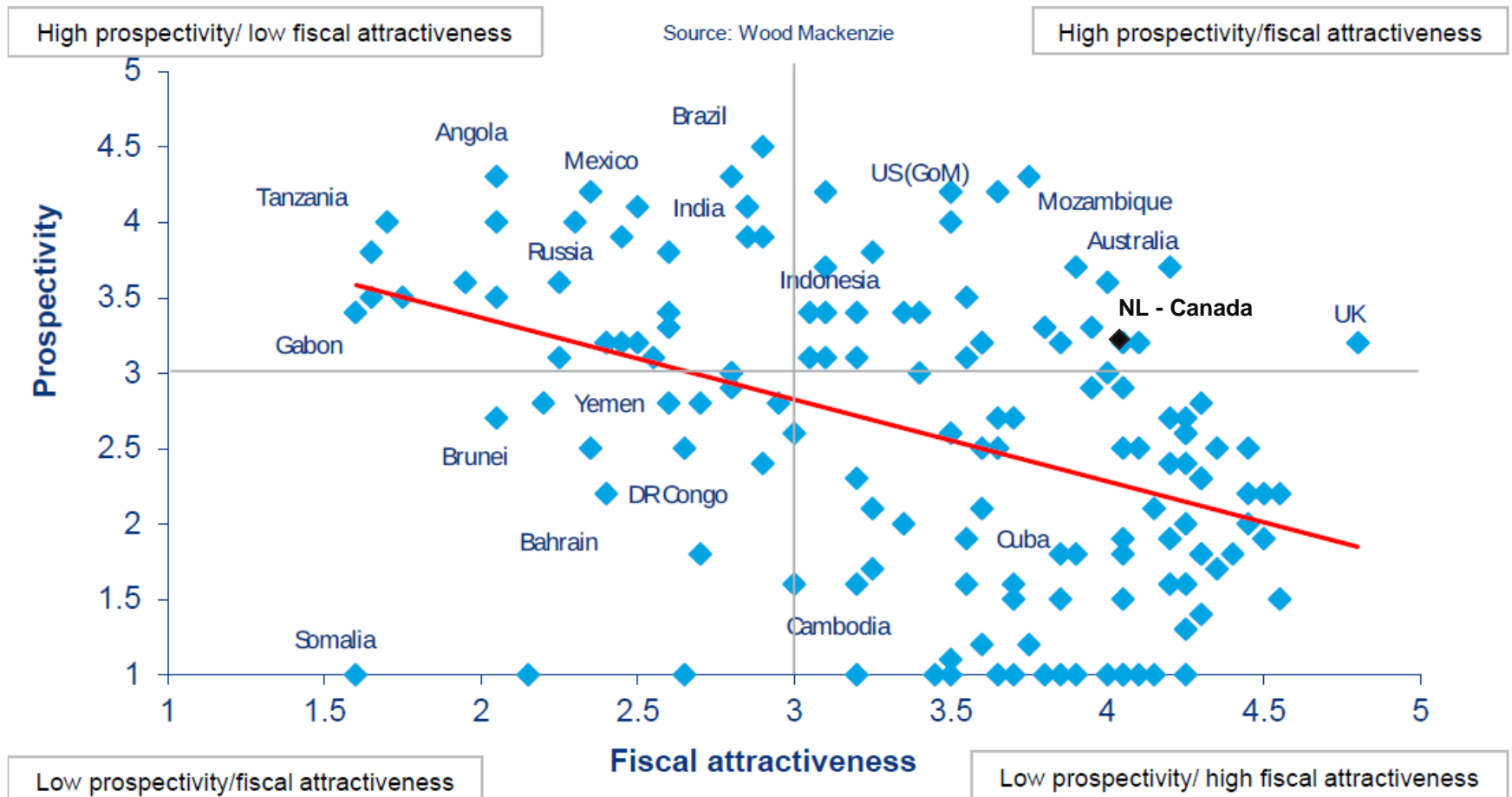
60+ years of offshore weather and sea state data



