

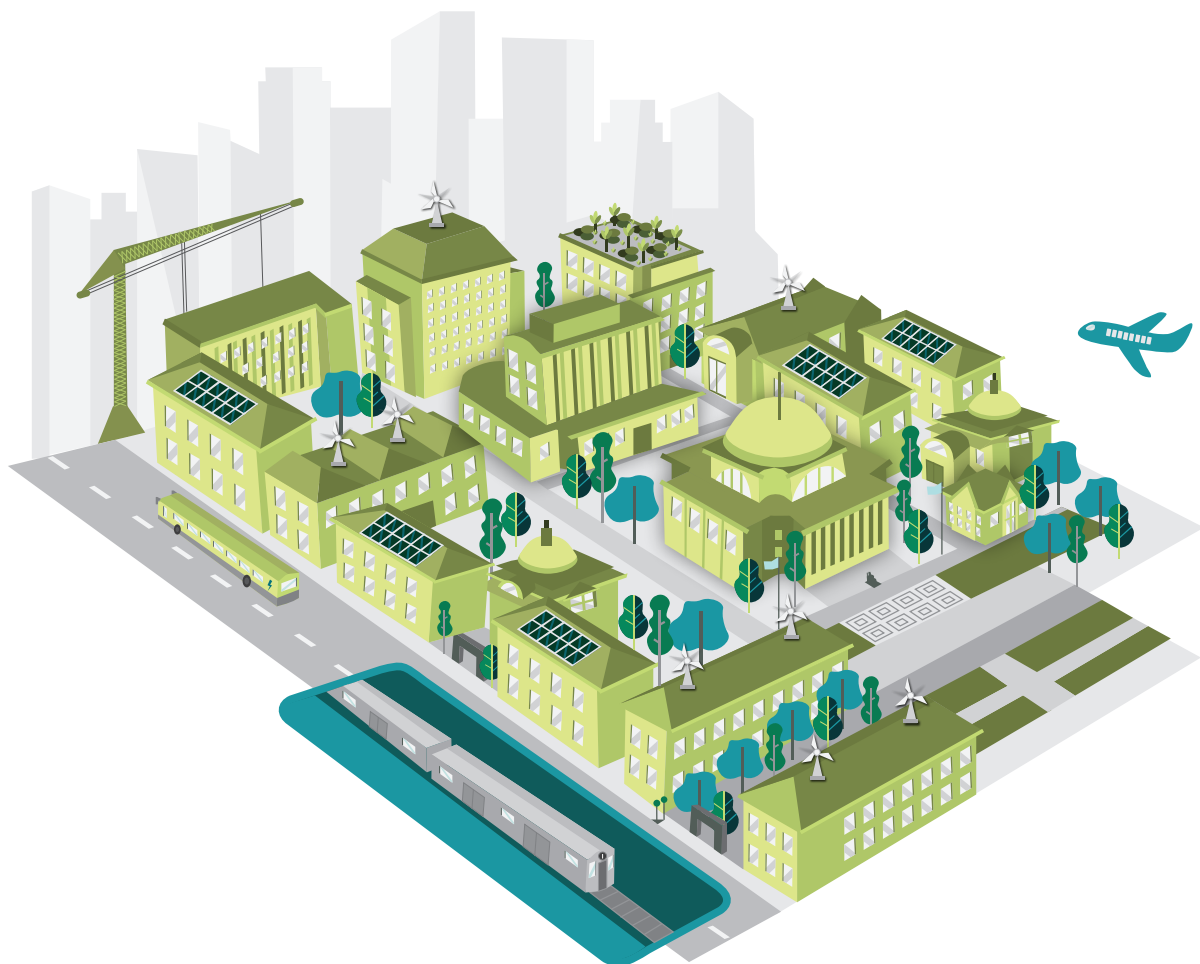


**ANNUAL SUSTAINABILITY
PROGRESS REPORT
2021 - 2022**

**SUSTAINABLE
COLUMBIA**

contents

Overview	3
Leadership	4
Net Zero	5
Science-Based Targets	6
Operations	11
Taking Action	12
Learning Together	13



