Advantec

Presentation Bergen 12th Sep 2017
• Established in 2005 with 18 employees
• Today 300 employees in 5 countries, 150 in Norway
• Acquired by GE Oil & Gas in December 2015
Strong global footprint in key oil and gas hubs

- **Houston, USA**
  - Production facilities
  - Service

- **Rio de Janeiro, Brazil** (planned)

- **Aberdeen, UK**
  - Engineering & Production facilities
  - Service

- **Norway (5 locations, 2 planned)**
  - Stord (HQ), Stavanger, Ågotnes Bergen, Hammerfest, Kristiansund
  - Engineering & Production facilities
  - Services

- **Klaipeda, Lithuania**
  - Production facilities

- **Perth, Australia**
Three business segments

**Subsea & Well Control Services**

- **IWOCS**
  - Complete IWOCS for rental
  - Patented reel system
  - IWOCS operation support
  - Site integration testing
  - 3rd party services, storage, spare parts, and maintenance

- **Other hydraulic systems**
  - Chemical injection modules
  - Hydraulic Power Units (HPUs) for subsea production - rental
  - Test & flush HPUs for rental

**Specialist Services**

- **Completion & project support services**
  - Project Management
  - Multi-discipline engineering support
  - MC & Commissioning
  - MMO support
  - Hydraulic testing & flushing services

- **Equipment rental & calibration services**
  - Re-calibration services
  - Rental of test instruments and equipment
  - Re-certification of pressure relief valves

**Technology & Products**

- **IWOCS**
  - Engineering competence specialized within subsea applications
  - Complete IWOCS for sale
  - Patented reel system

- **Well Control Units**
  - Integrated BOP Control and Grease Injection modules in single container
  - Rotary Drilling Control Hydraulic Power Units

- **Other hydraulic systems**
  - Chemical injection modules
  - Hydraulic Power Units (HPUs) for subsea production
  - Test & flush HPUs
  - Cooling skids

**Advantec offering**

- **Delivery model**
  - Engineering
  - Fabrication
  - Eq. rental
  - Op. support

**Customers**

- Nexen
- Marathon
- Aker Solutions
- Statoil
- Wartsila
- Weatherford
- Aker Solutions
- FMC
- MAERSK
- REINERTSEN
- Westcon
Advantec’s market

IWOCS PL COE within GE, and “the Independent” product and service provider
Externally

Market view

Internal market

Products  Services  Rental

External market

Products  Services  Rental

Business stream

Customers

GE Regions
Brown Field

Turbo machinery
Advantec in Perth, Western Australia

**Advantec Group Pty Ltd**

**Office Facility, East Perth**

**Kewdale Storage and maintenance facility**

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<thead>
<tr>
<th>General Information</th>
<th>The facilities include</th>
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<tr>
<td></td>
<td>Engineering, &amp; Administration facilities</td>
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<td>Workshop for fabrication, repair and service.</td>
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<td>Massive storage opportunities (up to 30000 m²)</td>
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<th>Location</th>
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<tr>
<td>The Perth office is conveniently centered 1km from the CBD with major operators within immediate proximity.</td>
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<td>Workshop/Storage area is located only 10km from office/city center.</td>
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<td>Perth CBD contains all major Australian based oil companies, contractors and oil service companies.</td>
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<td>Perth is only 16km from the port of Fremantle.</td>
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<th>Potential Workshop/Storage Area</th>
<th>Kewdale</th>
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<tr>
<td>Workshop 8000 m²</td>
<td>Workshop</td>
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<tr>
<td>Outside area 22000 m²</td>
<td>Outside area</td>
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<tr>
<td>Storage TBA</td>
<td>Storage</td>
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<tr>
<td>SIT area TBA</td>
<td>SIT area</td>
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<tr>
<td>SIT Office TBA</td>
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<tr>
<td>Office TBA</td>
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*) Advantec Aberdeen has entered into an agreement related to facilities under construction for 15 years + 2 x 5 years options at GBPk 450 per year
The first major oil fields in Australia were identified in the early 1960’s

Geographically, Western Australia is the largest producer (64% of national output) As of August 2017

There are approx. 18,000 offshore/onshore oil and gas wells in Australia

Between 2012 and 2017, a total of USD 150 billion will have been invested into the Australian oil/gas industry.