700+ downloadable reports

COMPETITIVENESS

Figure 2: Fiscal attractiveness vs Prospectivity indices



Deepwater oil exploration potential by reservoir quality

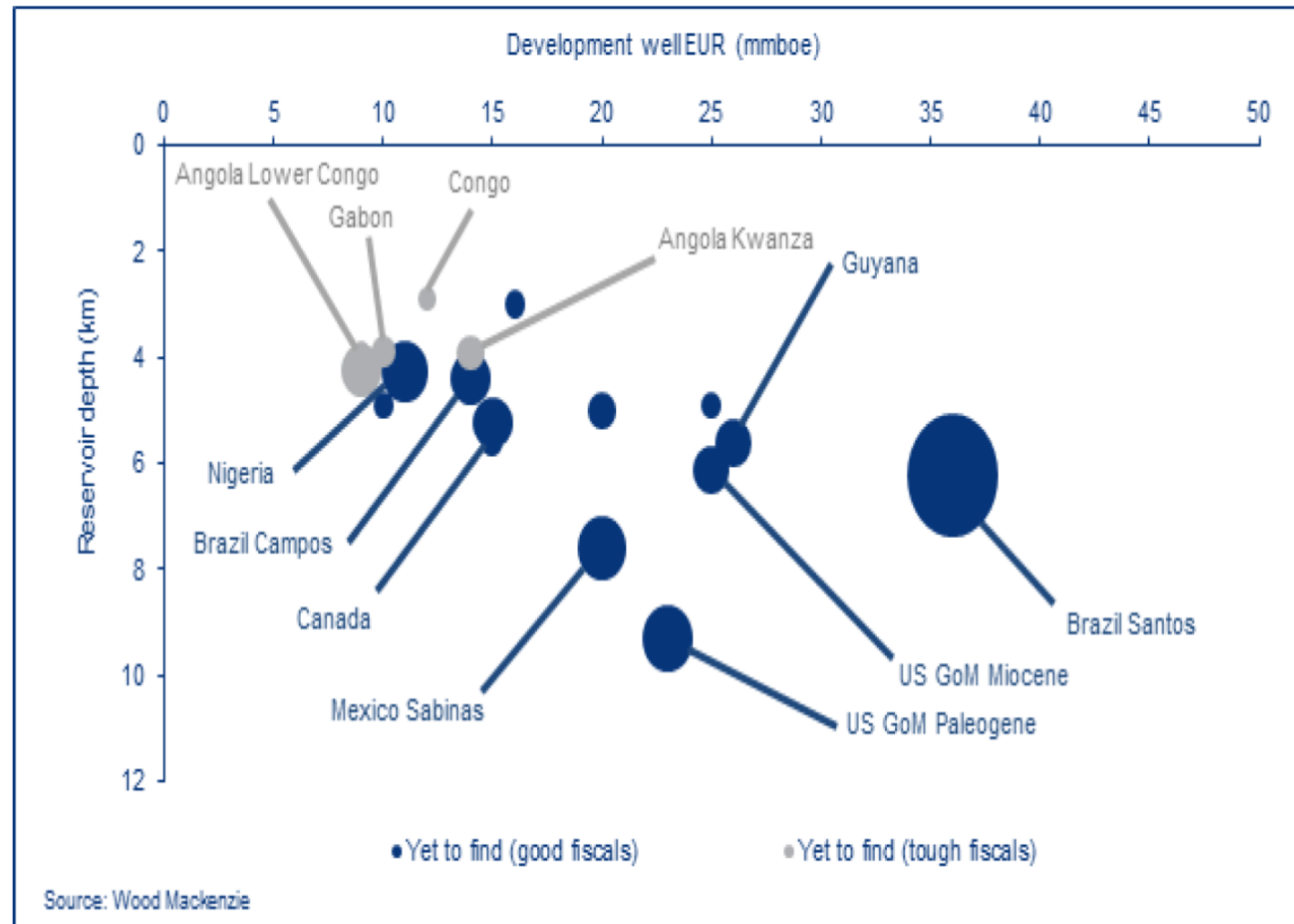
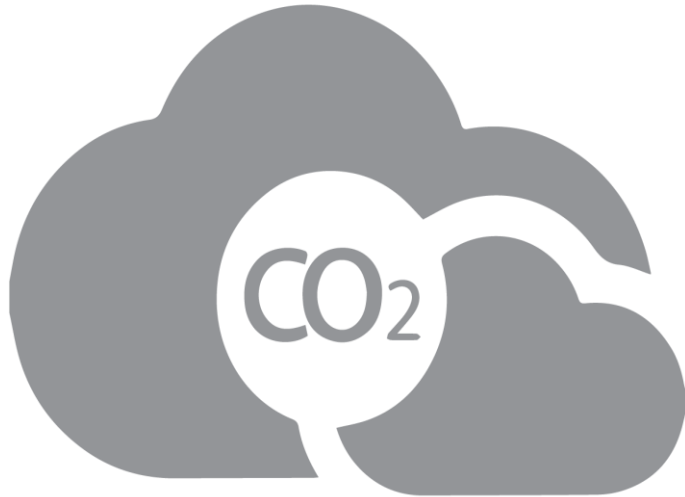