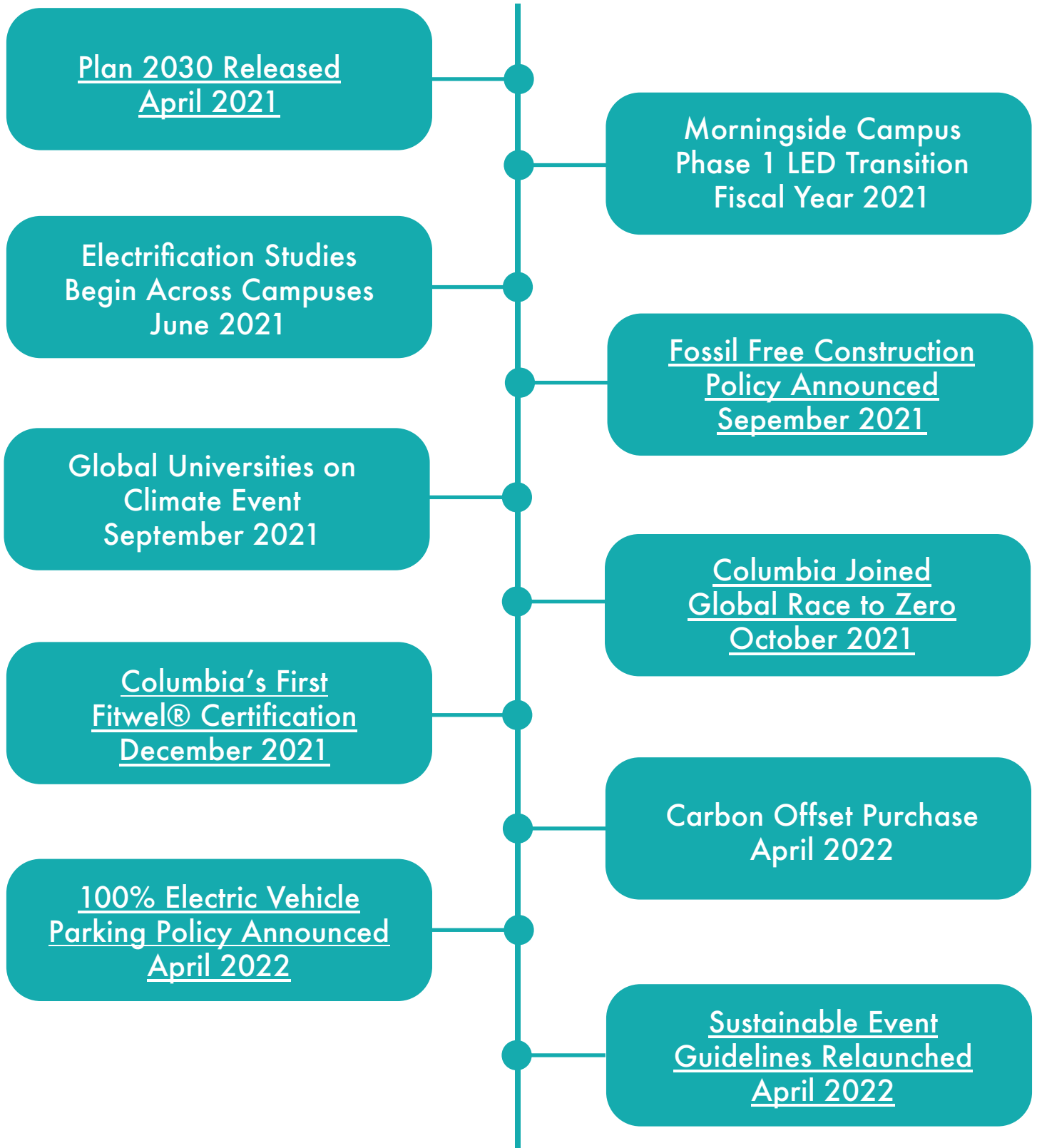


Because Columbia is one of the world's great academic centers in climate science, we have more than the usual responsibility to play a leadership role in adapting to and stemming this emerging threat to the planet.

