



America's Top Colleges for Renewable Energy 2020

Who Is Leading the Transition to 100% Renewable Energy on Campus?



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Executive summary

America's colleges and universities are leading the transition to a 100 percent renewable energy system. Small liberal arts colleges, large public universities and community colleges alike, from every corner of the U.S., are taking the lead in reducing energy consumption, deploying renewable energy technologies, and switching to electric vehicles (EVs).

The nation's leading campuses for clean energy – from Georgetown University to the University of Idaho – are setting a strong example for other colleges and the nation as a whole to follow. **More than 40 colleges and universities now obtain 100 percent or more of their electricity from renewable energy sources.**¹

Campuses are also leading in cleaning up America's transportation system. **Each of the top 10 schools for electric vehicles in this ranking has switched over 60 percent of its campus-owned vehicles to EVs.** Of the schools that reported their campus fleet details to STARS, 82 percent have at least one EV.

Leading campuses are taking action on multiple fronts. Colby College in Maine is one of the leaders in the use of electricity from renewable sources, as well as the use of on-campus renewable energy to supply other building energy needs such as heating and hot water. Other leading colleges include Georgetown University, which generates 130 percent of its electricity needs with clean renewable sources, and Ringling College of Art and Design in Florida, which has a campus fleet made up of 85% EVs.

College campuses are ideal places to lead the renewable energy transition. Colleges are large energy users and

are well suited to employ microgrids and district heating and cooling systems that expand the potential uses for renewable energy.² Organizations such as Second Nature, with more than 400 active participants in its Climate Leadership Network, have helped get hundreds of campuses to make commitments to act on climate by pursuing carbon neutrality and climate resilience.³ Schools that seize these opportunities also draw the attention of potential students. A 2020 Princeton Review survey of more than 10,000 college applicants found that two-thirds of them would factor in schools' environmental commitments – including commitments related to energy use – when deciding where to attend.⁴

America's leading clean energy colleges and universities are setting a shining example for other schools to follow. When the COVID-19 pandemic wanes, schools should follow their lead by pledging to move toward 100 percent renewable energy.

Leading campuses are well on the way to 100 percent renewable energy.

Of 127 colleges that reported data to the U.S. Environmental Protection Agency's (EPA) Green Power Partnership, 42 are now meeting at least 100 percent of their electricity needs with renewable energy generated by the university or purchased through power purchase agreements (PPAs) or renewable energy certificates (RECs). Seventy-six colleges are getting at least 50% of their energy from renewables. Georgetown University in Washington, D.C., leads all schools, generating and purchasing more than 1.3 times as much electricity from renewable sources as it consumes.

TABLE ES-1: The top 10 U.S. EPA Green Power Partnership (GPP) colleges and universities obtaining 100 percent or more of their electricity from renewable sources*

| School | State | Percent of electricity from renewable sources |
|-----------------------------------|-------|---|
| Georgetown University | DC | 130% |
| Hobart and William Smith Colleges | NY | 125% |
| Emerson College | MA | 123% |
| Whitman College | WA | 119% |
| Unity College | ME | 115% |
| Lewis & Clark College | OR | 110% |
| Swarthmore College | PA | 110% |
| Ithaca College | NY | 109% |
| Bentley University | MA | 107% |
| Saint Louis University | MO | 105% |

* Schools are able to attain more than 100 percent of their electricity needs from renewables for a number of reasons: there may be changes in electricity use relative to their contract amounts; some schools may buy renewable electricity to help cover emissions related to things like electric grid losses or from their supply chain; and schools might purchase renewables through long-term contracts at levels that anticipate campus growth.

Leading campuses are not just switching to renewable electricity – they are also replacing all fossil fuel-powered systems, including for heating, cooling and hot water, with systems that run on electricity or renewable energy, such as solar thermal panels and geothermal heat pumps. Over half of universities’ energy consumption – 53 percent on average – comes from water heating and space heating, which are primarily powered by gas and other fossil fuels.⁵

Colby College in Maine ranks first for using renewable energy for its non-electrical energy needs, thanks in part to energy from a geothermal system that draws from the earth’s stable temperature to provide heating for its Alumni Center and the Davis Science Center. Chatham University in Pennsylvania, which is second in this year’s ranking, features three solar thermal systems that are used to heat all of its hot water.⁷

