Wind Power Division – at a glance

<table>
<thead>
<tr>
<th>Business Units</th>
<th>Portfolio</th>
<th>Market Position</th>
</tr>
</thead>
</table>
| **EMEA** (Europe, Middle East, Africa) | • Onshore wind power plants  
                         • Offshore wind power plants  
                         • Service                  | **Offshore No. 1** |
| **Americas** (North-/South America) |                                                                             | **Equity stakes** |
| **APAC** (Asia-Pacific) | • two joint ventures with Shanghai Electric                                | **A2SEA**  
                         • Integration vessels        | **installation vessels**  
                         • Majority stake holder      | • DONG Energy               |
                         |                                                                                   |                 |

Restricted © Siemens AG 2013 All rights reserved.
Market growth for wind energy (installed capacity in MW) is estimated at 5% a year (2012–2017)*:


Market position:
- No. 1 in offshore market
- No. 4 in global installations 2013

Locations

**Headquarters:** Hamburg, Germany

**Production locations:**

**Denmark**
- Nacelles: Brande
- Blades: Aalborg
- Blades: Engesvang

**China**
- Blades and Nacelles: Lingang City, Shanghai

**Americas**
- Nacelles: Hutchinson, Kansas, USA
- Blades: Fort Madison, Iowa, USA
- Blades: Tillsonburg, Ontario, Canada

**Sales and service centers worldwide**
### Siemens Wind Power Facts at a glance

#### Siemens Wind Power facts

- One of the world’s leading suppliers of wind power solutions
- Acquired Danish wind turbine manufacturer Bonus Energy A/S in 2004
- Installed Base: > 13,100 turbines with ~ 22,100 MW capacity
- Installed in 2013: > 4,200 MW
- More than 9,300 employees globally incl. Wind Service
- Record order backlog of ~ € 11 billion incl. Wind Service
- Revenue in FY 2012: ~ € 5.1 billion
All our products are based on four platforms; two platforms use for direct drive technology

<table>
<thead>
<tr>
<th>Platform level</th>
<th>Siemens G2 Platform</th>
<th>Siemens D3 Platform</th>
<th>Siemens G4 Platform</th>
<th>Siemens D6 Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product level</td>
<td>SWT-2.3-101</td>
<td>SWT-3.0-101</td>
<td>SWT-3.6-120</td>
<td>SWT-6.0-154</td>
</tr>
<tr>
<td></td>
<td>SWT-2.3-108</td>
<td>SWT-3.0-108</td>
<td>SWT-4.0-120</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWT-3.0-113</td>
<td>SWT-4.0-130</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWT-3.2-113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feature level</td>
<td>e.g. Net Converter, Scada, TLC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recognized technology leader with more than 30 years of experience in the wind industry

Siemens product portfolio track record

<table>
<thead>
<tr>
<th>MW class</th>
<th>Multi-MW class</th>
<th>Multi-MW Direct Drive class</th>
</tr>
</thead>
<tbody>
<tr>
<td>CombiStall</td>
<td>Pitch technology with variable speed</td>
<td>Direct drive technology with no gearbox</td>
</tr>
<tr>
<td>SWT-1.0-54</td>
<td>SWT-2.3-82 VS</td>
<td>SWT-3.0-101 DD</td>
</tr>
<tr>
<td>SWT-1.3-62</td>
<td>SWT-2.3-107</td>
<td>SWT-2.3-113 DD</td>
</tr>
<tr>
<td>SWT-2.0-76</td>
<td>SWT-3.6-120</td>
<td>SWT-6.0-120/154 DD</td>
</tr>
<tr>
<td>SWT-2.3-82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installed base worldwide: > 13,100 turbines with ~ 22,100 MW capacity

Source: E W  1) December 2012 - Installed

Restricted © Siemens AG 2013 All rights reserved.