President Lee C. Bollinger

overview

April, 2021



April, 2022

Leadership

Since Plan 2030 was released last year, Columbia University has proven through its commitments and policies that it is a leader in the global fight against climate change. In September, 2021 Columbia announced that it will no longer install new fossil fuel connections in any new construction, refresh, or renovation projects and will evaluate how to fully electrify the campus by replacing the onsite combustion of fossil fuels with clean, renewable energy sources.

Columbia also joined the Race to Zero, a global initiative for a zero carbon world that rallies non-state actors to take rigorous and immediate action to halve global emissions by 2030. During Climate Week NYC in September, for which Columbia's Climate School was named University Partner, the university hosted a lineup of virtual events centered on university action to combat climate change. These included a panel of Columbia faculty, staff, and student representatives who discussed activity around Plan 2030, as well as a Global Alliance of Universities on Climate (GAUC) panel alongside Yale and Tsinghua Universities.



In November 2021, Columbia submitted a formal letter of support for Governor Hochul and the State's efforts to bring renewable electricity into Zone J to help reduce the City's reliance on fossil fuel-fired generation. Since then, Governor Hochul announced in April 2022 the approval of the two clean energy projects that will deliver clean, renewable solar, wind, and hydroelectric power to New York City. Columbia is well positioned to pursue access to this power through state sponsored programs including Tier 4 RECs.

Looking ahead, we are planning to gradually transition Columbia's parking areas to 100% zero emission vehicle occupancy by phasing out access for internal combustion engine vehicles. The phase-out in University-managed space will begin between the years 2030 and 2037 in an effort to meet the University's greenhouse gas reduction targets while also aligning with New York State action on this issue. In addition, the Sustainable Events Guidelines have been re-launched to encourage all campus stakeholders to review and align with best practices for gatherings large and small. Schools and departments can support the University's sustainability goals by following the guidelines as live events resume.

0
L
O
N

net zero

**Columbia University
commits to net zero
greenhouse gas emissions
by 2050 or sooner.**

At Columbia, we recognize that to be truly sustainable is to take a multi-faceted and multi-tiered approach. We are looking to tackle climate and sustainability issues through world-renowned research occurring right here on our campus, engaging staff leadership and individual participation. Ranging from energy conservation efforts to award-winning reuse programs and recycling efforts, we're dedicated to creating a more sustainable planet for all.

Check out Columbia's process or rigorous greenhouse gas accounting:
sustainable.columbia.edu/ghg



science-based targets

For more on SBTs, visit
sustainable.columbia.edu/sbt

Science-based targets provide a clearly defined trajectory to reduce GHG emissions in line with the Paris Agreement, which aims to limit global warming to 1.5°C above pre-industrial levels. More than a thousand public entities globally are adopting SBT to translate the latest climate science from global calculations to institution-specific targets. The targets outlined in Plan 2030, calculated from the base year of 2019, align all Columbia's campuses at the highest level to take immediate action on GHG reduction efforts.

