5. Land divisional plan

By Brice Bouffard
We have a path to profitable growth in Land

1. Capture the upturn in Energy & Infrastructure
2. Differentiate by integrated digital solutions
3. Leverage core expertise in new growth markets
4. Back to ROCE of >10% by 2021–2023
Land key financials

Land financials

### Revenue (X EUR million)

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Value</td>
<td>569</td>
<td>507</td>
<td>476</td>
<td>354</td>
</tr>
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YTD Sep

### EBIT (excl. exceptional items X EUR million)

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<td>Value</td>
<td>12.6</td>
<td>6.6</td>
<td>15.3</td>
<td></td>
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1. Corrected for one-off related to contractual settlement in 2017

### EBIT margin (%)

- 2015: 2%
- 2016: 1%
- 2017: 3%
- 2018:       

Land revenue split (2017)

- **Europe:** 39%
- **Americas:** 24%
- **APAC:** 19%
- **MEI:** 16%
- **Africa:** 2%
- **O&G:** 12%
- **Power:** 17%
- **Mining:** 3%
- **Infrastructure:** 68%
Land key financials

Land financials

Revenue (X EUR million)

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Evolution of Land revenue split (2016 to 2017)

Revenue (X EUR million)

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<tr>
<td>YTD Sep</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Mining</td>
<td>109</td>
<td>56</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>65</td>
<td>78</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>301</td>
<td>326</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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1. Corrected for one-off related to contractual settlement in 2017
Activities across the life cycle of an infrastructure project

- Site appraisal
  - Geotechnical drilling services
  - Cone penetration testing
  - Geophysical surveys

- Design & Contracting
  - Construction support
  - Laboratory testing and monitoring
  - Geoconsulting

- Construction
  - Final investment decision

- Operation & Maintenance
  - Asset integrity services

- Decommissioning
Cone Penetration Testing and Drilling – Hong Kong airport
Cone Penetration Testing and Drilling – Hong Kong airport

Geotechnical drilling and CPT investigation

Foundation design & ground risk reduction

Project details

- Client: HK Airport Authority
- Scope: CPT, soil sampling, lab testing, geophysical surveys, water quality sampling in 800+ locations, near- and onshore, since 2010
- Deliverables: site characterisation for structurally sound and safe design & construction plan
Geomonitoring – The Hague tunnel construction
Geomonitoring – The Hague tunnel construction

Real-time monitoring of ground deformations

Early warning to de-risk construction operations

Project details
- Client: Municipality of The Hague
- 1.6 km tunnel boring, 30 m depth in dense urban area
- 5,000 in-situ sensors on ground and buildings processed daily on Gaia Insight for decision support
- Improved construction performance with fewer delays
Road asset integrity – Virginia DOT pavement condition assessment

**Roadware pavement condition assessment**

**Optimised roadway maintenance planning**

**Project details**
- **Client:** Virginia Department of Transportation, USA
- **Scope:** pavement condition assessment covering 48,300 km road network annually
- **Survey and analysis helps DOT engineers optimise cost and planning of road maintenance**
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Our key markets are expected to grow in the near-term

**Oil & Gas**

Infrastructure spend\(^1\) (X USD billion)

- **CAGR 2018-2022**
  - MEA: 11%
  - Europe: 6%
  - Americas: 5%
  - APAC\(^1\): 8%

**Power & Electricity**

Infrastructure spend\(^1\) (X USD billion)

- **CAGR 2018-2022**
  - MEA: 15%
  - Europe: 5%
  - Americas: 6%
  - APAC\(^1\): 9%

**Rail, Road & Other\(^2\)**

Infrastructure spend\(^1\) (X USD billion)

- **CAGR 2018-2022**
  - MEA: 15%
  - Europe: 6%
  - Americas: 6%
  - APAC\(^1\): 8%

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1. Construction Services spend excluding China
2. Other e.g. airports, harbours
Source: GlobalData CIC Oct 2018
In a fragmented landscape, Fugro is well positioned

Data acquisition landscape is dominated by small, local players

- 91% Other companies
- 9% Companies >25 EUR million revenues & multiple service lines

Only a few players offer integrated services globally

- Large consulting & engineering firms
- Many small, local firms

Competitors:
- Fugro
- €476M
- Golder
- ACES
- Intertek PSI
- Tetra Tech Coffey
- Sixense Soldata
- Terracon

Source: Fugro analysis, company websites
We will enhance our approach to capture this growth

1. Focus on key asset classes
2. Grow share of large projects
3. Lead with consulting
Focus on key asset classes – in the growing Energy & Infrastructure markets

### Infrastructure
- Transportation & Mining
  - Roads: €600-900 M
  - Tunnels: €600-800 M
  - Bridges: €500-700 M
  - Rail: €250-350 M
  - Airports: €150-250 M
  - Mines: €1,000-1,300 M

