Who We Are

• Renewable Energy Developer (wind and solar)
• PNE USA is wholly-owned subsidiary of PNE AG (German parent company publicly traded on German stock exchange)
• Almost 3 GW of wind/solar installed worldwide (14 Countries)
  • 1 GW in North American pipeline
• US HQ based in Chicago IL
• NM operations:
  • Staff
  • Gladstone Wind Farm
Solar PV Technology

• Cell Efficiency
• Single Axis Tracking
• Microinverters
Of the utility-scale solar contracts signed in 2018, only 11% were under a mandated renewable portfolio standard, while more than 80% of projects were signed under voluntary procurement by a utility or corporate off-taker. (Source: U.S. Solar Market Insight Report)
Industry Trends - Solar Installations

Annual U.S. Solar Installations

Yearly Installed Solar Capacity (MWe/s)

Source: SEIA/Wood Mackenzie Power & Renewables U.S. Solar Market Insight

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Industry Trends - Solar Declining Prices

U.S. Solar PV Price Declines & Deployment Growth

Source: SEIA/Wood Mackenzie Power & Renewables U.S. Solar Market Insight
Lawrence Berkeley National Laboratory, Tracking the Sun

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Utilities Turning Towards Solar

U.S. Utility Solar PPAs at Interconnection Date vs. New Build Natural Gas Cost of Delivery

Industry Trends - Solar Costs
Dispatchable Solar

• When paired with battery storage solutions, utility-scale solar can provide utilities and grid operators with flexible, reliable power to meet the needs of their customers.
Solar Growth Forecast

U.S. Solar PV Deployment Forecast

- Annual Solar PV Installed Capacity (MWdc)
- 2010 to 2024E

- Residential
- Non-Residential
- Utility

Source: SEIA/McMackenzie Power & Renewables U.S. Solar Market Insight

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Utility Scale Drivers

- RPS
- Declining module prices
- Power Purchase Agreements
- PURPA
- Demand from rate payers
  - Climate Change
  - Environmental benefits (clean air, water)
- Energy Storage
State-by-State Solar Deployment

Top 10 States

<table>
<thead>
<tr>
<th>State</th>
<th>Installed Capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>24,464 MW</td>
</tr>
<tr>
<td>North Carolina</td>
<td>5,261 MW</td>
</tr>
<tr>
<td>Arizona</td>
<td>3,739 MW</td>
</tr>
<tr>
<td>Nevada</td>
<td>3,145 MW</td>
</tr>
<tr>
<td>Texas</td>
<td>2,925 MW</td>
</tr>
<tr>
<td>New Jersey</td>
<td>2,733 MW</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>2,465 MW</td>
</tr>
<tr>
<td>Florida</td>
<td>2,290 MW</td>
</tr>
<tr>
<td>Utah</td>
<td>1,651 MW</td>
</tr>
<tr>
<td>New York</td>
<td>1,628 MW</td>
</tr>
</tbody>
</table>

Source: SEIA/Wood Mackenzie Power & Renewables U.S. Solar Market Insight

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Thank You!

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