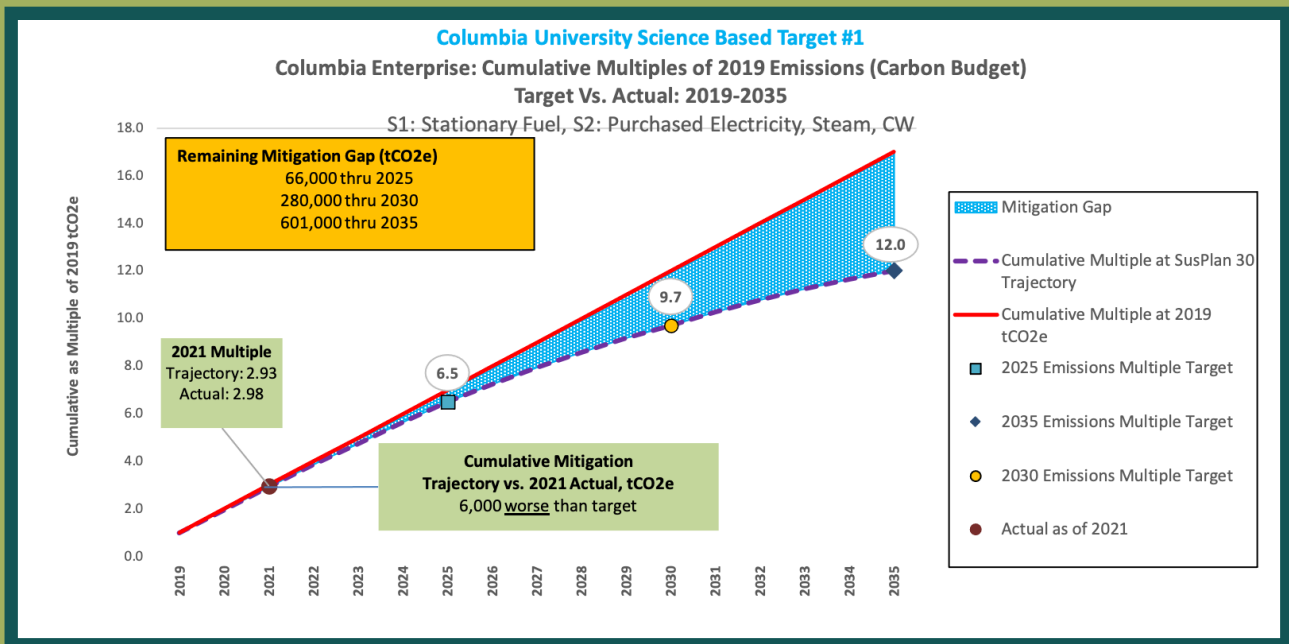
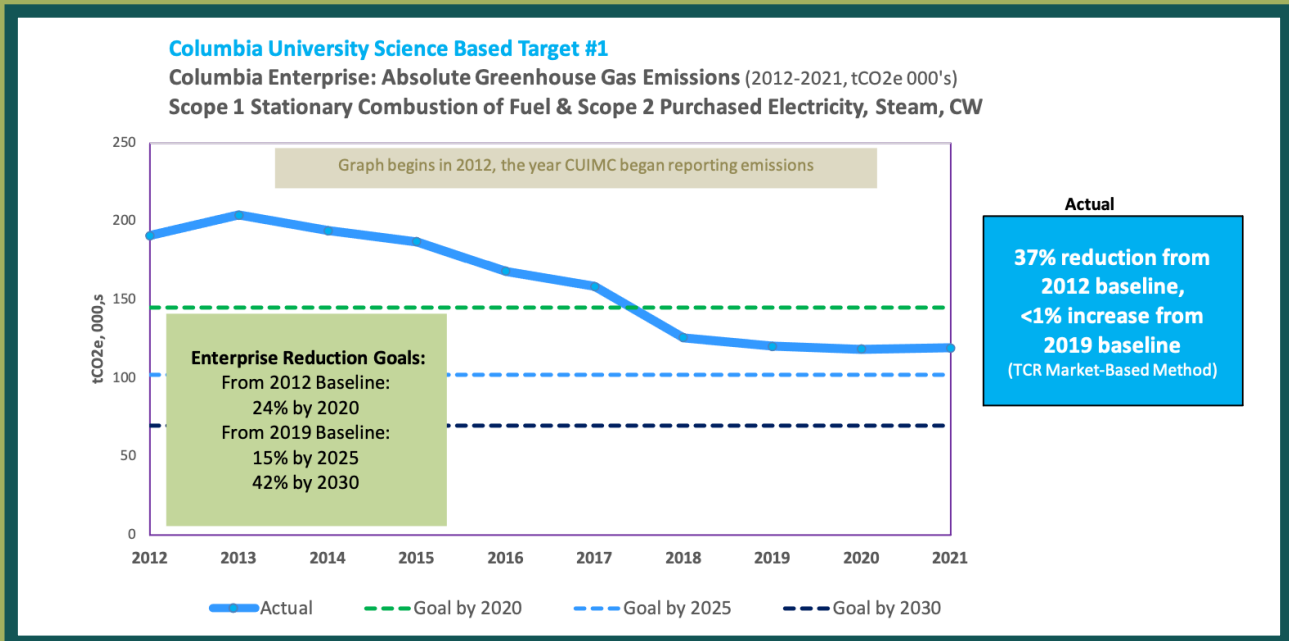
2025 interim target = **15%**

