SECTION I

An Introduction to Infield Systems
Energy Sector Exposure

Infield provides products and services across the full oilfield service supply chain

Image courtesy of FMC Technologies Inc.
Geographic Locations

A globally recognised oil & gas consultancy with a dedicated team of cross-sector specialists

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c.40 energy professionals – global footprint
## Products & Services

A leading offshore oil and gas and associated services consultancy

<table>
<thead>
<tr>
<th>Data, Reports &amp; GIS Mapping</th>
<th>Business Strategy and Analysis</th>
<th>Transaction Services</th>
</tr>
</thead>
</table>
| • Offshore specific data covering production infrastructure, rigs, specialist vessels, construction yards, contracts and OFS providers  
• Sector specific reports  
• GIS mapping services covering operational and forecasted production infrastructure | • Market matching and market tracking – “Match & Track”  
• Complete market intelligence outsourcing  
• Bespoke sector services  
• Market entry strategy  
• Procurement strategy advisory – “Project Flow”  
• Ad-hoc sector analysis  
• NPV Economic Field Modelling | • Advisory  
• Market overview IPO  
• Debt financing analysis  
• Distressed asset purchase analysis  
• Buy/sell side market due diligence  
• Opportunity identification |

*Source: Infield Systems Limited, company websites*
The Background

Marginal costs are increasing, the workforce is aging and shareholders expect the same, or higher levels of dividends. Something has to give...

IOC Capital Expenditure Expectations

Distribution of SPE Members 2013 vs. 1997

Production Cost Curve of Oil Related Resources

Sources: Infield Systems
Oil Price Forecast (2015-2020)

Brent prices of $90-$100/bbl reflects a healthy level for supply/demand balance in longer-term. We expect continued moderation in oil prices with substantial upside risk towards the end of the decade.

Annual Average of Brent Prices

The annual average of Brent prices are anticipated to stay in a range between $90-100/bbl throughout the rest of the decade.

Downside market risks are expected to drive price moderation over the coming two years. Supply is anticipated to outstrip demand by over 1mbpd in 2015 and 0.5mbpd in 2016.

However, high cost of marginal supply will likely set a lower limit of around $80/bbl; a threshold that is key to the continuation of the shale boom.

We anticipate substantial upside risk towards the end of the decade due to geopolitical instability in major producers and under-investment over the period between 2014 and 2016.

OCT 2014
BRENT: $87.7/BBL
WTI: $84.7/BBL

Source: Infield Systems
Oil Market Overview

Lower expected investment in unconventionals will potentially set the stage for higher prices towards the end of the decade.

Brent Price Volatility

Average Sanction Prices

Onshore
- Oil Sand (Canada)
- Extra Heavy Oil (Venezuela)
- Shale Oil (Outside US)
- Conventional (West Africa)
- Conventional (Iraq)

Offshore
- Barents Sea (Arctic)
- West of Shetlands (North Sea)
- Ultra-Deep-water (West Africa, GoM)
- Deep-water (North Sea) | Ultra-Deep-water (Brazil)
- Mid-Water (North Sea)
- Shallow-Mid Water (North Sea | South East Asia)

Oil Price Components

Global Oil Production by Resource Type

Source: Infield Systems
Offshore Market Outlook (2015-2020)

Offshore activity will remain moderately robust but activity in frontier areas such as the Arctic and East Africa will most likely be delayed. Orders will be weak for 2015.

Global Offshore Outlook
Shallow water development will likely be unaffected by the low oil price environment. Deep-water activity in Brazil, West Africa and the GoM will continue to be robust throughout the coming years, but contractors will work through backlogs in the absence of new contract awards. Deep-water activity in the Northern North Sea is expected to be delayed and in the Arctic is expected to remain minimal. A number of major deep-water gas projects in East Africa and Australia could fall out of the forecast window due to unfavourable oil price conditions.

