United Therapeutics
A PUBLIC BENEFIT CORPORATION

On Operating Sustainably: Our Facilities at United Therapeutics

At United Therapeutics, we recognize that indoor air quality, building materials, and design choices affect everything from respiratory health to mental well-being. That is why one of our goals as a public benefit corporation (**PBC**) is to **Operate Sustainably**. We aspire to integrate **site net zero energy** and **site net zero embodied carbon** principles into new construction where feasible. At the same time, we seek to create facilities that contribute aesthetically to the communities in which we operate, that are resilient in operation, that create space for wellness, and that spark creativity and collaboration among our teams.

Starting in 2003 with the installation of our first solar array, we now have more than 7-MW of onsite solar powering our operations, with about 20 percent of our portfolio by square foot certified to LEED Gold or better.

Incorporating sustainability into new building design is no afterthought. The imperative to operate sustainably has been part of our philosophy since the first decade of our founding, even before we became a PBC. It also informs how we manage and maintain our properties.

Fast Facts About Our Properties

4 **LEED certified properties**, representing about 20% of our square feet, including the LEED Platinum site net zero energy *Unisphere* in Silver Spring, Md.

5 Sites designed to approach **site net zero energy** or **net zero embodied carbon**

84 **Electric Vehicle** charging ports available across our campus locations

~7-MW **Onsite solar capacity**

Multiple Facility of the Year (FOYA) Awards from the international Society for Pharmaceutical Engineering (**ISPE**) for innovative buildings, including the 2024 honorable mention for UT's Phase Five (Project Lightyear) cGMP* warehouse and logistics center designed for high efficiency and low embodied carbon.

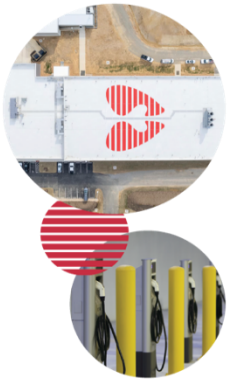
The following illustrates our commitment to managing our environmental footprint as we grow in our effort to achieve our PBC purpose.

United Therapeutics converted to a public benefit corporation (**PBC**) in 2021—the first publicly-traded biopharmaceutical company to do so. Our **PBC purpose** has two parts: ***to create a brighter future for patients through the development of novel pharmaceutical therapies and technologies that expand the availability of transplantable organs.*** Our first purpose helps delay or avoid the need for a transplant, while the second purpose enables a patient to have a transplant when they need one. We align our PBC purpose with three pillars—our patients, our people, and our plane. Our goal related to our planet pillar is to operate sustainably.

* cGMP = current Good Manufacturing Practices. These are manufacturing practices and controls that ensure that manufactured products are consistently produced and controlled according to set quality standards.

A Journey of Innovation

Our greener construction aspirations started with an idea—that we could grow while seeking to manage our impacts on the environment. This evolved into a commitment that resulted in many first-of-their kind, award-winning buildings. This effort continues today. Next on the horizon: a mass-timber manufacturing facility we expect to bring online in 2027! So, check here often as we continue to forge new ground in corporate real estate in service of the science inside.



2024

Completed our first clinical-scale designated pathogen free **(DPF)** facility to help expand the availability of tolerable, transplantable organs for patients with end-stage organ disease. The DPF also incorporates sustainability elements such as a **900 kW photovoltaic (PV) array**, white roof for heat deflection, and **energy recovery** on systems to precondition the outside air to maintain high air quality requirements.

2023

Completed our **fourth LEED Certified** facility cold storage cGMP compliant warehouse and logistics center in Research Triangle Park **(RTP)**, N.C. Designed toward net zero energy and lower embodied carbon, this facility also includes a **microgrid** with battery backup using **Tesla Megapacks** that provide **6.2 MWh of battery storage capacity** to support the building potential grid outages.

2020

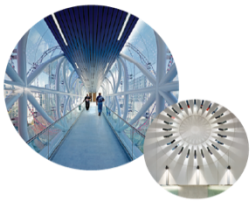
Completed our **fourth site net zero energy facility**, an 11,000 square foot childcare facility on our campus in RTP, N.C.

2019

Completed our **third site net zero energy facility** on the campus of the Mayo Clinic, Jacksonville, Fla.

2018

Completed the largest, certified commercial **site net zero energy facility** in North America, *the Unisphere*, in Silver Spring, MD. This **LEED Platinum** facility includes almost 3,000 PV panels with more than **1,000 MWh average annual renewable energy production capacity, 52 closed-loop geoexchange wells**, and more.



2016-2017

Committed to **site net-zero energy** design for new construction where feasible.

Completed **first site net zero energy facility** in Melbourne, Fla.

2003-2015

Installed our first **92 kW photovoltaic (PV) system** on our first manufacturing facility in Silver Spring.