TABLE ES-2: Top five schools for renewable heating, cooling, hot water and other non-electric energy produced per student⁶

| Rank | School | State | Amount of non-electric renewable energy produced on campus per full-time equivalent student (MMBtu) |
|------|---------------------|-------|---|
| 1 | Colby College | ME | 55.3 |
| 2 | Chatham University | PA | 40.2 |
| 3 | University of Idaho | ID | 36.2 |
| 4 | Colgate University | NY | 33.5 |
| 5 | University of Iowa | IA | 22.3 |

TABLE ES-3: Top five schools with the highest percentage of electric vehicles⁹

| Rank | School | State | Percent of campus-owned vehicles that are EVs |
|------|------------------------------------|-------|---|
| 1 | Ringling College of Art and Design | FL | 85% |
| 2 | University of the Pacific | CA | 81% |
| 3 | Rice University | TX | 76% |
| 4 | Harvey Mudd College | CA | 73% |
| 5 | Loyola Marymount University | CA | 72% |

Leading schools are switching their campus fleets to electric vehicles.

Leading campuses are not just cleaning up their buildings, but also their transportation systems by transitioning away from fossil fuel-powered vehicles and toward EVs. Transportation accounts for the largest portion of greenhouse gas emissions in the United States at 29 percent, so shifting how we power our vehicles is essential to reaching a zero-carbon future.⁸

Ringling College of Art and Design in Florida leads the nation in percentage of campus-owned vehicles that are electric powered, with 35 of the college's 41 vehicles being EVs. All of the top five schools that reported to the AASHE STARS database had more than 70 percent of their vehicles be EVs.

Leading schools are reducing energy consumption by improving the energy efficiency of campus buildings and encouraging students and employees to conserve energy.

Colleges and universities are reducing energy consumption on campus to make it easier to power themselves with 100 percent renewable energy. Leading campuses are cutting their energy consumption by improving energy efficiency and by better managing their heating, cooling and ventilation needs in real time to prevent waste. Schools are also cutting consumption through energy conservation programs, such as Brown University's Departmental Sustainability Program (DSP), which

encourages departments to adopt sustainable practices in their energy consumption, as well as to reduce waste production and to reduce emissions from transportation.¹⁰

Numerous schools have adopted ambitious renewable energy commitments for the future.

Vanderbilt University made a commitment in 2019 to power its entire campus with renewable energy and achieve carbon neutrality by 2050. To meet this goal, Vanderbilt plans to invest in on-site and off-site renewable energy, reduce its carbon footprint from transportation, expand green spaces and pedestrian walkways, and invest in sustainable infrastructure.¹¹ Some of the sustainability projects it has spearheaded include a dockless bikeshare program, the building of solar-powered phone charging stations and picnic tables, as well as a solar-powered water heating system installed in the Currey Tennis Center.¹² Vanderbilt also announced at the end of January 2020 a 20-year agreement with the Tennessee Valley Authority and Nashville Electric Service to build a new 35 MW solar farm that will help offset around 70 percent of Vanderbilt's annual indirect greenhouse gas emissions from purchased electricity.¹³

The University of Arizona is moving ahead with the state's largest ever renewable energy deal between a university and a utility company.¹⁴ The agreement with Tucson Electric Power will dedicate portions of two new renewable energy projects to the university: a solar-plus-storage system southeast of Tucson and a wind farm in New Mexico. Both projects are set to go up in late 2020.¹⁵

The University of Hawai'i (UH) is committed to produce as much renewable energy as its campuses use by 2035.¹⁶ In 2019, a 1-megawatt installation of PV panels at the University of Hawai'i at Mānoa's parking structure came online, and another megawatt of solar power is expected to be built in the summer of 2020.¹⁷

The University of California system (UC) is committed to 100 percent clean electricity and to becoming carbon neutral by 2025.¹⁸ One of the most impressive parts of UC's commitment is its policy to avoid onsite combustion of fossil fuels for space heating and water heating in all new campus buildings and those undergoing major renovations.¹⁹

To follow in the footsteps of leading campuses, all colleges and universities should:

- Set a goal to obtain 100 percent of their energy from renewable sources – including for electricity, heating and other building energy needs, and campus-owned vehicles. To achieve this goal, schools should:
 - Reduce energy consumption through energy efficiency improvements and energy conservation initiatives.
 - Use renewable energy sources, such as wind and solar power, to supply 100 percent of their electricity.
 - Transition all other building energy systems – including heating, hot water and cooling – to be electric or powered by renewable energy sources, such as solar hot water or ground-source heat pumps.
 - Swap all fossil-fuel powered vehicles for EVs.
- Enable and encourage students and employees to commute to and from campus sustainably by walking, biking, taking transit or using EVs.
- Purchase goods and services – such as food and travel – that minimize the use of fossil fuels.