<table>
<thead>
<tr>
<th>Region</th>
<th>Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arctic 2015-2016</td>
<td>Oil prices below $90/bbl means that Arctic projects are uneconomic. FIDs of major Arctic developments are not expected.</td>
</tr>
<tr>
<td>Arctic 2017-2020</td>
<td>Construction activity is not expected due to delayed investment decisions over the previous years.</td>
</tr>
<tr>
<td>GOM 2015-2016</td>
<td>Peak shallow water activity is expected around 2016 while FID on deep-water developments could be further delayed.</td>
</tr>
<tr>
<td>GOM 2017-2020</td>
<td>Deep-water activity is expected to recover and ultra-deep-water development will likely start during the forecast period.</td>
</tr>
<tr>
<td>Latin America 2015-2016</td>
<td>Brazil will likely relax its strict policy on pre-salt development and the Mexico energy reform may increase investment.</td>
</tr>
<tr>
<td>Latin America 2017-2020</td>
<td>Deep-water projects in Mexico and ultra-deep-water projects in Brazil will likely take off during the forecast.</td>
</tr>
<tr>
<td>North Sea 2015-2016</td>
<td>Current developments to continue, but sanctioning activity weak. Statoil to place pressure on the supply chain.</td>
</tr>
<tr>
<td>North Sea 2017-2020</td>
<td>Development of deep-water and ultra-deep-water fields in the Northern North Sea will likely commence at the end of the forecast.</td>
</tr>
<tr>
<td>Middle East 2015-2016</td>
<td>Shallow-mid water activity unaffected by the oil price slide as projects are based on low sanction prices.</td>
</tr>
<tr>
<td>Middle East 2017-2020</td>
<td>Continued development in the Persian Gulf is expected throughout the decade with a moderate increase in CAPEX.</td>
</tr>
<tr>
<td>South East Asia 2015-2016</td>
<td>Continued development in shallow-waters with deep-water opportunities in Indonesia and Malaysia.</td>
</tr>
<tr>
<td>South East Asia 2017-2020</td>
<td>Shallow water activity is expected to peak towards the end of the forecast but deep-water activity will see considerable increase.</td>
</tr>
<tr>
<td>Africa 2015-2016</td>
<td>West Africa activity will remain robust. We anticipate more concessions from governments to propel output.</td>
</tr>
<tr>
<td>Africa 2017-2020</td>
<td>Deep-water development is anticipated to be strong in Angola, Nigeria and Ghana. East African activity may be delayed.</td>
</tr>
<tr>
<td>Australia 2015-2016</td>
<td>The development of on-going mega-projects are likely to continue but the pace of new developments is expected to slow.</td>
</tr>
<tr>
<td>Australia 2017-2020</td>
<td>We expect delays in offshore gas projects as they face strong competition from the US, Middle East as well as East Africa.</td>
</tr>
</tbody>
</table>

Source: Infield Systems

Considerable caution across the industry as Operator Capex cuts and reduced commodity prices begin to bite – short-term woes with longer-term growth potential

Capex will fall in 2015 and stay stagnant through 2016/17 unless oil prices increase so as to drive new project sanctioning. There are substantial risks in the capital-intensive subsea sector. On-going development of floating platforms will likely continue. However, we could see delays in deep-water mega-projects towards the end of the forecast. In the long-term we anticipate that offshore CAPEX will continue its rise due to both an increase in volume and overall value of projects

