innogy – what does the future hold?

Frank-Detlef Drake
Head of Strategy and Technology
London, 30th January 2018
We set up innogy to build on and drive the three megatrends of the energy industry:

- Decarbonisation
- Decentralisation
- Digitisation
The future energy system will comprise six distinct business areas with significant changes in European value pools.
TARGET PICTURE 2025

The What – innogy's target picture in 2025

Core business
G&I
- Grid assets
Retail
- Commodity
Renewables
- Wind assets
- Solar EPC/O&M
- Solar IPP

New growth areas
- FTTx
- Smart poles
- Energy+
- eMobility

Synergies
Platforms
Innovation
TARGET PICTURE 2025

Our target picture 2025 is defined along the dimensions: performance, position, portfolio and partnerships (4P)

Performance
We will become a topquartile performer

Position
We will achieve leading positions in our businesses

Portfolio
We will actively restructure our portfolio, if leading positions and performance cannot be achieved

Partnerships - will be needed to improve position and performance

Our strategy is in its essence a “best owner strategy”
innogy guides regional footprints of segments via boundary conditions
### TARGET PICTURE 2025

#### The How – innogy's target operating model

<table>
<thead>
<tr>
<th>Functional steering</th>
<th>&quot;One face to the customer approach&quot;</th>
<th>Develop and hire top-notch skills</th>
<th>Programmatic M&amp;A</th>
<th>Further strengthening external orientation</th>
<th>Scaling digital</th>
<th>Agile organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clear guidance on importance of a much stronger performance culture</td>
<td>• Follow &quot;One face to the customer approach&quot; across our segments</td>
<td>• Develop talents</td>
<td>• Systematically screen and support acquisitions and divestments required to achieve our target picture</td>
<td>• Accelerate open ecosystem and partnership approach</td>
<td>• Accelerate build-up of digital and advanced analytics capabilities within segment and group level</td>
<td>• Empower cross-functional teams</td>
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<tr>
<td></td>
<td></td>
<td>• Complement existing capabilities with new hires on senior and working level</td>
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<td></td>
<td>• Rapid prototyping</td>
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<td>• Open ecosystem partnerships</td>
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</tbody>
</table>
STRATEGIC THRUSTS

G&I remains a leading DSO in scale & performance and will grow across traditional & emerging infrastructure business areas

### Target picture 2025

<table>
<thead>
<tr>
<th>Position</th>
<th>Strategic measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Top 3 DSO in our markets</td>
<td>Core business</td>
</tr>
<tr>
<td>• Leading player for FTTx and Smart Poles</td>
<td>G&amp;I</td>
</tr>
<tr>
<td>Performance</td>
<td>DSO acquisitions</td>
</tr>
<tr>
<td>• Top-quartile performer amongst European DSOs</td>
<td>Efficiency and effectiveness</td>
</tr>
<tr>
<td>• Ambition to become the best DSO in our markets</td>
<td>FTTx</td>
</tr>
<tr>
<td>Portfolio</td>
<td>Scale up Germany</td>
</tr>
<tr>
<td>• Programmatic M&amp;A, i.e. with financial investors</td>
<td>International scale up</td>
</tr>
<tr>
<td>Geographies</td>
<td>Smart Poles</td>
</tr>
<tr>
<td>• Focus on Europe</td>
<td>Pilot projects</td>
</tr>
<tr>
<td>• Assess opportunities in North America and selected emerging markets (case-by-case)</td>
<td>Extend pole base</td>
</tr>
</tbody>
</table>

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1 In Europe  
2 In the relevant markets  
3 According to McKinsey DSO benchmarking 2017
### The opportunity

**Global ranking of FTTh penetration**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>FTTh penetration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Korea</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>UAE</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>Singapore</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>Japan</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>Sweden</td>
<td>20</td>
</tr>
<tr>
<td>15</td>
<td>China</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>Denmark</td>
<td>0</td>
</tr>
<tr>
<td>[-]</td>
<td>Czech Republic</td>
<td>0</td>
</tr>
<tr>
<td>[-]</td>
<td>Trinidad&amp;Tobago</td>
<td>0</td>
</tr>
<tr>
<td>[-]</td>
<td>Croatia</td>
<td>0</td>
</tr>
<tr>
<td>[-]</td>
<td>Germany</td>
<td>1.3</td>
</tr>
</tbody>
</table>

**Selected examples**

- Benefit from low penetration rates in Germany and German government support to close this infrastructure gap
- Capture the opportunity by
  - Lever existing duct network with direct customer access
  - Scale up cooperation with telco players
  - Pursue acquisitions of smaller player in this field

### innogy's approach

**Ambition and potential**

Capex of around €200m p.a. until 2020

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1 Fiber to the x (e.g. home and curb)
2 Fiber to the home penetration: Economies with at least 200,000 households

SOURCE: IDATE for Ftth council Europe, WIK, German Federal Ministry for Economic Affairs and Energy, McKinsey, innogy
The opportunity

