

Sustainable Solutions for Healing Environments





Whether it's to heal a wound, receive a life-saving procedure or to simply check your health, proper healthcare allows us to experience life to its fullest. We rely on our healthcare community to reduce pain and to strengthen, even lengthen, our lives. For medical staff to best serve their community and patients, **the healthcare environment they work in must also be healthy.** This is where we can help.

At Trane, we create sustainable communities, places where people can thrive. We believe that a holistic approach to building wellness is one way that healthcare systems can fulfill their promise to society. Healthcare facilities have a direct impact on patient outcomes and the resiliency, sustainability, and public perception of the healthcare system at large. Operating efficient and effective facilities is especially challenging amid today's changing regulations and advancing technology. The issues are complex and intertwined, and many of the solutions fall within the broad scope of Trane's holistic approach to better buildings.

\$

Cost & Compliance: From source, install and set-up—to daily operation and monitoring to make any building do your bidding. Simple. Open. Uncomplicated. Our leadership in innovation, sustainability and connectivity makes our equipment and controls top notch.



Reliability & Resiliency: Customer service is at the heart of what we do, and with our full suite of customizable services, you can trust the outcomes from Trane. Our dedicated and highly trained technical and engineering teams provide insight, guidance, and assistance through routine maintenance and unplanned situations. We can connect to equipment and initiate solutions from anywhere—virtually making downtime a thing of the past.



Outcomes that Matter: Data collection, aggregation, analysis, and insight to deliver intentional outcomes. We know that healthcare facilities have people to keep comfortable, energy efficiency to manage and sustainability goals to crush.

The Cost of Care

With HVAC, hot, chilled and domestic water systems (equipment and controls), and lighting accounting for approximately 72% of facility costs, it's time to take control.¹

Delivering high quality healthcare and the buildings where that care is delivered cost money to build, to maintain and to operate. It takes a lot of energy to care for the sick and historically, healthcare facilities have been a major user of energy, while also coming under increasing pressure to reduce energy use and carbon emissions. According to ENERGY STAR, because hospital facilities are open 24/7 and have extra commitments for air filtration, circulation, cooling and waste management, they use about 2.5 times the amount of energy as a similar-sized commercial building.



From operating suites, radiological and emergency departments, to adhering to code compliance requirements for JCAHO, CMS, or HFAP, the right solutions can position healthcare facilities for future growth, reduced energy and maintenance costs.

Take control of your energy spend...

What, When and How much you use.



The health care industry is always changing, and we're lending our expertise to help shape the future. We're active participants in organizations including the American Society of Healthcare Engineers (ASHE), ENERGY STAR, American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE), American College of Healthcare Executives (ACHE*), BOMA* Medical Office Building Association CHEs, CCHL and U.S. Green Building Council*. Since 2004, Trane is a U.S. Department of Energy (DOE)-qualified Energy Services Company (ESCO), accredited by the National Association of Energy Services Companies (NAESCO*) and the Canadian Federal Buildings Initiative.

1. Energy Consumption Analysis and Characterization of Healthcare Facilities in the United States Khaled Bawaneh, Farnaz Ghazi Nezami, Md. Rasheduzzaman and Brad Deken. Published: 4 October 2019).

Take Care of Your Healing Environment

1. Equip

Optimized indoor air quality and comfortable conditions are critical for productivity and performance. Patients, physicians, and staff deserve a comfortable working environment, and numerous studies have demonstrated the impact of Indoor Air Quality on patient healing and staff productivity. Heating, ventilation, and air-conditioning (HVAC) is the primary driver in achieving healthier, comfortable spaces. From your staff's comfort to your patients' healing process, IAQ has a powerful impact on your operation.²

Improving indoor air quality is one of the most effective ways to address airborne health risks in your building. Thus, implementing a science driven IAQ assessment is a good data driven first step. The assessment will provide a comprehensive report of current conditions, recommended changes to meet industry guidelines and document implemented improvements.



2. Maintain, Operate and Prolong Your Building Systems

You need worry-free HVAC systems that run reliably. With our Scheduled Service Agreements, we will:

- Maintain your HVAC systems properly
- Scheduled preventive maintenance
- Refrigerant management
- Laboratory analysis
- Energy analysis
- Connectivity and Alarm Notification

Optional features

- Contingency planning and rental reserve
- Critical systems audit
- Predictive service
- Retro-commissioning
- Building Performance Package (controls and BAS service)



Maintenance and Contingency Plan Assessment: Our maintenance and mechanical service experts help you evaluate your HVAC assets for ongoing, unplanned and emergency needs.

^{2.} Integrating Health and Energy Efficiency in Healthcare Facilities - energy.gov

3. Control

Building Automation

We know that providing an exceptional environment of care is priority number one. But with intense regulatory compliance standards and extremely high operating costs, that priority is seriously challenging.