Secured **LEED Gold certification for two** buildings on our Silver Spring campus.

Commissioned the construction of a **4-MW PV system** on our RTP campus.

Enabling the Sustainability Ambitions of Others

Geoexchange systems use the earth like a battery, removing and storing excess summer heat and using it for warmth in winter. Our site net zero LEED Platinum *Unisphere* provides an example of how our Corporate Real Estate (**CRE**) team paved the way for the ambitions of others.

Key to the building's designed functionality were 52 closed loop geoexchange wells drilled 500 feet below the building footprint. However, Maryland law barred this under an out-of-date well construction code that treated geoexchange wells the same as drinking water wells.

Our CRE team was able to work collaboratively with other stakeholders to get the code changed, thus paving the way for the use by other organizations of similar technology in the construction of greener buildings elsewhere in Maryland.

Preventative Maintenance

Proactive facilities management is essential to achieving the performance promise of green buildings. Our Engineering and Maintenance (**EM**) teams work hard to maintain our first-in-class properties, a different exercise from typical operational maintenance. For example, while ancient cultures tapped into the power of geothermal energy, the technologies to harness its capabilities and the installation of geoexchange systems in modern buildings is limited in practice. For technologies like these, maintenance knowledge is developed on the job rather than in formal classroom training.

Preventative maintenance programs can provide up to 20 percent savings in raw material use and 30 percent lower greenhouse gas (**GHG**) emissions compared to not having such programs.[1] The EM teams understand that robust maintenance programs can reduce energy and water use, even in conventionally designed buildings, and they seek opportunities to improve efficiencies where possible. For example, in 2019, they completed a multi-phase lighting retrofit in our main manufacturing site in our RTP, N.C. campus, replacing existing fluorescent and halogen lighting with more efficient LED lighting, and installing daylight and occupancy sensors, resulting in significant energy cost savings.

The team understands their important role in helping us make progress toward our PBC goal to operate sustainably. They aspire to implement the latest techniques possible to eke out further savings, mindful always that product safety and quality, and adherence to strict **GxP** requirements, take precedence.[2]

[1] Roeckel, Guillaume. "The Value of Preventative Maintenance for Achieving Sustainability Goals", Automation.com. 7 February 2024. https://www.automation.com/en-us/articles/february-2024/value-preventative-maintenance-sustainability

[2] GxP refers to Good Manufacturing Practices (**GMP**[2]), as well as Good Clinical Practices (**GCP**), Good Distribution Practices (**GDP**), Good Laboratory Practices (**GLP**), Good Tissue Practices (**GTP**), and Good Vigilance Practices (**GVP**).

Sample Social and Environmental Building Awards and Recognition

2025

- 2025 ISPE FYOA—Honorable Mention, DPF

2024

- 2024 ISPE FOYA—Honorable Mention, Phase Five
- 2024 US Green Building Council (**USGBC**) Carolinas Local Leadership Award
- 2024 Research Triangle Cleantech Cluster (RTCC) Cleantech Innovation Award for Energy
- 2024 International Institute for Sustainable Laboratories (I2SL) Award for Excellence in Resilience and Renewable Energy

2023 ASCE-National Capital Section Innovation in Sustainable Engineering Award

2020

- USGBC Maryland Leadership Award – Innovative Design, New Construction
- Urban Land Institute (**ULI**) Excellence in Sustainability
- Trends Award for Excellence in Sustainability – ULI Washington
- Project of the Year Finalist – Engineering News-Record (**ENR**)
- Interiors – Sustainability – Contract Magazine
- Community Leader Award for Innovative Design – USGBCMD
- Well Workplace Corporate Social Responsibility Award, Leadership Montgomery

2019

- Best of the Best Green Project, ENR
- Excellence in Sustainable Design Citation, Montgomery County Planning Department

Resources

The Unisphere: the largest certified site net zero, LEED Platinum, commercial office building in North America	**Video:** https://vimeo.com/292412250
Phase Five: our LEED Gold certified, designed for site net zero energy warehouse and distribution center that includes an independent microgrid system that eliminates the need for fossil fuels onsite	**Video:** https://vimeo.com/856506077
Our DPF: the world's first clinical-scale designated pathogen free facility to help expand the availability of tolerable, transplantable organs for patients with end-stage organ disease	**Video:** https://vimeo.com/911193933/32e7535418
See the latest **Corporate Responsibility and Public Benefit Report** for additional details about our public benefit goals and progress in these areas and more.	**Website:** https://corporateresponsibility.unither.com/

United Nations Sustainable Development Goals (UN SDGs)

Our sustainable building work aligns with multiple UN SDGs, but especially UN SDG 3—Good Health and Wellbeing, UN SDG 9—Industry Innovation and Infrastructure, UN SDG 11—Sustainable Cities and Communities, UN SDG 12—Responsible Consumption and Production, and UN SDG 13—Climate Action.