

# Renewable Energy and Power Solutions



## Creating a more sustainable and resilient energy infrastructure

The world of energy is going through a transformation, creating new opportunities and challenges for both building owners and utility providers across the country, redefining how the energy demand—and supply—are managed. We are looking beyond how energy is consumed in buildings to how that energy is produced.

A growing number of building owners are implementing distributed energy resource (DER) and energy storage solutions, gaining wide-ranging benefits including reduced operating costs, lower environmental footprint and improved resiliency.

At Trane, our approach incorporates many factors, including use scenarios, current utility rates, local legislation and incentive programs and geography.

Let's go beyond today's traditional power sources by incorporating sustainable and efficient distributed energy resources into your overall energy strategy.

## Your mission. Our solution.

Organizations adopt distributed energy resources for a variety reasons and objectives. At Trane, we will begin your project with a thorough assessment of your goals: Is the primary objective capital preservation? Tax credit benefit? Energy autonomy? Emergency resiliency? Sustainability? Does your organization want to minimize demand charges by leveraging energy storage to shift the timing of the building's electrical load? Or is there an objective to monetize the facility by participating in demand response programs with local utilities?



Trane can help implement a wide array of distributed energy resource solutions including:

### **Cogeneration**

By using a single fuel source, such as natural gas, to produce both electrical and thermal energy, an organization can nearly double the return on investment on fuel.

### **Solar Photovoltaic**

More commonly known as Solar PV. These systems reduce utility expenses, support grid resiliency and climate commitment.

### **Microgrid**

Being able to operate autonomously by strategically using local energy generation and energy storage supports organization's grid resiliency and reduces operational costs.

### **Integrated Energy Storage**

Thermal energy storage and batteries help to improve how the power supply is managed. It can create a more resilient energy infrastructure, and bring additional saving opportunities to both building owners and utilities providers.

### **Biomass**

Made from byproducts such as forest debris, agricultural waste and scrap lumber, it provides a clean-burning, renewable source that fuels specialized engines capable of generating both power and heat.

### **Biogas**

Rather than flaring or simply burning it for emissions control, facilities utilize biogas as a renewable energy source for on- and off-site use. Combining biogas as fuel with the advantages of cogeneration turns a regulatory challenge into a three-part advantage by reducing costs, increasing reliability, and reducing the most harmful emissions.

### **Wind Power**

As turbine technology has improved and costs have come down, wind-driven power production has become more viable across a broader spectrum of projects.

---

## A Leader in Connected Building Solutions

By working with Trane, you benefit from the unmatched combination of intelligent systems, building automation and energy management strategies that only a leading connected building solutions provider can deliver.

Trane offers comprehensive Energy Services to help you be more sustainable, cost efficient and resilient.

Learn more at [trane.com/BeyondEnergy](https://trane.com/BeyondEnergy)



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.com](https://trane.com) or [tranetechnologies.com](https://tranetechnologies.com).

*All trademarks referenced in this document are the trademarks of their respective owners.*

© 2020 Trane. All Rights Reserved.

ENGY-SLB016-EN  
04/21/2020