Notes and forward-looking statements

This document contains statements related to our future business and financial performance and future events or developments involving Siemens that may constitute forward-looking statements. These statements may be identified by words such as “expect,” “look forward to,” “anticipate” “intend,” “plan,” “believe,” “seek,” “estimate,” “will,” “project” or words of similar meaning. We may also make forward-looking statements in other reports, in presentations, in material delivered to shareholders and in press releases. In addition, our representatives may from time to time make oral forward-looking statements. Such statements are based on the current expectations and certain assumptions of Siemens’ management, of which many are beyond Siemens’ control. These are subject to a number of risks, uncertainties and factors, including, but not limited to those described in disclosures, in particular in the chapter Risks in the Annual Report. Should one or more of these risks or uncertainties materialize, should decisions, assessments or requirements of regulatory authorities deviate from our expectations, or should underlying expectations not occur or assumptions prove incorrect, actual results, performance or achievements of Siemens may (negatively or positively) vary materially from those described explicitly or implicitly in the relevant forward-looking statement. Siemens neither intends, nor assumes any obligation, to update or revise these forward-looking statements in light of developments which differ from those anticipated.

This document includes – in the applicable financial reporting framework not clearly defined – supplemental financial measures that are or may be alternative performance measures (non-GAAP-measures). These supplemental financial measures should not be viewed in isolation or as alternatives to measures of Siemens’ net assets and financial positions or results of operations as presented in accordance with the applicable financial reporting framework in its Consolidated Financial Statements. Other companies that report or describe similarly titled alternative performance measures may calculate them differently.

Due to rounding, numbers presented throughout this and other documents may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.
Gas and Power

As GP, we are **more** ...

- More resilient portfolio
- More customer focused
- More competitive structure
- More control of costs
Gas and Power

Clear targets

Broad portfolio

Changing market

Concrete actions
Gas and Power

- Clear targets
- Broad portfolio
- Changing market
- Concrete actions
Clear targets, clear goals

**Grow Revenue**
- Grow topline at market level
- Shift business mix for faster growth

**Improve Efficiency**
- €1.5bn operational productivity by FY21
- Sharpen R&D spend

**Increase Profit**
- €1bn cost out by FY23 (€700m by FY21)
- In margin band by FY21

**Deliver Cash**
- Cash Conversion Rate of 1.0 by FY21
- Drive NWC discipline and ownership

Note: Figures reflect GP OpCO setup as of April 1st, 2019
Delivering our targets despite strong market headwinds

Grow Revenue

- Revenue FY18: 18.1
- Oil & Gas
- Central Power Generation
- Distributed Power Generation
- Transmission
- Revenue FY21: ~18.9

Increase Profit

- Adjusted EBITA Margin FY18: 4%
- One-Offs FY18
- Market
- Operational Productivity
- Structural Cost Out
- Adjusted EBITA Margin FY21: ~8%

1 Severance €374m and disclosed divestment gains €167m
Note: Figures reflect GP OpCO setup as of April 1st, 2019
Unrestricted © Siemens 2019
Continuous focus on cost reduction and cash delivery

Orders (€bn) + 19%¹

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
<th>H1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.6</td>
<td>10.2</td>
<td></td>
</tr>
</tbody>
</table>

Revenue (€bn) - 6%¹

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
<th>H1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8</td>
<td>8.3</td>
<td></td>
</tr>
</tbody>
</table>

Orders (€bn) + 19%¹

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
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</tr>
</thead>
<tbody>
<tr>
<td>8.6</td>
<td>10.2</td>
<td></td>
</tr>
</tbody>
</table>

Adj. EBITA/ margin (€m) - 60bps

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
<th>H1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.8%</td>
<td>5.2%</td>
<td></td>
</tr>
</tbody>
</table>

Adjusted EBITA margin excl. severance

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
<th>H1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3%</td>
<td>5.6%</td>
<td></td>
</tr>
</tbody>
</table>

Free Cash Flow (€m) - 6%

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
<th>H1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>-148</td>
<td>-157</td>
<td></td>
</tr>
</tbody>
</table>

Cash Conversion Rate (CCR)