<table>
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<tr>
<th>Market</th>
<th>2015-2016</th>
<th>2017-2020</th>
<th>ST Risk</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Capex</td>
<td></td>
<td></td>
<td>Medium</td>
<td>Capex will likely fall in 2015, given the low oil price outlook. In the long-term, substantial growth will be driven by both an increase in volume and overall value of projects</td>
</tr>
<tr>
<td>Floating Platform EPIC</td>
<td></td>
<td></td>
<td>Medium</td>
<td>Growth in the long-term is driven by an increase in deep-water activity in emerging markets such as Brazil and West Africa. Ultra-deep-water projects in the North Sea and West Africa could be delayed</td>
</tr>
<tr>
<td>SURF Pipeline Capex</td>
<td></td>
<td></td>
<td>Low</td>
<td>SURF activity is particularly prominent in regions with a high proportion of floating facilities and subsea focussed investment</td>
</tr>
<tr>
<td>Control Line Capex</td>
<td></td>
<td></td>
<td>Low</td>
<td>Umbilicals dominate the market with considerable installation in the short-term. Risk profile is low as associated with floating production infrastructure</td>
</tr>
<tr>
<td>Subsea Capex</td>
<td></td>
<td></td>
<td>Medium</td>
<td>Shot-term expenditure is expected to be hit by lower than expected order volumes for 2014 driven primarily be the tree market. Overall CAPEX growth expectations are positive beyond 2016</td>
</tr>
<tr>
<td>Subsea Tree Orders</td>
<td></td>
<td></td>
<td>High</td>
<td>Tree orders for the first three quarters of this year have been substantially below industry expectation. On-going oil price volatility adds additional uncertainty to the market</td>
</tr>
</tbody>
</table>

Source: Infield Systems
## Offshore Business Environment (2015-2020)

The short term outlook for the offshore market remains flat as demand is being pushed to the latter half of the five-year view.

### Market

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Seismic</td>
<td></td>
<td></td>
<td>High</td>
<td>Lack of pre-funding seismic and CAPEX reductions from IOCs has materially reduced demand. Competition remains high, with challenging headwinds capping positivity</td>
</tr>
<tr>
<td>Jack-up Rigs</td>
<td></td>
<td></td>
<td>Medium</td>
<td>The recent and expected high level of newbuilding activity in the jack-up sector will help alleviate any short fall in rig supply in the coming years. Operators are displaying a clear preference for high-spec assets and this has generated a raft of retirements</td>
</tr>
<tr>
<td>Floating Rigs</td>
<td></td>
<td></td>
<td>Low</td>
<td>The short term outlook for deep-water rigs has deteriorated due to a reduction in CAPEX from the majors. We believe demand is being pushed to the latter half of the five-year view</td>
</tr>
<tr>
<td>Subsea</td>
<td></td>
<td></td>
<td>High</td>
<td>Orders expected to fall back from 2013’s historical highs. Without Bonga SW, 2014 (calendar) will see c.225 awards. Long-term growth underpinned by strong fundamentals in deep-water exploration and marginal fields, but 2015 will likely be weak</td>
</tr>
<tr>
<td>Fabrication</td>
<td></td>
<td></td>
<td>Medium</td>
<td>Order backlogs remain at recent historical highs, however, indications suggest a slight cooling in the short term. Continued operator confidence and high oil prices provide strong economic merits to long term demand</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
<td></td>
<td>Medium</td>
<td>Mid-cycle downturn likely to see reduced orders, but next cycle to commence from 16 onwards. Growth depends on WAF activity</td>
</tr>
<tr>
<td>Operations</td>
<td></td>
<td></td>
<td>Low</td>
<td>Increased focus on HSE dictates more complex work, but operational base is falling. Five-year view dependent on robust deep-water and South East Asia market. Some cuts have been made by Statoil in the North Sea, but this is expected to be a short-term supply chain response</td>
</tr>
</tbody>
</table>

*Source: Infield Systems*
SECTION III

Subsea Tree Activity in 2014
Subsea Tree Awards per Quarter

- Historically Europe, Africa and Latin America have accounted for 22%, 23% and 30% of awards respectively
- 2008-2013 period driven by Petrobras
- Brazilian activity has been lacking in 2014 – material influence on tree orders
- Lag of 6-12 months on more commoditised subsea kit – 2015 will be painful

2008-2014 Subsea Tree Awards by Region

2013: 549
2014YTD: 188
2014YE: c. 235
Subsea Tree Awards – 2014YTD

So far in 2014, Aker dominates in Africa, Dril-Quip in Europe, FMC in APME and OneSubsea in South America