Chart includes deepwater oil basins with yet-to-find resources greater than 500 mmbbl. Bubble size represents YTF resources. Good fiscals based on fiscal attractiveness score > 2.5 in "A balancing act: global fiscal terms and benchmarking", October 2016. Tough fiscals have fiscal attractiveness score of < 2.5.

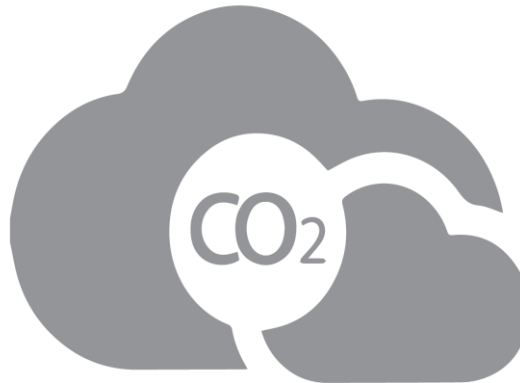
GHG EMISSIONS PER BARREL OF OIL

SAGD Oil Extraction



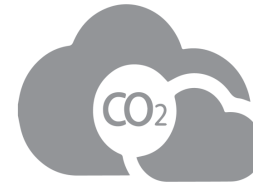
84 kg of CO₂ (eq)

Oil Sands Mining



44 kg of CO₂ (eq)

World Average



18kg of CO₂ (eq)

Offshore East Coast



12 kg of CO₂ (eq)

Scattergun deepwater exploration (2012-2014)