<table>
<thead>
<tr>
<th></th>
<th>H1 FY18</th>
<th>H1 FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.36</td>
<td>-0.29</td>
<td></td>
</tr>
</tbody>
</table>

¹ Comparable, i.e. adjusted for currency translation and portfolio effects

Note: Figures reflect GP OpCO setup as of April 1st, 2019

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Gas and Power

Clear targets

Broad portfolio

Changing market

Concrete actions
Leading along the entire energy value chain

### Key figures FY18

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders</td>
<td>€18.5bn</td>
</tr>
<tr>
<td>Revenue</td>
<td>€18.1bn</td>
</tr>
<tr>
<td>4% Adj. EBITA Margin</td>
<td>~65,000</td>
</tr>
</tbody>
</table>

### Position in relevant market

<table>
<thead>
<tr>
<th>Market</th>
<th>Oil and Gas</th>
<th>Central Power Generation &gt; 100 MW</th>
<th>Distributed Power Generation &lt; 100 MW</th>
<th>Transmission</th>
<th>Services and Digital</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2</td>
<td>#2</td>
<td>#1</td>
<td>#2</td>
<td>#2</td>
<td>#2</td>
</tr>
</tbody>
</table>

### Customer groups

**Oil and Gas**
- bp
- Saudi Aramco
- Shell

**Utilities / IPPs**
- Duke Energy
- China Huaneng Group Co. Ltd.
- GNA

**Industry**
- EGA
- Mitrephor RenewEnergy
- Reliance Industries Limited

**TSOs**
- State Grid Corporation of China
- TenneT
- amprion

1. Including LGTs (Large Gas Turbines)

Note: Figures reflect GP OpCO setup as of April 1st, 2019

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Siemens Capital Market Day | Gas and Power | Lisa Davis, Tim Holt
Strengthening resiliency through balanced business mix

GP business mix – Revenue FY18

**Market verticals**
- Oil & Gas (OG)
  - 17%
- Central Power Generation (CP)
  - 41%
- Transmission (TR)
  - 31%
- Distributed Power Generation (DP)
  - 11%

**Business types**
- Services
  - 43%
- Products
  - 28%
- Solutions
  - 29%

**Geographical mix**
- Asia, Australia
  - 22%
- Europe, CIS
  - 28%
- Americas
  - 30%
- MEA
  - 20%

**Trend for FY21**

<table>
<thead>
<tr>
<th></th>
<th>OG</th>
<th>CP</th>
<th>DP</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 ~87% of Central Power Generation Revenue are LGTs related
Note: Figures reflect GP OpCO setup as of April 1st, 2019

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Page 11 Munich, May 8, 2019

Siemens Capital Market Day | Gas and Power | Lisa Davis, Tim Holt

2 China share ~35%
### Industry-leading Service business

#### Large and diverse fleet
Service-relevant fleet by region (units)

- **Latin America**: 8,500
- **Europe, CIS**: 25,000
- **North America**: 30,000
- **Asia, Australia**: 14,500
- **MEA**: 11,000

**Total**: 90,000

~ **50%** of rotating equipment with several O&G majors

#### Strong business foundation

**Backlog (€bn)**

- **CAGR**
  - **FY17**: 31.8 (as reported)
  - **FY18**: 32.8 (as reported)
  - **Estimate FY19**: 34.4 (comparable)

- **Growth**
  - **FY17**: 31.6 (as reported)
  - **FY18**: 32.8 (as reported)
  - **Estimate FY19**: 33.8 (comparable)

~ **90%** of backlog reflects long-term programs

#### Resilient performance

**Revenue (€bn)**

- **Stable**
  - **FY17**: 7.9 (as reported)
  - **FY18**: 7.8 (as reported)
  - **Estimate FY19**: 7.9 (comparable)

- **CAGR**
  - **FY17**: 3.0
  - **FY18**: 3.3
  - **Estimate FY19**: 3.4

Growth and productivity driving profit improvement

---

1 Including Service-relevant turbines, generators, compressors, engines

2 CAGR FY17-19

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Munich, May 8, 2019
Large projects are in our DNA and we know how to do them