Building automation can be the answer! The right controls can work alone or seamlessly with existing systems, provide flexibility and cost savings.

Choosing an intelligent, wireless controls system helps provide:

- Mobility
- Scalability
- · Easy install and use
- Compliance reporting using building automation
- Energy savings and operational efficiencies relate to equivalent revenue

By empowering you to manage your systems proactively, you can achieve an optimized healing environment—and bottom line.



Healthy Lighting is more than meets the eye

Research suggests that lighting impacts human health and performance by enabling performance of visual tasks, controlling the body's circadian system, affecting mood and perception, and by enabling critical chemical reactions in the body. In addition, it also improves the adjustment to night-shift work among staff.³

Our lighting team can develop the best plan to keep your facility appropriately lit, while remaining energy efficient. You'll find we can do much more than change a light bulb. Our capabilities run the continuum, from improving indoor environmental quality to using lighting infrastructure to locate people or things.



4. Measure and Manage

Trane Intelligent Services[®] (TIS) is the key to knowing your building. TIS provides Energy Management Systems and Services that helps transform your building data into intelligence. That intelligence creates actionable insights that optimize building performance—and impact business outcomes.

Trane Intelligent Services[®] provide always-on, automated monitoring powered by a suite of leading technologies backed by Trane's team of technical experts. It's an effective and affordable way to look after your HVAC equipment 24/7. A few of the many benefits of Trane Intelligent Services[®] include:

- Uncover hidden information and opportunities for improvement, remotely
- Get targeted recommendations
- Reduce downtime
- Make smarter, more cost-effective decisions about how you manage and maintain your building, with the deep professional expertise and energy analytics from Trane

Our energy experts help you establish your Energy Use and Cost Intensity and can manage, monitor and mitigate costly inefficiencies in your building's infrastructure.



5. Renew, Replace, Re-purpose

Energy Services Contracting

With an Energy Savings Performance Contract, you can undertake significant building upgrades that improve energy efficiency—and pay for the improvements with future energy savings guaranteed by Trane. This eliminates the need for significant capital expense.

Whether you want to implement energy conservation measures, install more energy efficient equipment, incorporate renewable equipment or all the above, we can help. Our experts can design and install a comprehensive energy improvement program for you—to improve your business' overall sustainability and reduce operating costs.

Facility Condition Assessment: Our Comprehensive Solutions experts can provide in-depth facility asset condition assessments and provide multiple options for implementation of needed improvements, including financial tools to help you make them financially viable.

Sustainability—Setting and achieving Environmental, Social and Governance Targets

Energy intensity reduction is the guiding principle in everything we do, and we want to help you develop strategies that take your sustainability results to the next level. By offering a wide range of renewable energy options and provide high-efficiency HVAC systems with next-generation, low global warming potential (GWP) refrigerants, we can help you launch your building's carbon shift—and achieve your sustainability goals—without compromising comfort and control. Available applications for sustainable goals:

- Direct Expansion Heat Pumps
- Hot Water Space Heating
- Digital Energy Services/Controls
- Renewable Energy Generation



Financing your future

We understand the landscape of financial tools available to you. From utility rebates, tax credits, traditional leases, and Property Assessed Clean Energy (PACE) loans, to energy service agreements (ESA), public-private partnerships and innovative renewable investments, like Power Purchasing Agreements (PPA) there are a lot of options. You don't have to chart a path through these complex options on your own. We'll not only develop an energy efficiency program that meets your goals, but we'll also propose the financial tools best able to help you achieve them, and then help arrange the financing.

Discount Programs

Planning a project involving HVAC, electrical and lighting systems can be a daunting task, particularly when capital expenses are involved. Whether considering a simple upgrade or installing a complete building automation system, it's important to make the right choice for the long term. After all, critical comfort systems are a way to add value to your building and create a superior environment for the people and the things in the building.

Partnerships with Cooperative and Group Purchasing Organizations

Cooperative purchasing combines the purchasing volume of multiple companies and organizations to obtain better pricing for every member of the group. It takes the guesswork out of wondering whether you're getting the best price for a project upgrade and streamlines your purchasing process because you work with pre-negotiated contracts that already meet your competitive bid requirements. It may also align with your current procurement processes for other capital purchases.

Trane participates with multiple group purchasing organizations including Kinetic GPO, Premier IncTM, Vizient[®] and HealthTrust Purchasing Group[®].

^{*}JCAHO - Joint Commission on Accreditation for Healthcare Organizations *HFAP - Healthcare Facilities Accreditation Program

Learn more at trane.com



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* or *tranetechnologies.com*.

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

© 2022 Trane. All Rights Reserved. HLTH-SLB015-EN 01/06/2022