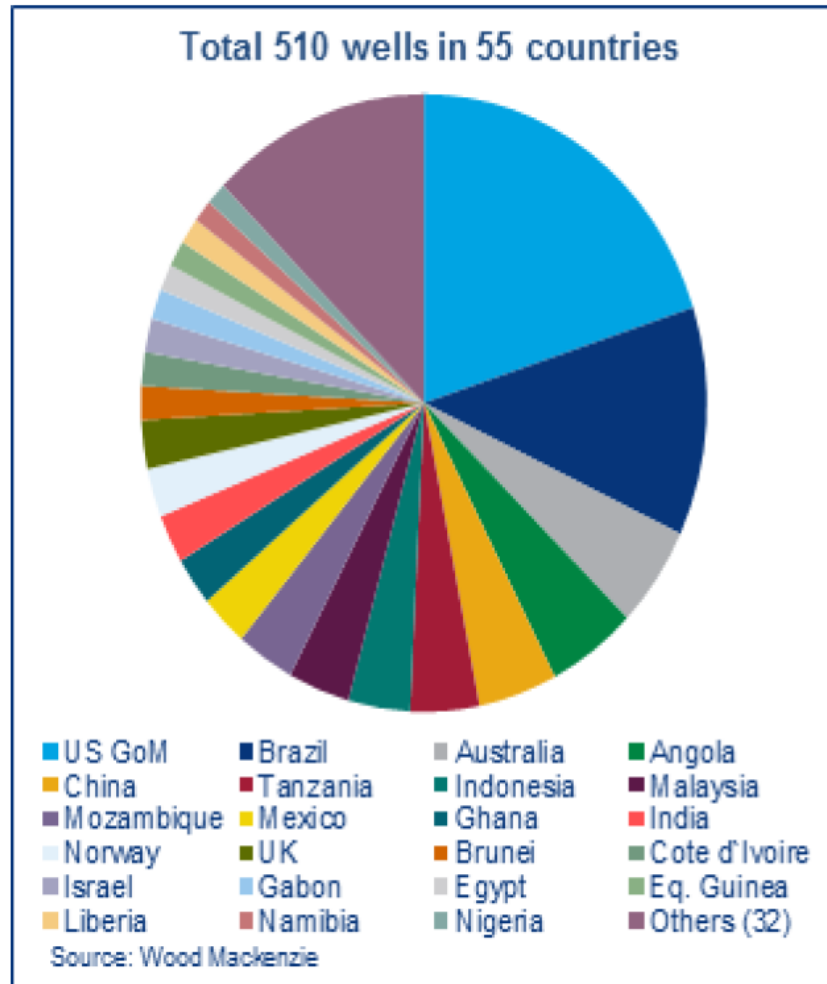


Chart includes exploration wells completed 2012-2014 in water depths over 400 metres. Total 510 wells across 55 countries, including 32 countries with five wells or fewer.

Focused deepwater exploration (2015-2017)

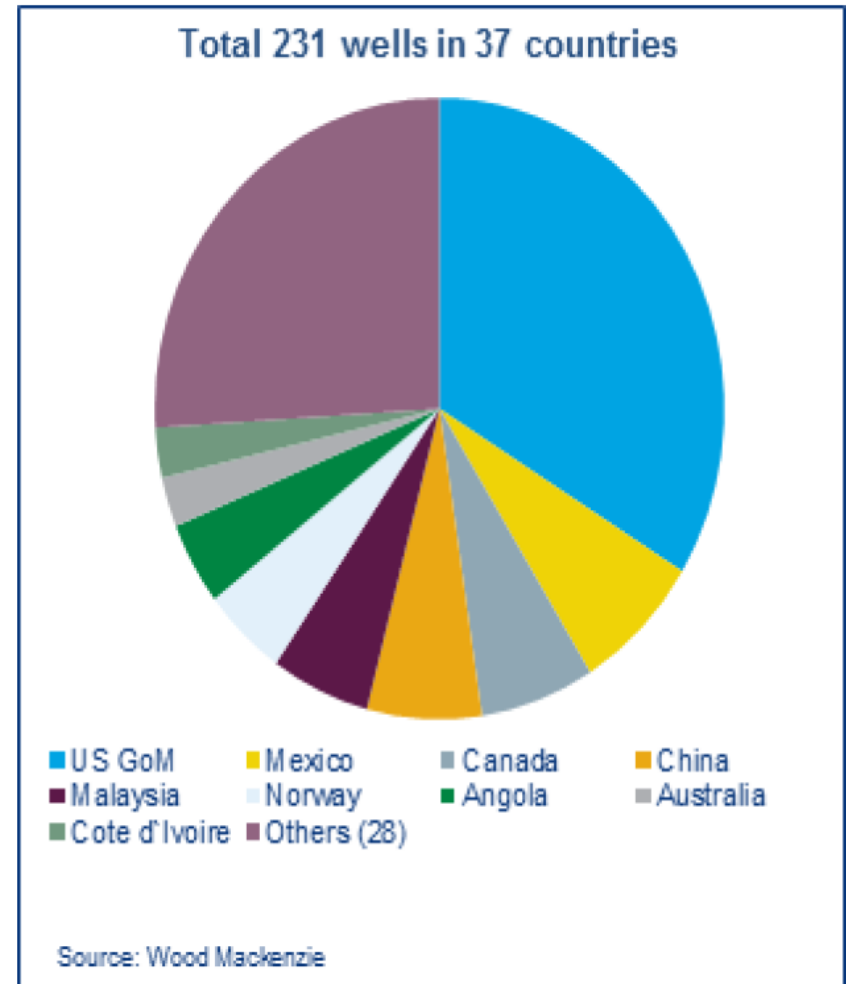
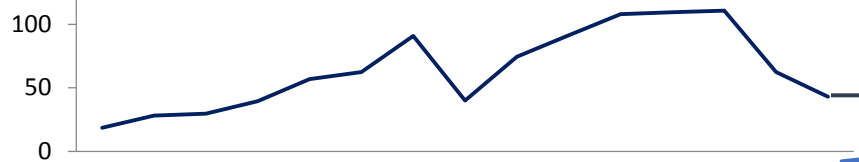