2030 interim target = **42%**

2035 interim target = **63%**

By 2050 or sooner = **100%**

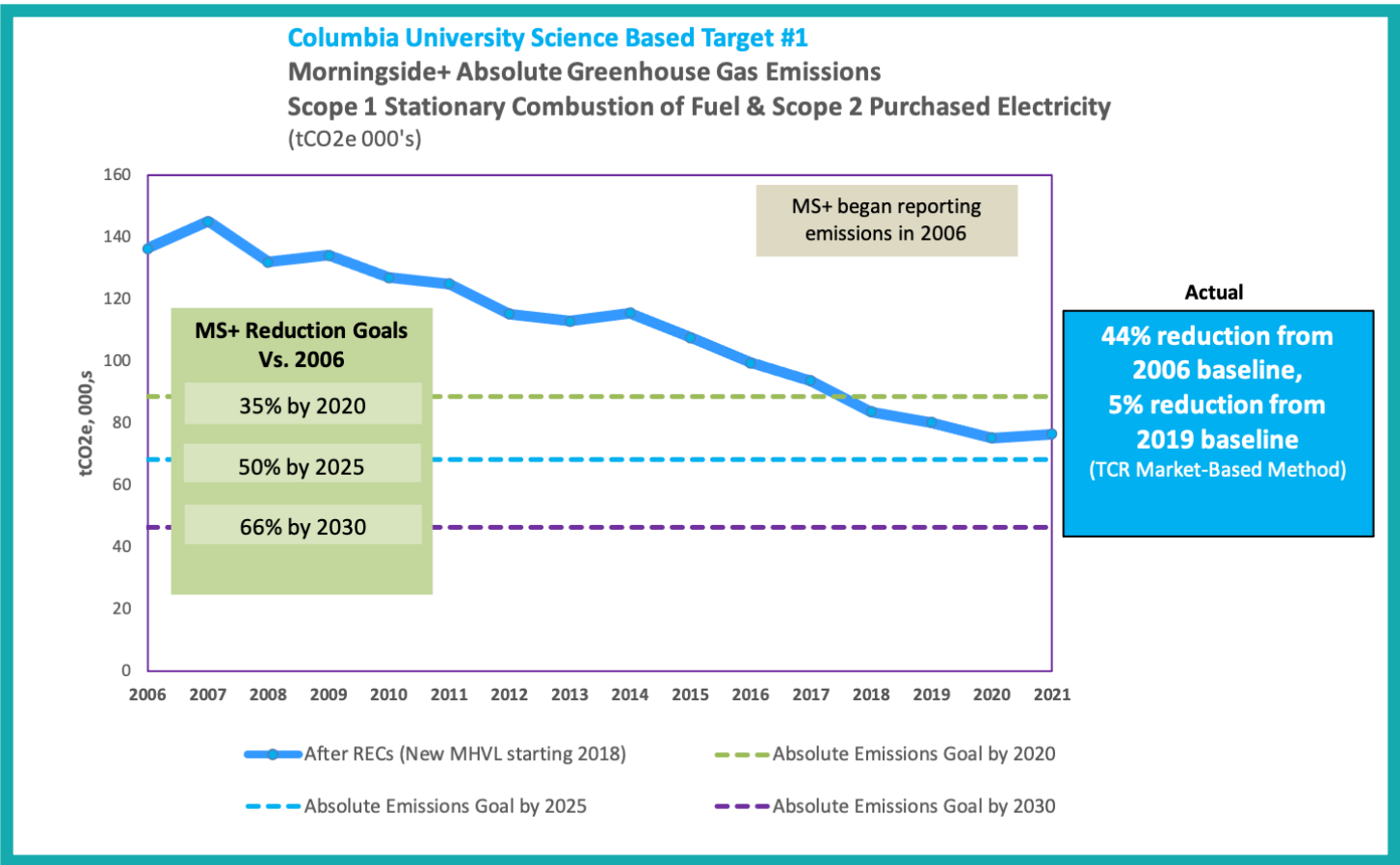
science-based targets: all campuses



2012 is the baseline year for our enterprise-wide science-based targets tracking because this is the earliest year that all three campuses were actively tracking and reporting their emissions (MS+ 2006, LDEO 2006, CUIMC 2012).