Our EPC business creates value

- One EPC business unit
- Selective bidding
- Maximize GP value add
- Stringent risk management
- Reliable execution

Project NEMO Link
Turnkey full-EPC HVDC – OE €290m

Project Ende Andina
Three thermal and power generation sites – OE €1bn
## Key trends, 2018 – 2023 (Source: IHS Autonomy 2018)

<table>
<thead>
<tr>
<th>Category</th>
<th>FY18</th>
<th>FY23</th>
<th>CAGR FY18-23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy demand (Mtoe)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrification (TWh)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decarbonization (TWh)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decentralization (#GTs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digitalization (Share of connected LGTs in GP fleet)</td>
<td>~ 90%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Energy demand (Mtoe)
- +4%

### Electrification (TWh)
- +10%

### Decarbonization (TWh)
- -4%
  - Renewables: +34%
  - Coal: -24%

### Decentralization (#GTs)
- -24%
  - Central: -34%
  - Distributed: +18%

### Digitalization (Share of connected LGTs in GP fleet)
- ~90%

### Market challenges and opportunities

**GP market**

- **Transmission**: +3%
- **Oil & Gas**: +3%
- **Distributed Power Generation**: +1%
- **Central Power Generation**: -3%

**1-2%**

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### Innovating for customer value across the verticals

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Changing Customer Needs</th>
<th>GP Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil &amp; Gas</td>
<td>• Fast return on invest&lt;br&gt;• Low total installed cost&lt;br&gt;• Monetize stranded assets</td>
<td>• Integrated system offers&lt;br&gt;• Digital solutions (topsides 4.0)&lt;br&gt;• Performance-based contracts</td>
</tr>
<tr>
<td>Central Power</td>
<td>• High efficiency&lt;br&gt;• Flexibility in ramp up/down&lt;br&gt;• Emissions reduction</td>
<td>• H2 Gas Turbines&lt;br&gt;• Brownfield exchange&lt;br&gt;• Project co-development</td>
</tr>
<tr>
<td>Distributed Power</td>
<td>• Flexible hybrid solutions&lt;br&gt;• Captive power&lt;br&gt;• Standard applications</td>
<td>• Broad gas and steam portfolio&lt;br&gt;• Integration with battery &amp; Renewables&lt;br&gt;• Energy as a Service</td>
</tr>
<tr>
<td>Transmission</td>
<td>• Secure grid stability&lt;br&gt;• High grid flexibility&lt;br&gt;• High energy efficiency</td>
<td>• Innovative products&lt;br&gt;• Power electronic and grid access solutions&lt;br&gt;• Real-time monitoring</td>
</tr>
</tbody>
</table>
Gas and Power

Clear targets

Broad portfolio

Changing market

Concrete actions
Implementing concrete actions to achieve our targets

<table>
<thead>
<tr>
<th>Grow Revenue</th>
<th>Improve Efficiency</th>
<th>Increase Profit</th>
<th>Deliver Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Service excellence for all verticals</td>
<td>• Continue operational productivity drive</td>
<td>• Leverage GP setup for significant cost savings</td>
<td>• All levers and all GP</td>
</tr>
<tr>
<td>• Leading innovation for Transmission growth</td>
<td>• Point R&amp;D towards Service and growth areas</td>
<td>• Ensure project excellence</td>
<td>• Compensation tied to cash generation</td>
</tr>
<tr>
<td>• Four key growth areas</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Siemens Capital Market Day | Gas and Power | Lisa Davis, Tim Holt
Our actions

- Grow Revenue
- Improve Efficiency
- Increase Profit
- Deliver Cash

- Service excellence for all verticals
- Leading innovation for Transmission growth
- Four key growth areas
Leveraging Service strength to grow in all verticals

**Strong foundation in core**

<table>
<thead>
<tr>
<th>Service Revenue per unit</th>
<th>FY16-18</th>
<th>FY18-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGT</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>IGT &amp; AGT</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>Steam</td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>Transmission</td>
<td>←</td>
<td>←</td>
</tr>
</tbody>
</table>

*1 Comparable, excluding FX / portfolio impacts

**New initiatives**

- Extended O&M
- Remote Field Services & Operation
- Brownfield Exchange
- New Digital