Chart includes exploration wells completed January 2015 to August 2017 in water depths over 400 metres. Total 231 wells across 37 countries, including 28 countries with five wells or fewer.

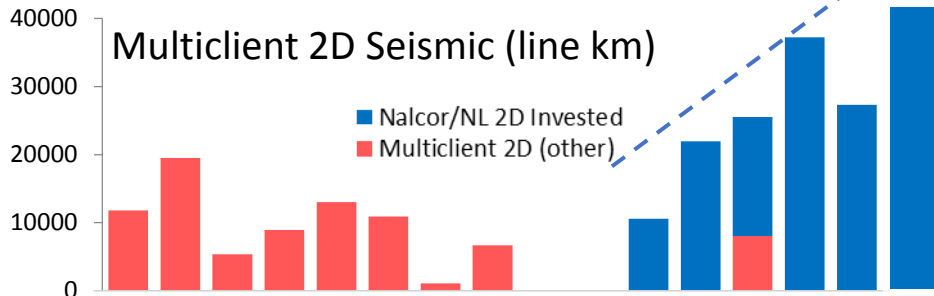
2016

7 NEW ENTRANTS IN
THE LAST 2 YEARS.

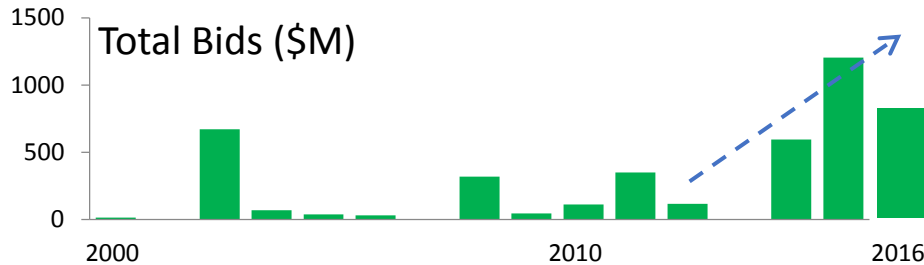
Brent Oil Price (\$US)



Multiclient 2D Seismic (line km)



Total Bids (\$M)



Existing Companies





INCREASE IN OFFSHORE ACTIVITY



As a part of the new land tenure system (2013), seismic purchases pre-round are eligible expenses for work commitment bids.