Page 6
# Towers

## Selected WTG Towers for the Polish Market

<table>
<thead>
<tr>
<th>Turbine Type</th>
<th>Rated Power [MW]</th>
<th>Rotor Diameter [m]</th>
<th>IEC Class</th>
<th>Tower Hub Height [meters]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>tubular steel towers</td>
</tr>
<tr>
<td>SWT 2.3-83</td>
<td>2.3</td>
<td>83</td>
<td>2A</td>
<td>79.5 80.4 80.5 80.8 81.5 82.5 83.5 84.5 85.5 86.5 87.5 88.5 89.5 90.5 91.5 92.5 93.5 94.5 95.5 96.5 97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.5 105.5 106.5 107.5 108.5 109.5 110.5 111.5 112.5 113.5 114.5 115.5 116.5 117.5 118.5 119.5 120.5 121.5 122.5 123.5 124.5 125.5 126.5 127.5 128.5 129.5 130.5 131.5 132.5 133.5 134.5 135.5 136.5 137.5 138.5 139.5 140.5 141.5 142.5</td>
</tr>
<tr>
<td>SWT 2.3-101</td>
<td>2.3</td>
<td>101</td>
<td>2B</td>
<td>79.5 80.4 80.5 80.8 81.5 82.5 83.5 84.5 85.5 86.5 87.5 88.5 89.5 90.5 91.5 92.5 93.5 94.5 95.5 96.5 97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.5 105.5 106.5 107.5 108.5 109.5 110.5 111.5 112.5 113.5 114.5 115.5 116.5 117.5 118.5 119.5 120.5 121.5 122.5 123.5 124.5 125.5 126.5 127.5 128.5 129.5 130.5 131.5 132.5 133.5 134.5 135.5 136.5 137.5 138.5 139.5 140.5 141.5 142.5</td>
</tr>
<tr>
<td>SWT 2.3-108</td>
<td>2.3</td>
<td>108</td>
<td>2B</td>
<td>79.5 80.4 80.5 80.8 81.5 82.5 83.5 84.5 85.5 86.5 87.5 88.5 89.5 90.5 91.5 92.5 93.5 94.5 95.5 96.5 97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.5 105.5 106.5 107.5 108.5 109.5 110.5 111.5 112.5 113.5 114.5 115.5 116.5 117.5 118.5 119.5 120.5 121.5 122.5 123.5 124.5 125.5 126.5 127.5 128.5 129.5 130.5 131.5 132.5 133.5 134.5 135.5 136.5 137.5 138.5 139.5 140.5 141.5 142.5</td>
</tr>
<tr>
<td>SWT 3.0-101DD</td>
<td>3.0</td>
<td>101</td>
<td>1A</td>
<td>79.5 80.4 80.5 80.8 81.5 82.5 83.5 84.5 85.5 86.5 87.5 88.5 89.5 90.5 91.5 92.5 93.5 94.5 95.5 96.5 97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.5 105.5 106.5 107.5 108.5 109.5 110.5 111.5 112.5 113.5 114.5 115.5 116.5 117.5 118.5 119.5 120.5 121.5 122.5 123.5 124.5 125.5 126.5 127.5 128.5 129.5 130.5 131.5 132.5 133.5 134.5 135.5 136.5 137.5 138.5 139.5 140.5 141.5 142.5</td>
</tr>
<tr>
<td>SWT 3.0-108DD</td>
<td>3.0</td>
<td>108</td>
<td>1B/2A</td>
<td>79.5 80.4 80.5 80.8 81.5 82.5 83.5 84.5 85.5 86.5 87.5 88.5 89.5 90.5 91.5 92.5 93.5 94.5 95.5 96.5 97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.5 105.5 106.5 107.5 108.5 109.5 110.5 111.5 112.5 113.5 114.5 115.5 116.5 117.5 118.5 119.5 120.5 121.5 122.5 123.5 124.5 125.5 126.5 127.5 128.5 129.5 130.5 131.5 132.5 133.5 134.5 135.5 136.5 137.5 138.5 139.5 140.5 141.5 142.5</td>
</tr>
<tr>
<td>SWT 3.0/3.2-113DD</td>
<td>3.0/3.2</td>
<td>113</td>
<td>2A</td>
<td>79.5 80.4 80.5 80.8 81.5 82.5 83.5 84.5 85.5 86.5 87.5 88.5 89.5 90.5 91.5 92.5 93.5 94.5 95.5 96.5 97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.5 105.5 106.5 107.5 108.5 109.5 110.5 111.5 112.5 113.5 114.5 115.5 116.5 117.5 118.5 119.5 120.5 121.5 122.5 123.5 124.5 125.5 126.5 127.5 128.5 129.5 130.5 131.5 132.5 133.5 134.5 135.5 136.5 137.5 138.5 139.5 140.5 141.5 142.5</td>
</tr>
</tbody>
</table>

*Remark: This is turbine IEC Class. Please note that differences may exist between turbine and tower IEC Class.*

Restricted © Siemens AG 2013 All rights reserved.