**Applied to all verticals**

**Oil & Gas**
- Transfer GT LTP success to compression and steam
- Replace OOEMs GTs with Siemens technology

**Transmission**
- Leverage offshore service assets
- Transfer GT LTP success to Transmission
Leading innovation to grow in Transmission

GP growth in Transmission (>4% p.a.) driven by …

- Innovative products & systems
- End-to-End integrated solutions
- Global footprint & factory network

Focus areas

- RE integration / Greener energy
  - +47% T&D networks until 2040 (+36 mn km)
- National grids reinforcement
  - €90bn/a investments in transmission
- Interconnecting grids
  - +380 GW until 2050 (“Belt and Road”)

GP opportunities

- Blue products portfolio
- Power electronics offerings
- Offshore grid access solutions
- Grid resilience products
- Upgrades of existing assets
- Replacement of aging assets
- Leading HVDC products
- DC transmission offerings
- Digital products / systems

GP innovations (examples)

- Offshore Transformer Module
- Unified Power Flow Controller
- Digital Substation / Sensformers®
## Booking business in new growth areas

<table>
<thead>
<tr>
<th>Projects</th>
<th>Make fossil energy greener</th>
<th>Deliver power out of a box</th>
<th>Manage grid complexity</th>
<th>Facilitate sector coupling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braskem Chemical, 60% H₂-fueled cogen, Brazil</td>
<td></td>
<td></td>
<td></td>
<td>Large Power-to-Methanol project, Chile</td>
</tr>
<tr>
<td>OE: ~ €200m</td>
<td></td>
<td></td>
<td>OE: ~ €400m</td>
<td>MoU signed</td>
</tr>
<tr>
<td>Estrella del Mar III, SeaFloat mobile power, Dominican Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OE: ~ €90m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultranet, Flexible energy transmission, Germany</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>New technology (e.g., MVDC+) to address stabilization &amp; flow control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decarbonization solutions incl. production of alternate fuels and use of H₂-fueled gas turbines</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### Immediate opportunities
- Emission reduction through energy efficiency, fuel change, hybridization
- Critical power needs at minimum cost and quickly deployed
- New technology (e.g., MVDC+) to address stabilization & flow control
- Decarbonization solutions incl. production of alternate fuels and use of H₂-fueled gas turbines

### Future opportunities
- Gas2Wire
- Flexible configurations
- Real-time active grid control
- Green Power-to-Hydrogen
Our actions

Grow Revenue

Improve Efficiency

Increase Profit

Deliver Cash

- Continue operational productivity drive
- Point R&D towards Service and growth
# Continue operational productivity drive

<table>
<thead>
<tr>
<th>Technical Specifications Optimization</th>
<th>Productivity achieved</th>
<th>Further measures in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmonization of specifications across businesses and markets (50 / 60 Hz)</td>
<td>Drive “design-for-localization”</td>
<td>Increase functional specifications to leverage supplier know-how</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced Negotiation Concepts</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>From tendering to eBidding</td>
<td>From eBidding to eAuctioning</td>
<td>Trustful cooperation with suppliers (“open book policy” / cost break down)</td>
</tr>
<tr>
<td>Implementation of “should-cost analyses” as basis for negotiations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Value Sourcing</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-cost suppliers mainly for local projects</td>
<td>Increase use of low-cost suppliers for global projects</td>
<td>Increase footprint in China, in India and Romania</td>
</tr>
<tr>
<td>Build up resources in China</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

€1.5bn operational productivity by FY21
Our actions

- Leverage GP setup for significant cost savings
- Ensure project excellence
Deliver additional €500m cost reduction by FY23

<table>
<thead>
<tr>
<th>Current Savings from PG2020 ¹ Nov 2017</th>
<th>Synergies and Rightsizing</th>
<th>Leaner Setup in Regions</th>
<th>Support Function Reduction</th>
<th>Total Savings FY23</th>
</tr>
</thead>
<tbody>
<tr>
<td>€500m</td>
<td>€200m</td>
<td>€100m</td>
<td>€200m</td>
<td>€1bn</td>
</tr>
<tr>
<td>€100m achieved H1 FY19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Merge units</td>
<td>• Pool resources in 5 global hubs</td>
<td>• IT: Bundle services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pool business functions</td>
<td>• Establish demand-based services</td>
<td>• Supply Chain Mgmt.: Automate processes</td>
<td></td>
</tr>
</tbody>
</table>