• Opportunities go beyond hardware and lighting, to services, data, and applications for cities
• Capture the opportunity by
  – Extending position as major public infrastructure operator
  – Offering various complementary products
  – Creating partnerships with telco providers

innogy's approach

Ambition and potential

Currently in evaluation/piloting
STRATEGIC THRUSTS

Retail commits to achieve leading positions related to size and performance

Target picture 2025

Position
• Leading positions in core European markets
• Achieve substantial market share\(^1\) for eMobility on a global scale

Performance
• Top-quartile performance

Portfolio
• Consider acquisitions for upscaling and for Energy+

Geographies
• Focus Europe for retail-related businesses
• North America as strategic growth region\(^2\)

Strategic measures

Core business
- Commodity
  - B2C: Scale & performance
  - B2B: Restructuring & performance
  - Lean retail backbone/attackers (incl. Energy+)

Energy+
- B2C: Sales increase & churn reduction
- B2B: Sales increase
- Partnerships and M&A

eMobility
- Upscaling in Europe
- US market entry

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1 In electrical vehicle charging market
2 Entering with eMobility in the US and assessing opportunities for entry in other business areas
STRATEGIC MEASURES

New growth area for Retail: Energy+

The opportunity

innogy's approach

- Push existing offerings and grow through M&A and partnerships
- Start with expanding offering of asset-light products and services (e.g. energy services to scale rapidly)
- Six customer segments were identified in B2B requiring a modular yet standardized setup of solutions

Ambition and potential

Grow Energy+
- In B2C to reduce churn
- In B2B as asset-light solution business
New growth area for Retail: eMobility

The opportunity

innogy's approach

- @Home: Establish innogy as 1st contact for home charging solutions
- @Semi-Public: Standardize offering
- @Station: Secure locations for EV charging station
- @Public: Continue extending public charging facilities to remain leading provider

Ambition and potential

Achieve substantial market share for EV charging on a global scale
Renewables will focus on growth and performance as well as potential opportunities for value maximizing options.

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<thead>
<tr>
<th>Target picture 2025</th>
<th>Strategic measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position</strong></td>
<td><em>Wind Onshore</em></td>
</tr>
<tr>
<td>• Top 3 Renewables in Wind On-/ Offshore &amp; Solar</td>
<td>Improve O&amp;M performance</td>
</tr>
<tr>
<td></td>
<td><em>Wind Offshore</em></td>
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<td></td>
<td>Streamline capex</td>
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<td></td>
<td>Capital recycling</td>
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<td>Governmental tender team</td>
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<tr>
<td><strong>Performance</strong></td>
<td><em>Solar EPC/O&amp;M</em></td>
</tr>
<tr>
<td>• Top-quartile performance</td>
<td>Improve O&amp;M performance</td>
</tr>
<tr>
<td></td>
<td>Capital recycling</td>
</tr>
<tr>
<td></td>
<td>10-in-10 program</td>
</tr>
<tr>
<td><strong>Portfolio</strong></td>
<td><em>Solar IPP²</em></td>
</tr>
<tr>
<td>• Review strategic fit and potential opportunities for value-maximizing options of parts of the business</td>
<td>Grow O&amp;M business</td>
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<tr>
<td></td>
<td><strong>Core business</strong></td>
</tr>
<tr>
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<td>Enter low-cost EPC market</td>
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<tr>
<td><strong>Geographies</strong></td>
<td><strong>New growth area</strong></td>
</tr>
<tr>
<td>• Expand in Europe and North America</td>
<td><strong>Build IPP business</strong></td>
</tr>
<tr>
<td>• Expand in selected emerging markets, especially for Solar EPC and O&amp;M¹</td>
<td></td>
</tr>
</tbody>
</table>

1 EPC: Engineering-Procurement-Construction, O&M: Operations & Maintenance
2 IPP: Independent Power Producer
New growth area Renewables: Solar IPP

The opportunity

innogy's approach

• Market entry establishing global Build-Own-Operate business with the possibility of sell-downs
• Short term: M&A, Brownfield
• Mid-/long-term: Brownfield and preparation of Greenfield

Ambition and potential

Timing of first EBIT contribution depending on delivery of pipeline
SUMMARY

With the 4P-Strategy, we continue our journey – with a more specific and binding focus on performance and growth.

4P-Strategy

- **Position**: We rank among the top three providers in our industry.
- **Performance**: We count to the most profitable companies in our industry.
- **Portfolio**: We pursue activities that correspond to our target picture.
- **Partnership**: We are energy partner no. 1 for our customers, municipalities, corporate and financial partners.

Future energy system

New growth areas:
- Photovoltaics
- eMobility
- Glass fibre networks
Backup
CORE BELIEFS

We have five core beliefs on what is required to change – they guide the target picture 2025

- Skill and economies of scale are the most critical differentiators – our segments will drive these
- We see the most additional value in optimization within the segments, while we regard the value of vertical integration as an add-on
- In order to achieve and sustain leading positions, we benefit from strategic partners
- In order to achieve and sustain a top-quartile performance in all businesses we benefit from (financial) investors and their performance management approaches
- In order to further strengthen our capabilities and entrepreneurial "mindset", we will build on skill development, cultural change, partnerships, acquisitions, and hiring