North America: 39

Latin America: 14

Africa: 89

Europe: 27

Global manufacturers’ market shares 2014 YTD: 188 subsea tree awards

North America: 39

Latin America: 14

Africa: 89

Europe: 27

Asia: 19

OneSubsea 100%

Aker Solutions 73%

FMC 74%

OneSubsea 21%

GEOG 5%

Aker Solutions 36%

Dril-Quip 12%

OneSubsea 51%

FMC 49%

OneSubsea 51%

FMC 49%

GEOG 11%

Aker Solutions 7%

Europe: 27

Africa: 89

Asia: 19

North America: 39

Latin America: 14

Aker Solutions 73%

FMC 74%

OneSubsea 21%

GEOG 5%

Aker Solutions 36%

Dril-Quip 12%

OneSubsea 51%

FMC 49%

GEOG 11%

Aker Solutions 7%

Europe: 27
Subsea Tree Awards in 2014YTD

- 188 subsea tree awards in 2014YTD
- One major award from Total in Angola (Kaombo)
- Catcher

Sources: Infield Systems
The Next Big Thing – Bonga South-West – 2014??

Sources: Infield Systems
SECTION IV

Subsea Forecast
Subsea Tree Installation Forecast

- Supporting subsea infrastructure – 12-18 month lag behind tree orders
- Manifolds & templates considered considerably less complex than the compression, boosting, separation & production – opportunity for small fabricators

Subsea Tree Installation (units)

Regional Activity Split 2014 - 2018

Australasia 7%
Asia 9%
North America 15%
Latin America 18%
Europe 25%
Africa 25%
Associated Subsea Infrastructure

• Supporting subsea infrastructure – 12-18 month lag behind tree orders
• Manifolds & templates considered considerably less complex than the compression, boosting, separation & production – opportunity for small fabricators
• 2014-15 poor for trees means a reduction in related kit through 2H15 & 2016

Associated Subsea Infrastructure Installations (units)

Regional Activity Split 2014 - 2018
Control Line Infrastructure

• Control line market, driven by umbilicals is driven by Europe – subsea developments, tiebacks, EOR
• RoW has relatively equal split of the residual market
• Considerable increase in the complexity of umbilicals could restrain supply through 2016-17 – concerns voiced by Aker

Control Lines Installations by Line Type (KM)

Regional Activity Split 2014 - 2018

- Europe 40%
- Asia 12%
- Africa 10%
- Latin America 9%
- Middle East & Caspian Sea 11%
- Australasia 7%
- North America 11%

- Power Line
- Umbilical
Pipeline Line Infrastructure

- Inner pie L5Y, outer pie N5Y – considerable shift to deeper more complex environments
- Trend towards greater tension capacities across the installation fleet
- Increase in engineering and fabrication complexity for deepwater flexible & composite lines – Technip 3,000m (2017 qualification year)

Pipeline Installations by Water Depth (KM)

L5Y/N5Y Comparison

- 0-99
- 100-499
- 500-999
- 1000-1499
- >1499
SECTION V

NWECS in Focus
Subsea Steel Fabrication in the UK

Although the industry is dominated by few key players, a plethora of smaller Firms have the potential to service a proportion of regional demand.

Location and size of key subsea fabrication players in the UK
Subsea Steel Fabrication in Norway

Norway’s manufacturing competitiveness is undermined due to its high input cost compared to emerging markets

Location and size of key subsea fabrication players in Norway

Key:
Overall company size

- 1,001+
- 501 - 1000
- 101 - 500
- 0 - 100

- Skude Industri – Skudeneshavn
- GE Oil & Gas – Bergen
- Rosenberg WorleyParsons – Hundvag
- Aker Solutions – Egersund
- AS Nymo – Grimstad
- Kongsberg Oil & Gas – Asker
- FMC Technologies – Kongsberg
- Jotne – Oslo
- NIPUNN Engineering – Lier
- NLI Subsea Engineering – Vear
- Agility Group – Skien / Tonsberg / Langesund

Source: Infield Systems
Note:*Buskerud, Telemark and Vestfold areas
Key Contacts

Infield is a globally recognised oil & gas consultancy with a dedicated international team of cross-sector specialists

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Head Office
Regional Office

c.40 Energy Professionals covering all geographic regions
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