Additional savings enabled by new GP OpCo setup:

- €500m

¹ Announced in November 2017

Note: Figures reflect GP OpCO setup as of April 1st, 2019

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Increased control with 70% of previous corporate allocation now GP managed

Support Function Reduction

Corporate allocation

From (before V2020+)

To (after V2020+)

GP in control of support cost

€200m

100%

70%

30%

Examples for support functions reduction

Targeted cost savings

IT

~ 90% under GP

20%

SCM

~ 90% under GP

22%

COM

~ 45% under GP

26%

Note: Figures reflect GP OpCO setup as of April 1st, 2019

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Our actions

**Grow Revenue**

**Improve Efficiency**

**Increase Profit**

**Deliver Cash**

- All levers and all GP
- Compensation tied to cash generation
### Measures in place along entire cash cycle

#### 33% of senior management bonus linked to cash

<table>
<thead>
<tr>
<th>Inventories</th>
<th>Purchasing</th>
<th>Accounts Receivables</th>
<th>Customer Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve inventory turn by</td>
<td>Extend payment terms for</td>
<td>Improve Days Sales Outstanding by</td>
<td>Increase share of contract Liabilities by</td>
</tr>
<tr>
<td>20%</td>
<td>&gt;40%</td>
<td>15%</td>
<td>&gt;10%</td>
</tr>
</tbody>
</table>

- Reduce lead time via additive manufacturing (up to 50% e.g. SGT-400 Blade1)
- Consequent follow up on accounts receivables to prevent overdues
- For projects EVA > Profit

**Note:** Figures reflect GP OpCO setup as of April 1st, 2019

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Current cash performance due to …

- Restructuring / cost out
- Fewer pre-payments on projects
- HL product introduction
- Slow supply chain response

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Deliver a CCR of 1.0 by FY21
Our actions

Grow Revenue

Improve Efficiency

Increase Profit

Deliver Cash
Clear targets, clear commitment

Grow Revenue
- Grow top line at market level
- Shift business mix for faster growth

Improve Efficiency
- €1.5bn operational productivity by FY21
- Sharpen R&D spend

Increase Profit
- €1bn cost out by FY23 (€700m by FY21)
- In margin band by FY21

Deliver Cash
- Cash Conversion Rate of 1.0 by FY21
- Drive NWC discipline and ownership

Note: Figures reflect GP OpCO setup as of April 1st, 2019
Gas and Power

Prepared for the future!

Leading portfolio

More control of our business

Clear priorities and targets

Experienced team

Strong ownership culture

Committed to delivering
Oil and Gas

Portfolio

Upstream (Offshore/Onshore)
- Gas compression & injection
- Power generation & distribution
- Advanced Digital Solutions

Midstream
- Pipeline compression
- LNG liquefaction and boil-off gas

Downstream
- Compression for refining
- Petrochemicals
- Power generation

Key Equipment
- Industrial gas turbines
- Aero-derivative gas turbines
- Steam turbines
- Electric drives
- High speed gas engines
- E-houses & modules
- Turbo and reciprocating compression solutions

Highlights

Topsides 4.0
Our digital approach to rotating equipment, electrical & automation systems, and secure communications through the entire life cycle of the asset. Designed for reduced CAPEX and OPEX, shorter project cycle time, enabled for remote operations with integrated automation and safety systems, shorter time to stable operation with virtual training and commissioning on the digital twin, and lower OPEX with reduced staffing, predictive analytics, and integrated asset level optimization

Turbo and reciprocating compression solutions
Compressor solutions can be standardized or tailored to customer needs in a variety of applications – such as on- or offshore oil and gas production, natural gas transmission and distribution, air separation, chemicals, petrochemicals, and refining. Our proven, low maintenance compressor solutions provide outstanding efficiencies and reliability, lowering customer life cycle costs.
Central Power Generation