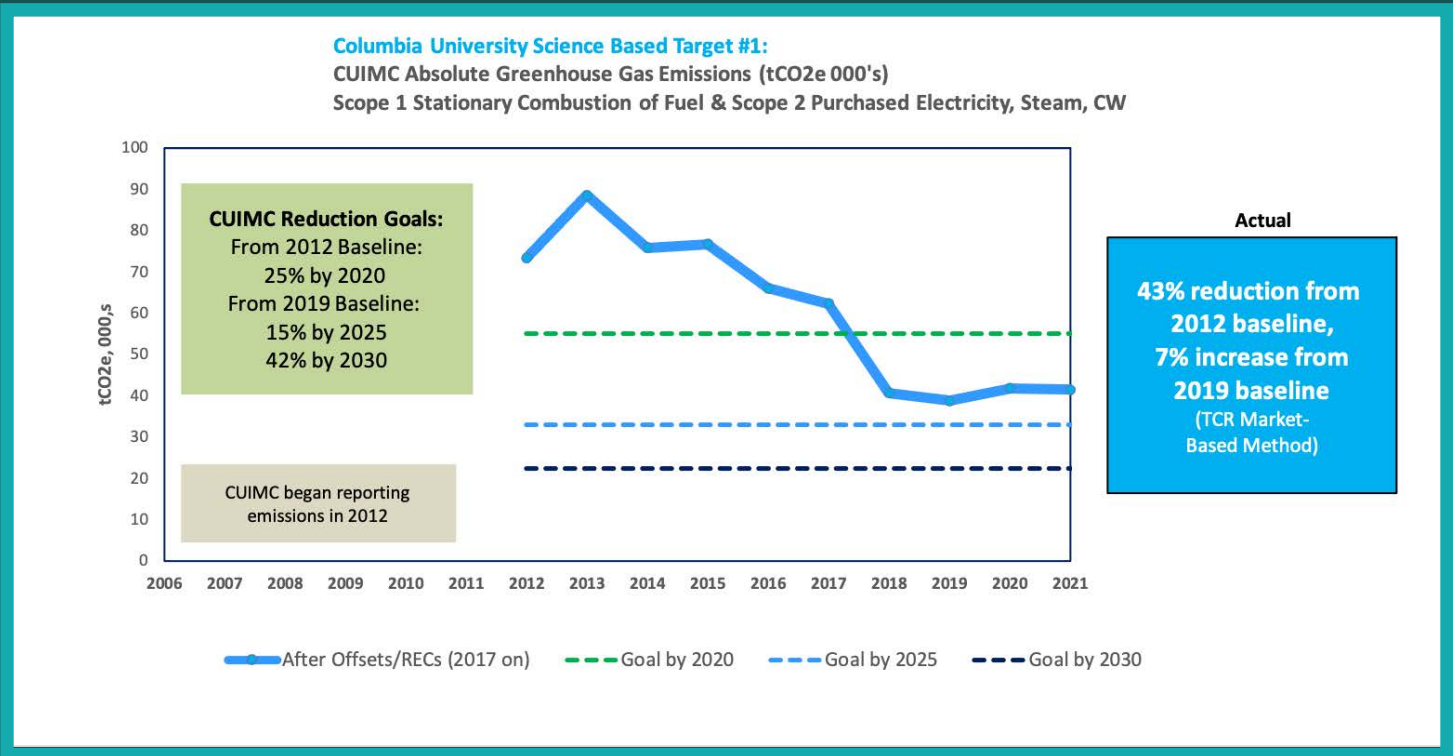
science-based targets: morningside+

Columbia’s Morningside campus is undergoing a \$2.6 million Strategic Electrification Study, which covers all buildings served by the Morningside Central Plant. Columbia is also negotiating more than \$1 million in grants from the New York State Energy Research and Development Authority (NYSERDA) for performing the study. The estimated date of completion for this effort is August 2022.