Siemens Wind Power Division
Offshore – Leading player in strongest growing market

Cumulated Siemens offshore installations

First project
- 1991: 5 MW Vindeby, DK

MW turbines
- 2000: 40 MW Middelgrunden, DK

GW project
- 2011: 630 MW London Array, UK

UK Round 3
- 2012: 1.8 GW DONG Master Agreement
Getting the costs of energy down - Innovations
Example 1: The world’s largest rotor blade B75

- Increased rotor-swept area harvests more wind and is thus crucial for the annual energy yield of the turbine.
- IntegralBlade-Technology: the world's largest fiberglass component cast in one piece.
- No seams or glued joints and no adhesive, all of which saves weight.
Getting the costs of energy down - Innovations
Example 2: Nacelle – Direct Drive Technology

- Gearless drive train increases reliability and availability
- 50% less parts reduces maintenance time
- 30% less weight facilitates installations offshore
- Higher energy yield
Getting the costs of energy down – Industrialization: Example 3: Moving line

• By introducing line production for nacelles, the production time was reduced by more than 50%, from 36 hours to 15 hours.
• Another way to lower the cost of energy is to produce a larger of number of wind turbines.
Wind technology is a young industry but yet a proven concept that offers potential for substantial improvements. Current and planned optimization in wind industry will make it competitive to any fossil & nuclear technology on the basis of CO₂–free energy cost. Since 2011 Siemens develops internal program to achieve grid parity with onshore and offshore wind technologies.
Comprehensive service solutions
What makes Siemens’ service unique?

- OEM knowledge and engineering support
- Skilled and experienced personnel available 24/7
- Comprehensive portfolio of service contracts
- 24/7 remote monitoring capability
- Technical field assistance to support scheduled and unscheduled outages
- Access to Siemens’ global logistics network with day-to-day management and control of inventory results in reduced lead-time for spare parts
- In-house training facility for customers
References in Poland – 150 MW in operation, 67 MW in construction

- **PGE**
  - Wind Farm Karnice
  - 13 x 2.3 MW
  - Operating since 2009

- **RWE**
  - Wind Farm Tychowo
  - 15 x 2.3 MW
  - Operating since 2010

- **EKO ENERGY**
  - Wind Farm Kobylnica
  - 18 x 2.3 MW
  - Operating since 12.2011

- **Dipol**
  - Wind Farm Okrągłe 1 x 2.3 MW
  - Operating since 2013

- **RWE**
  - Wind Farm Suwałki
  - 18 x 2.3 MW
  - Operating since 2010

- **PEP S.A.**
  - Wind Farm Gawłowice
  - 18 x 2.3 MW
  - In Execution

  - Wind Farm Rajgród
  - 11 x 2.3 MW
  - In Execution
Wind Power Division
Reference: Kobylnica, Poland

**Project name:**
Kobylnica Wind Farm

**Investor:**
Eko Energy Sp. z o.o.

**Project potential rating:**
41.4 MW

**Project location:**
North-central part of Poland, near Slupsk city

**Turbine siting:**
18 turbines located at Kobylnica commune, in region of Kwakowo and Lulemino villages

**Turbine type:**
SWT-2.3-101 with 99.5 m tubular steel tower. Transformer and MV switchgear are located in a separate container near the tower

**Construction period:**
From September 2010 until December 2011

**Extent of scope:**
Turbine and SCADA monitoring system, transport, installation and commissioning, 10 years service agreement

**Energy production:**
Annual production of energy about 100 GWh
Reference: Kobylnica, Poland
Transport of equipment to site
Reference: Kobylnica, Poland
Tower installation
Reference: Kobylnica, Poland
Rotor installation
Reference: Kobylnica, Poland
Turbine commissioning
Reference: Kobylnica, Poland
Wind farm ready
Wind farm – benefits for local communities

- Extra income for municipality and its residents
- Presence of long-term investor
- Employment of local work force and involvement of local companies
- Interest of tourists
- Power infrastructure development and construction of new road sections
- Ability to build an image of a modern eco-friendly municipality
Thank you very much for your attention!