**Portfolio**

- **Large gas turbines**
  117 MW to 593 MW

- **Generators**
  25 MVA to 2,235 MVA

- **Utility steam turbines**
  90 MW to 1,900 MW

- **Power plant solutions**
  - Gas turbine power plant solutions
  - Combined cycle power plants
  - Single-shaft and multi-shaft configuration
  - Integrated solar combined cycle power plants
  - Combined heat and power
  - Floating power plant solutions

- **Instrumentation & Controls**

**Highlights**

- **Holistic solution capabilities**
  One-stop solution provider with all critical components enabling innovative, fully integrated, optimized and even specialized power plant solutions (simple / combined cycle, combined heat and power, floating, and more)

- **Sector Coupling solutions**
  Integrated renewable energy systems ranging from 1 MW up to GWs (incl. electrolyzer)
Distributed Power Generation

Portfolio

- Aeroderivative gas turbines (4 MW to 71 MW)
- Industrial gas turbines (5 MW to 57 MW)
- Pre-designed and industrial steam turbines (<10 kW to 250 MW)
- Industrial power plant solutions (IPPS)
- Instrumentation & Controls
- Diesel and gas engines up to approximately 2 MW

Highlights

- Fast Power
  Solutions that can provide gas turbine generation capacities in just six months or less.

- SGT-800 gas turbine
  Designed for flexible operation, high efficiency and reliability, and low emissions.

- Gas engines
  Delivering highest efficiency, displacement within smallest footprint, available in the fastest cycle times.
Transmission

Portfolio

- High-voltage switchgear & devices
- Power transformers
- Substations
- Grid access and connection solutions
- HVDC and MVDC direct current transmission systems
- Totally integrated power solutions

Highlights

**High-voltage direct current (HVDC) transmission systems**

Stabilize power grids for greater renewables integration. Our HVDC systems are equipped with special control and protection functions to help address the challenges of distributing energy to consumers over greater distances and varied sources, paving the way for greater adoption of renewables. HVDC also makes it possible to selectively control the power flow, stabilize the voltage, and smooth out frequency fluctuations.

**Frequency stabilizer**

Compensate for voltage and frequency fluctuations in milliseconds. In the near future, power management systems alone will no longer be able to compensate for imbalances in power grids. Our innovative and economical SVC Plus FS solution is the missing link to ensure the grid stability needed in this era of transition to a new energy mix.
Service and Digital

**Portfolio**

- **Standard Services**
  Parts, field service, repairs and overhauls, remote operational service

- **Service programs**
  Lifetime extension, modernization and upgrades

- **Performance Enhancements**
  Long term programs, operation and maintenance, leasing programs, condition-based maintenance

- **Digital Services**
  Combining physical OEM services with intelligent data capabilities

- **Training and Consulting**
  Training for customers and partners on equipment operation and maintenance, EHS portfolio

**Highlights**

- **Cyber Security Services**
  Comprehensive end-to-end measures for fleet-wide protection as managed services: the full scope of cyber security detection and management.
  - Leveraging Operational Technology (OT) know-how to provide visibility into and control over their operating environment
  - Detection, investigation, and response to security incidents in real-time
  - Service scope comprising security consulting, managed services, dedicated professional services as well as security products

- **Additive Manufacturing**
  AM refers to a production process in which components are “printed” layer by layer on the basis of digital 3-D design data
  - With additive manufacturing technology parts for industrial gas turbines are repaired up to six times faster
  - 50% lead time reduction
  - 30% reduction of greenhouse gas emissions
  - 63% less resources in production process
  - 60% faster repairs
  - More flexibility for design of parts
Service and Digital

Combining physical OEM services with intelligent data capabilities

Digital Services makes valuable assets even better

Digital Services deliver customer value that is proven in the marketplace

- Physics-based models
- Remote connectivity
- Big data architecture
- Fleet statistical analysis
- Customized service and support
- Enhanced asset management
- Performance optimization

Examples:
- Condition-based maintenance e.g. Profertil S.A.
- Remote Diagnostics Services e.g. Tahaddart Power Plant
- Performance Optimization e.g. DEWA