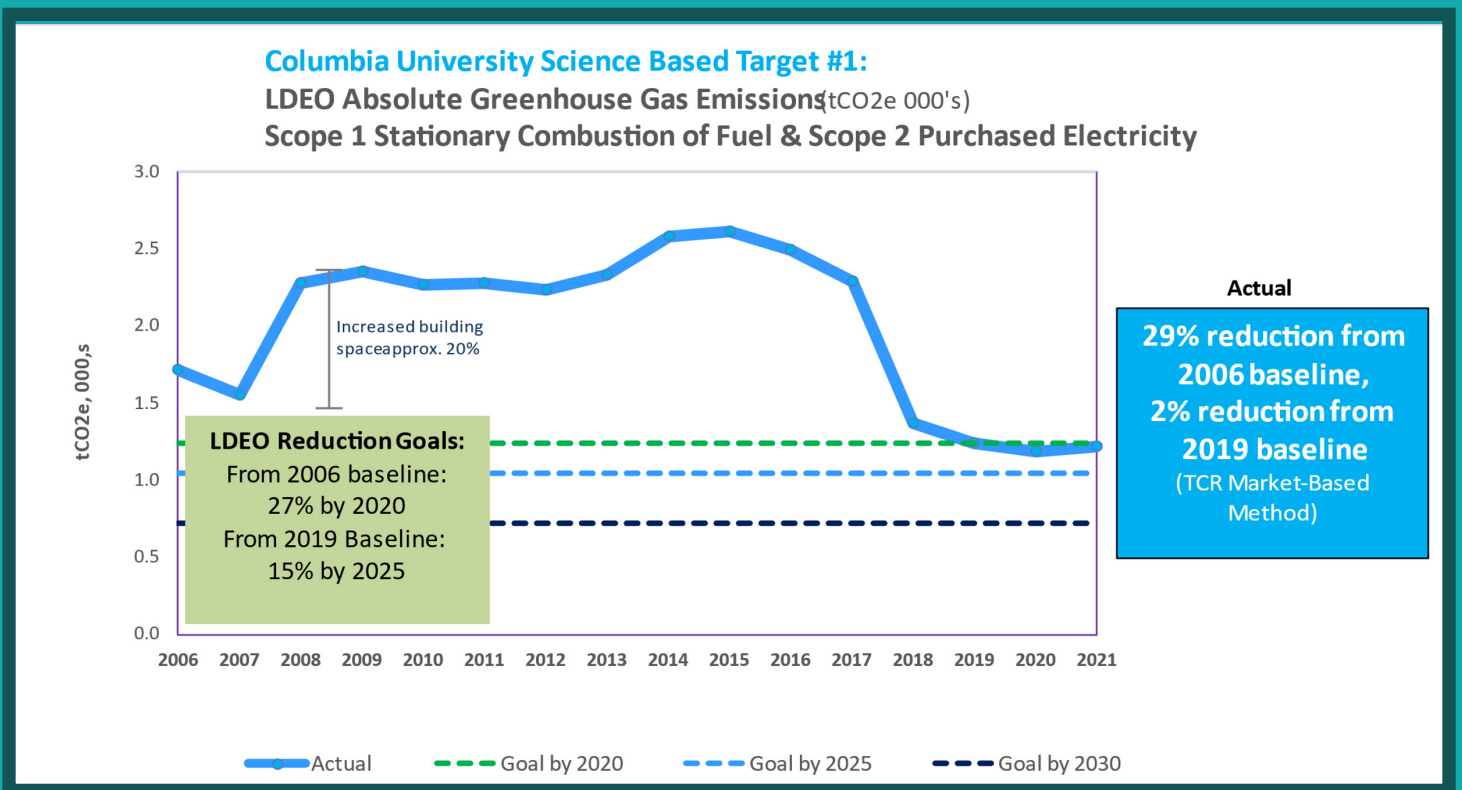
science-based targets: cuimc

Columbia University Irving Medical Center (CUIMC) is undergoing a \$1.8 million Deep Energy Audit covering 87 percent of the CUIMC portfolio. The Medical Center received \$1 million in grants from NYSERDA toward the audit. Results from these studies will put Columbia on a path toward strategic electrification, compliance with local laws, and carbon neutrality. The estimated date of completion for this effort is August 2022.



science-based targets: Ideo

Columbia University's Lamont-Doherty Earth Observatory (LDEO) sources 80% of its electricity from remote net metered solar farms. The rest is covered by Renewable Energy Certificates (RECs).



operations

O Columbia has committed to **net zero emissions** by 2050 or sooner.