The industry’s contribution to the Australian economy is forecast to reach USD 46 billion or 3.5% of GDP by 2020 – almost doubling from 2% of GDP in 2012.

Australia is predicted to become the world’s largest LNG exporter, overtaking Qatar, by 2020.

Australian oil/gas industry is transitioning from the investment/construction stage of the life cycle to the operations stage with the near completion of Wheatstone, Gorgon, Darwin LNG, Ichthys and Prelude.

According to the WA Energy Alliance, the value of operation and maintenance contracts in Australia over the next 25 years is estimated to be USD 300 billion.
Advantec Pty Ltd was formed August 12th 2015 after a longer analysis of the market, and through positive feedback from the operators in terms of technology and savings in both CAPEX and OPEX.

Market realities caught both service companies and operators off guard, and has made our Australian entry somewhat slower than expected.

• Another contributing factor was the acquisition of Advantec by GE Oil & Gas end of 2015, Advantec still being an Independent player.

• As the market is improving and Advantec is still very much alive – We look towards 2018 with optimism.

• Another reason for this optimism is our involvement in the Cockatoo Project.

The Cockatoo Project is an ‘independent’ Logistics and Subsea Supply Base in the North West Kimberley, near the Ichthys, Prelude and Browse developments.

• With only 130 nautical miles from the fields, the Cockatoo Project represents a major safety advantage and a logistics and storage & maintenance base only found on Perth (1400nm) or Darwin (500nm).

• The base will also have an 1800m sealed runway, the possibility of running crew boats directly to field, Subsea storage and maintenance and also refueling stations for planes, helicopters and vessels.
Cockatoo Supply Base

- Floating pontoon wharf design (35,000m² space
- 400t capacity per pontoon
- 24/7 operation as addresses tidal issues
- Subsea facility will have permanent wharf 100mtr quay side with gantry crane
- Entire laydown area up to 10 hectares (optional)
- Replica of Stord facility
- Supports Timor, Indonesia as well as North West Australia
Cockatoo Island Justification and Rationale

Currently, the progress is lead by NorSea (Facility Management), Advantec (Subsea Services), Brunel (Personnel Services) & Global Air & Energy (Primary driver and concept developer)

The KSCC is a Multiuser Aviation and Marine Hub incorporating Cockatoo Island, Broome and Derby as part of a supply chain cluster based on the Norwegian model, and linking Australia to Asia. Operators have requested that Cockatoo becomes an OEM independent / 24 hour operation multiuser and multi industry facility with a subsea / hi-tech workshop.

Safety advantage.

Distance to field represent significant logistic savings – Woodside, INPEX, BHPB & Shell

Political opposition to island developments mitigated by cluster concept and specialised services.

Provides cheaper and closer alternatives.

Supports 4PL or 3PL model as required.

24 hr operation planned.

Shared subsea service facility, Not controlled by a single company – Operator Request

Proposed “open book” financial model for airport and wharf services.

Business Case has been presented to DSD and Minister for State Development.

DSD are facilitating approvals process. Department of Lands has been engaged.

Access fee (capital and investment) recovered over 10 to 15yrs.

Mine has +20 year resource.

Technical stops at Derby for fixed wing. Rotary wing refueling provided.

Proposed financial model would allow for equity.
Challenges and Optimism

The last 24 months has been challenging for both operators and service-industry

Many planned projects, updates and general maintenance has been put on hold to accommodate an industry with restrictions in terms of both CAPEX and OPEX.

Projects been put in ice, maintenance work delayed – An industry in minimization mode.

We see a slow decision making process in regards to implement new strategies and technologies.

Changes in operators organization

Western Australia is hit twice, in both oil & gas and mineral sector.

On a positive note – We are experiencing a positive change in mindset and planning within the industry.

Prelude and Itchtys are coming online shortly

Gorgon and Wheatstone are reaching completion

Browse and Sunrise are back in planning stage

Postponed maintenance work is now back on schedule – planning stage.

Increased interest in studies that can identify cost cutting technologies fort delayed and future projects
Summary

- Australian market have opportunities
- Operators more open for new technology and solutions
- You have to plan in long term, willing to invest in time and effort
- Build market and client relations and demonstrate long your long term thinking
  - In the past they have experience new players entering into Australia, and experience here today, gone tomorrow
- Focus on cost efficient solutions
- Comply to Australian regulation
- Evaluate finding local cooperation partners