Ingersoll Rand advances the quality of life by creating comfortable, sustainable and efficient environments.

Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a $13 billion global business committed to a world of sustainable progress and enduring results.
### Our Global Footprint

**Manufacturing, Distribution & Office Locations**

<table>
<thead>
<tr>
<th>Region</th>
<th>Climate</th>
<th>Industrial</th>
<th>Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>America</strong></td>
<td>384</td>
<td>75</td>
<td>24</td>
</tr>
<tr>
<td><strong>Europe, Middle East, India, and Africa</strong></td>
<td>137</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td><strong>Asia Pacific</strong></td>
<td>134</td>
<td>59</td>
<td>2</td>
</tr>
</tbody>
</table>

**World-Class Talent in Every Market**

More than 40,000 employees globally

**Global Footprint and Ingersoll Rand Locations**

We have a total of 867 facilities around the world, including 51 manufacturing facilities worldwide.
Thermal Energy Storage
Efficient, cost-effective way to store cooling

- 15-25 kW load shift for 6 to 10 hours
- CALMAC tank is 99% recyclable and designed for 35-40 years
- Works with Trane chilled water system (chiller)
- Integrates with solar energy – compensates for duck curve
- Manufactured in Englewood, NJ since 1947 and acquired by Trane/Ingersoll Rand in 2017

Over 1 Gigawatt of thermal energy storage already installed in 60 countries.
## TES Helps New Jersey Build a Modern Grid

<table>
<thead>
<tr>
<th>New Jersey Master Plan</th>
<th>Thermal Energy Storage Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilizing new and developing technologies</td>
<td>• TES helps integrate renewables and reduces / shifts peak</td>
</tr>
<tr>
<td></td>
<td>• TES provides time shifted, emissions-free nighttime wind energy for daytime use during hot summer months</td>
</tr>
<tr>
<td></td>
<td>• TES can be used as an automated demand response asset</td>
</tr>
<tr>
<td></td>
<td>• TES is safe (i.e. non-flammable, no hazardous materials)</td>
</tr>
<tr>
<td>Overcoming current barriers to new and enhanced infrastructure</td>
<td>• Incentives facilitate deployment of energy storage resources like TES</td>
</tr>
<tr>
<td>Affordable distribution of energy to all customers</td>
<td>• TES helps reduce customer costs (~40% lower at night(^1))</td>
</tr>
<tr>
<td></td>
<td>• TES tanks are highly durable/efficient with a 30 year useful life, resulting in little maintenance costs and high efficiencies</td>
</tr>
<tr>
<td></td>
<td>• TES lasts 2 to 4 times longer than batteries at a fraction of the cost</td>
</tr>
</tbody>
</table>

\(^1\)Analysis of PSE&G Day-Ahead LMPs
TES is 1/3 the cost of battery systems for C&I

Levelized Technology Cost for BTM Applications$^{1,2}$

- **Cost advantages**
  - No inverter expense
  - Lower component costs, including balance of system, O&M
  - No need for capacity maintenance (augmentation)

- **Lower capital costs**
  mean lower financing costs

1. Costs represent average of range presented in LCOS 3.0 for battery technologies.
2. Conservative case that includes full cost of chiller.

*Source: Enovation Partners*
Thermal Energy Storage Programs that Work

Florida Power and Light Thermal Storage Program
• Rebate of $600 per kW
• Available on a rolling basis – you can apply for it anytime
• Pays after you’ve run the plant successfully for one month

ConEdison Demand Management Program
• Rebates change annually – $2,520 per kW for thermal storage
• Auction dates and installation deadline posted well in advance
• Pays after one summer month’s successful operation

Effective program attributes
✓ Bill transparency and ease of use
✓ Pilot programs that provide locational value for BTM DERs
✓ Published marginal/ avoided cost rates and utility incentives for non-wires alternatives
✓ Storage Incentives through state energy efficiency programs
New Jersey Installations

- **Perth Amboy School District**: Two school installations, with additional sites under consideration. Helps the district save on electricity costs.

- **West Long Branch School District**: Designed for energy cost savings.

- **Rutgers Athletic Center**: 2016 installation to mitigate air-conditioning demands at their basketball arena.

- **CALMAC manufacturing facility**: delivers $12,000 in annual energy savings.

Current electric rates are driving some installations due to ~40% lower nighttime spot market electricity prices¹

¹Analysis of PSE&G Day-Ahead LMPs
THANK YOU!