Morningside has reduced its greenhouse gas emissions by **44%** since its baseline year of 2006.

Since its baseline year of 2012, CUIMC has reduced its greenhouse gas emissions by

43%

The Lamont-Doherty park & ride allows Columbia employees living in the Rockland County area to give up their car commute by parking at Lamont and catching the free, battery-electric Columbia Transportation shuttle into Manhattan. Fifteen new parking spaces were added this year.



Columbia's first Fitwel® certified building is 600 W. 125th Street, a new 34-story residential building on 125th Street and Broadway. It earned 3 stars!



Columbia is credited with **100%**

renewable electricity through its purchase of carbon offsets.

Environmental Stewardship collaborated on 2 student capstone projects.



80%

of Lamont-Doherty Earth Observatory's (LDEO) electricity usage is covered each year by remote net metered solar farms. The rest is covered by Renewable Energy Certificates (RECs).



Upgrading to LEDs in the five Phase 1 Morningside buildings conserves about 1,100 Mega-Watt hours of electricity and reduces campus emissions by 320 Metric Tons Carbon Dioxide Equivalent.

taking action

For more stories, visit
sustainable.columbia.edu/news

Pathway to Decarbonization Virtual Panel

As part of Climate Week, a panel of Columbia faculty, staff and student representatives discussed the University's ten-year sustainability plan and the goal to achieve net zero emissions by 2050. The virtual event included an overview of Plan 2030 and discussion about activity underway, noting the role that students and faculty play in meeting the University's goals. The event was coordinated as part of Columbia's partnership in Climate Week.



Global Universities on Climate Event

As a part of the Global Alliance of Universities on Climate (GAUC) Columbia participated in a panel discussing the role of universities in solving our climate crisis alongside Yale and Tsinghua Universities.



Columbia Expands Lamont Park and Ride

The program allows Columbia employees living in the Rockland County area to give up their car commute to Columbia's Morningside and Manhattanville campuses by parking at Lamont and catching the free, battery-electric Columbia Transportation shuttle. Participants avoid 15 miles of driving each way, reducing greenhouse gas (GHG) emissions, parking congestion in Manhattan, and time wasted behind the wheel.



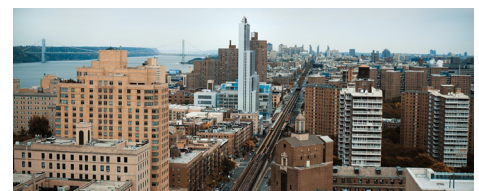
Clean + Go Green Resumed After COVID-19 Hiatus

As part of the award-winning program, large bins were available across the Morningside and Manhattanville campuses for the recycling, reuse or proper disposal of large, unwanted items. New or gently used clothing, coats, scarves, gloves, shoes, and non-perishable goods were donated to Columbia Community Service organizations that provide emergency services.



Fitwel® Three-Star Rating for New Columbia Building

Columbia earned a prestigious health and well-being certification for its new residential building on 125th Street. Fitwel's three-star rating, its highest, recognizes the building's extensive features that cultivate physical, mental, and social health of occupants as well as overall sustainability.



Columbia Again Recognized as a Top Performer by AASHE

Columbia Transportation took second place and Columbia Dining took sixth in The Association for the Advancement of Sustainability in Higher Education (AASHE)'s 2021 Sustainable Campus Index.



learning together

For more on *Culture Change & Campus as a Living Lab*, visit sustainable.columbia.edu/culture

At a first-of-its-kind event, the Earth Month Event: Sustainability Showcase 2022 brought together campus partners and students committed to sustainability. Undergraduate, graduate, and PhD students across schools and programs presented their research on topics related to climate and sustainable development. They connected with the leaders of Sustainable Columbia and Plan 2030, who in turn exposed students to how universities put research into action. The event demonstrated how individuals and groups throughout Columbia are addressing environmental issues, and how — by building on this collaboration and knowledge-sharing — we will build a better future together.



Stay up-to-date with Columbia's progress by visiting us online at sustainable.columbia.edu/news and following us on social media.

  SustainableColumbia

 SustainabICU

**SUSTAINABLE
COLUMBIA**