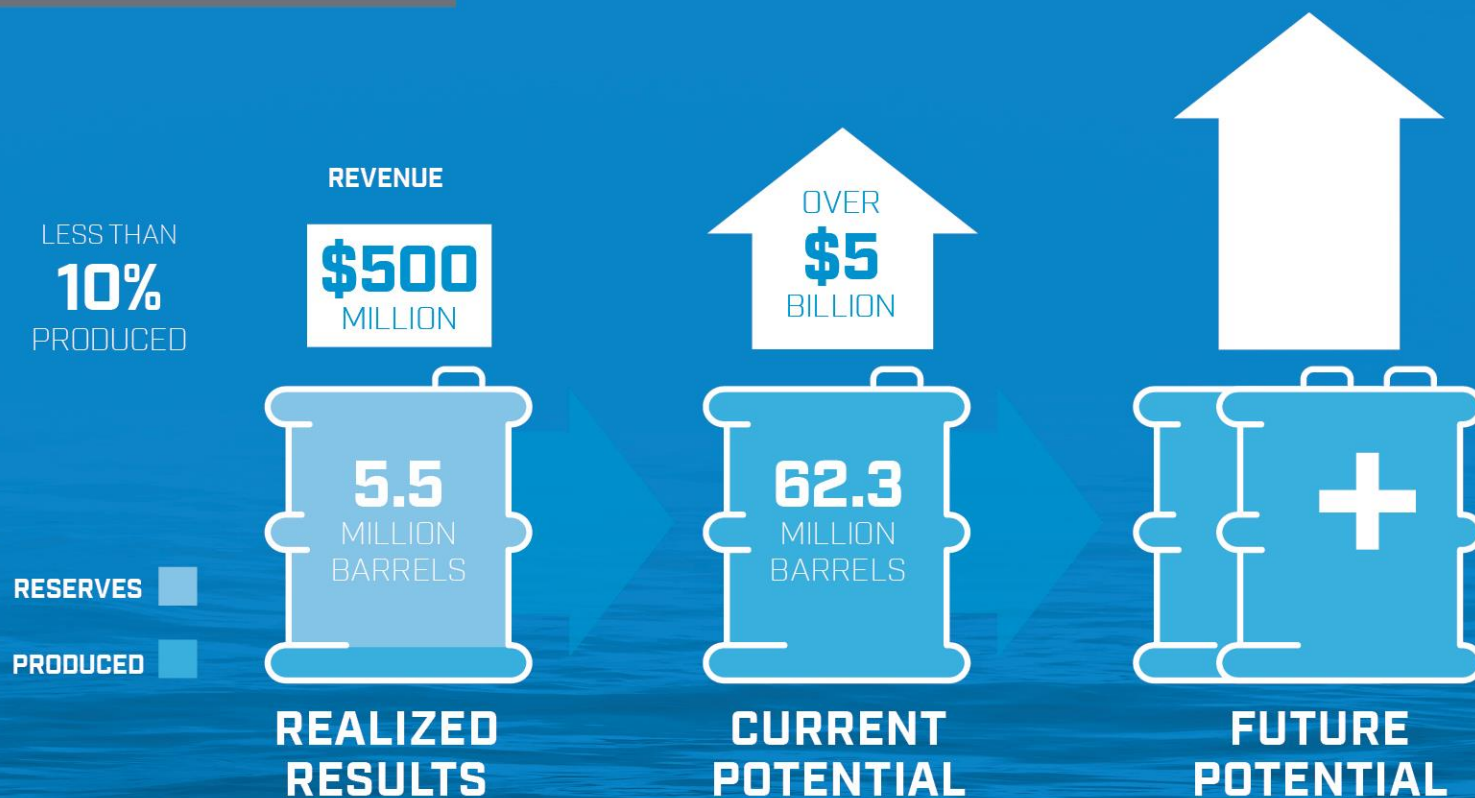
Existing Companies



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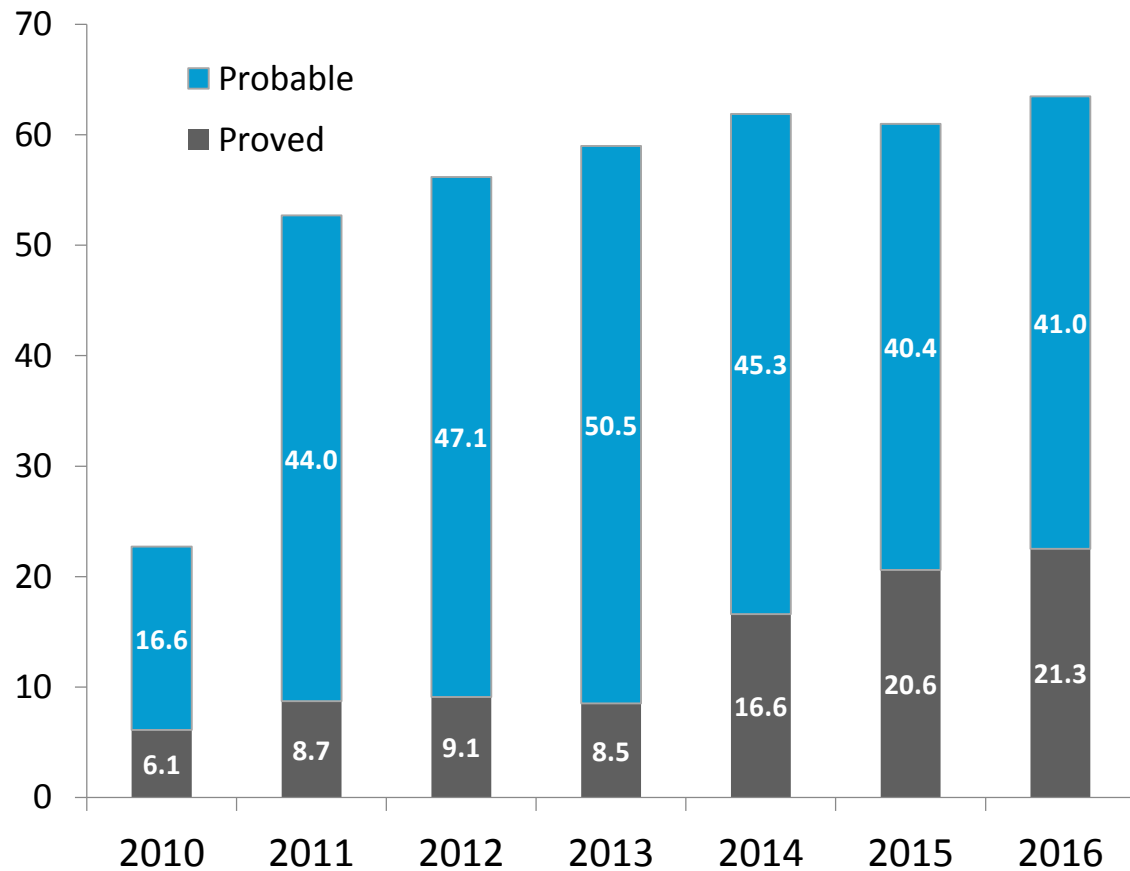


WHAT THE FUTURE HOLDS



NALCOR EQUITY RE-INVESTMENT IN EXPLORATION AND PRODUCTION
DRIVES FUTURE POTENTIAL GROWTH

OUR RESERVES



Significant increase in oil production in 2016 resulted in an increase of \$45 million

Forecasting continued increase in oil production, with a forecast price of \$55 USD/bbl

INDUSTRY CHALLENGES

- ❖ Carbon efficiency and cost efficiency
- ❖ Changing the culture of workforce
- ❖ Facilitating collaboration in competitive environment
- ❖ Challenge of differing motivations & drivers
- ❖ Limited trust across supply chain
- ❖ Measuring impacts of adjustments

UNLOCKING THE POTENTIAL



37.5 billion
barrels of oil*



133.6 trillion
feet³ of gas*

*Less than 7% of offshore potential.

PROVEN OPPORTUNITIES



Production

4 major producing projects, planned expansions ongoing.



Exploration

350 new leads
+ over 20 basins.



Fabrication

Robust fabrication and supply servicing capabilities (Bull Arm).

NL OFFERS



Rich in **natural resources**



Strategic location



Stable investment climate



Proven safety & **Environmental record**



Skilled and readily available workforce



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THANK YOU.