### Energy
- Power & O&G
  - Nuclear PP: €350-450 M
  - Power T&D: €400-600 M
  - O&G plants: €700-900 M

Note: Numbers represent Fugro estimated addressable market for projects >€25 M, excluding China. Source: GlobalData CIC Oct 2018 and Fugro analysis.
Grow share of large projects

- Alaska & Virginia DOT roadway maintenance
- HS2 High speed rail construction
- World’s longest suspension bridge: Canakkale Bridge
- Hong Kong airport 3rd runway land reclamation
- Hail & Ghasha oil field development
- Mozambique LNG Anadarko/ENI
- Cyclone Marcia Recovery Ergon Energy
Grow share of large projects – offering integrated solutions, focusing on key clients

Build on our experience with large projects

Further integrate our solutions
Providing integrated solutions across project life cycle

Focus on key clients
Focus on EPC firms and strengthen key account management
Lead with consulting – a global practice combined with dedicated commercial teams focusing on key asset classes

<table>
<thead>
<tr>
<th>Globally coordinated consultancy</th>
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<tbody>
<tr>
<td>▪ Globally coordinate our existing local pockets of expertise</td>
<td></td>
</tr>
<tr>
<td>▪ Create virtual centres of expertise</td>
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</tr>
<tr>
<td>▪ Focus on key asset classes</td>
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<table>
<thead>
<tr>
<th>Business development dedicated to key asset classes</th>
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<tbody>
<tr>
<td>▪ Dedicated teams for key asset classes</td>
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<tr>
<td>▪ Work hand-in-hand with consultants</td>
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<tr>
<td>▪ Partner with our clients early in the process</td>
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<table>
<thead>
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<th>Standardised processes and equipment</th>
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<td>▪ Standardise commercial approach</td>
<td></td>
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<tr>
<td>▪ Strengthen project management function</td>
<td></td>
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<tr>
<td>▪ Modernise equipment</td>
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Integrated digital solution for site investigation

Connected assets assisted by robotics
Integrated digital solution for site investigation
Integrated digital solution for site investigation

Automated processing leveraging machine learning
Integrated digital solution for site investigation

Deep expertise to unlock valuable insights
Integrated digital solution for site investigation

Decision support and real time insights visualised
Integrated digital solution for site investigation

- SAFER
- FASTER
- MORE EFFICIENT
- SUSTAINABLE
- HIGHER QUALITY
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Population growth, urbanisation and climate change drive growing need for water management.
Water supply – Expand our domain expertise to fulfil growing demand

Increased demand for fresh water drives market growth

- Leverage our existing knowledge and project experience
  - Leverage expertise in:
    - Hydrogeology
    - Geophysics
    - Drilling
    - Dam and pipeline site appraisal
  - Build on project experience in the Netherlands, Germany, Qatar, Turkey, Chile and Ethiopia
  - Offer integrated value propositions
    - Grow domain expertise through consulting
    - Focus on groundwater and supply infrastructure

Addressable market EUR 1-2 billion

Source: OECD Environmental Outlook 2050, addressable market adapted from GWI 2015
Flood protection – Build on existing expertise in dikes and levees

Climate change & urbanisation drive increased need for flood protection

- Dikes & levees
- Stormwater infrastructure
- Forecasting & early warning
- Flood risk management

Well positioned to protect communities against flooding

- Leverage expertise in:
  - Meteorological modelling
  - Hydrology
  - Hydraulics
  - Dikes & levees

- Build on project experience in dikes and levees from the Netherlands and USA

- Offer integrated value propositions
  - Focus on flood defense infrastructure combined with risk management
  - Targeted growth globally (e.g. megacities at risk)

Addressable market EUR 200-600 million

Source: Adapted from Carbon Brief 2017
The plan - Summary

1. Capture the upturn in Energy and Infrastructure
   1. Focus on key asset classes
   2. Grow share of large projects
   3. Lead with consulting
   4. Gain efficiencies through standardised equipment and processes

2. Differentiate by integrated digital solutions
   1. Develop remote, automated Geo-data acquisition
   2. Leverage artificial intelligence & machine learning to improve automated extraction of insights
   3. Deliver real-time, actionable insights and advice

3. Leverage core expertise in new growth markets
   1. Focus on water supply & flood protection
   2. Build on existing project experience
   3. Expand domain expertise
   4. Offer integrated value propositions
Land division – financial outlook for 2021-2023

Key drivers for margin improvement to achieve low-end of EBIT range

<table>
<thead>
<tr>
<th>Driver</th>
<th>EBIT margin impact (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>Volume</td>
<td>+1</td>
</tr>
<tr>
<td>Price</td>
<td>+1</td>
</tr>
<tr>
<td>Productivity</td>
<td>+1</td>
</tr>
<tr>
<td>Cost inflation</td>
<td>-1</td>
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Mid-term target 2021-2023

- ROCE >10%
- EBIT margin of 6-9%

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