

# How to Decarbonize Your Facilities

Buildings contribute to 40% of all global greenhouse gas emissions and pose a massive opportunity for carbon reduction and impact.

## TWO TYPES OF CARBON IN YOUR FACILITIES

### **Embodied Carbon**

#### MATERIALS WE SPECIFY AND BUILD

Furniture, steel, wood, construction, transportation

### **Operational Carbon**

#### EMISSIONS FROM RUNNING YOUR BUILDING

Electricity, natural gas, compressed air

## THREE OPERATIONAL DECARBONIZATION STRATEGIES

Reducing embodied carbon happens in the architecture and design phases of new construction. This would involve carbon-focused commissioning and sourcing product LCAs and EPDs to make design decisions with environmental goals in mind.

On the other hand, reducing your facility's operational carbon is an ongoing process of using less energy and using smarter energy. The projects on the right support operational decarbonization:

*Note: Occasionally, operational efficiency is at odds with human well-being. Keep in mind times when you need to choose human flourishing over environmental impact or cost reductions.*



### **Use Less Energy**

- HVAC & Controls
- Compressed Air
- Building Envelope
- Lighting Systems



### **Use Smarter Energy**

- Real-Time Pricing
- Peak Demand
- Building Systems Management
- Sub-Metering
- Retro-Commissioning



### **Make Your Own**

- Solar System
- Combined Heat & Power
- Cogenerations
- Energy storage systems

## WHERE DO YOU START?

### 1. Complete a Facility Energy Audit

This will point out hot spots in your building envelope and operational efficiency, allowing you to prioritize projects for the highest ROI and impact. Audits can be done in one building or across your entire portfolio for facility-to-facility comparisons.

### 2. Reevaluate Your Energy Procurement Strategy

Regardless of how efficiently you operate your buildings, you'll still use energy, so why not make it clean energy? Energy Procurement Specialists can help you understand the energy options for each of your facilities, bringing transparency to where and how you purchase renewable energy. Oftentimes, purchasing renewables and RECs can reduce your overall annual energy spent while positively impacting your carbon footprint.

Want to learn more? Explore our resource library to dive deeper into assessing and reducing emissions:



#### ARTICLES

- > [Facilities: Embodied vs. Operational Carbon](#)
- > [The Energy Management Pathway](#)
- > [Four Reasons You Need an Energy Management System](#)



#### CASE STUDIES & SERVICES

- > [Facility Energy Audits](#)
- > [Retro-commissioning & Controls Optimization](#)
- > [Utility Data Collection & Reporting](#)



#### MICROVLOGCAST VIDEOS

- > [Reducing the Carbon Impact of Existing Buildings](#)
- > [Sustainability in New Construction](#)



#### FORESIGHT FORUM WEBINARS

- > [How to Decarbonize Your Facilities](#)



**We're here to help!**

[Chat with Mike](#) about how we can help build a sustainability roadmap for your company.