Introduction

Boston University is an institution of over 34,000 students, with world-renowned faculty and a location in one of America's most vibrant cities.²⁰ It is also one of the growing number of universities or university systems in the country that has made the commitment to shift to 100 percent renewable electricity.²¹

Each campus is unique and the approach to going 100 percent renewable used by one college may not be the ideal approach for another. As an urban campus, BU has less potential for large scale solar energy installations or other forms of on-campus renewable energy than some other schools. But that hasn't stemmed the university's ambitions.

In December 2017, BU laid out an ambitious climate action plan to achieve carbon neutrality by 2040.²² A large part of the plan is to match 100 percent of the university's electricity demand with renewable energy through BU Wind, a 15-year power purchase agreement that supports a new wind farm to be built in South Dakota.²³ Once operational at the end of 2020, the 15-year agreement for 48.6 MW of wind power will allow BU to claim credit for the creation of 205,000 MWh of wind energy per year, enough to power 19,000 average American homes for a year.²⁴ These project RECs will be certified by Green-e, through an independent verification and certification program.²⁵

BU is undertaking a comprehensive on-site solar feasibility study and building highly efficient buildings that go far beyond building codes.²⁶ The university's new 19-story Center for Computing and Data Sciences, which is slated to open in 2022, will be the city's largest carbon neutral and fossil fuel-free building, and will uti-

lize 31 geothermal wells for ground-source heat pumps to heat and cool the building.²⁷

BU is also taking steps to reduce its carbon footprint in the transportation sector by increasing bike-sharing, conducting a feasibility study for converting its vehicle fleet to electric power, and refining its parking system to reduce the number of people who drive to campus alone.²⁸

The university is also a member of the University Climate Change Coalition, a coalition of North American universities that have "committed to mobilize their resources and expertise to accelerate local and regional climate action." The coalition works in close partnership with Second Nature's Climate Leadership Network, a 400 plus-member strong group of colleges and universities committed to taking action on climate.²⁹

BU's efforts, and the efforts of other campuses around the country, serve as examples not only for how other educational institutions can address the problems of climate change, but also for how the rest of the country can move towards a zero-carbon society and a clean renewable future.

But while BU is at the forefront of the movement of campuses around the country moving towards clean, renewable energy, it is far from alone. From Colby College in Maine to St. Olaf College in Minnesota to Southwestern University in Texas, colleges all across the country are showing that a commitment to sustainability and clean energy is within reach.

Institutions of higher learning are places of bold new ideas that change the world. Academics have been

researching and improving renewable technologies for decades in laboratories, and debating for years about how to move society in a direction away from fossil fuels.

As colleges and universities emerge from COVID-19, these institutions will once again be called on to be pioneers and set an example for the nation as a whole. As leading schools across the nation have shown, colleges and universities have the opportunity to put into practice the knowledge that has been fostered under their roofs – and to commit to powering their campuses with 100 percent clean, renewable energy.

Colleges and universities can lead the transition to 100 percent renewable energy

America needs to move away from fossil fuels and create a 100 percent renewable energy system to tackle global warming and the other problems caused by fossil fuels, including public health threats and environmental destruction.

America has enough renewable energy potential from the sun and wind to power the nation several times over. Many studies suggest that high penetrations of renewable energy are possible using technologies available today at costs that society can afford, indicating that we can move toward an energy system powered by 100 percent renewable energy.³⁰

College and university campuses are great places to accelerate the transition to 100 percent renewable energy. Colleges are major energy users, so their commitments to renewable energy can have big impacts. Educational buildings, including colleges and K-12 schools, were responsible for 10 percent of all energy consumption in the commercial sector in 2012.³¹ Colleges are often geographically constrained collections of buildings, enabling them to take advantage of solutions such as microgrids and renewable district heating and cooling that expand the range of potential uses for renewable energy.³² College campuses are also hotbeds of technical training and innovation, making them perfect places to develop, test and deploy new clean energy technologies, and providing an opportunity to use every

stage of that process to educate students. Lastly, college students tend to be climate-conscious and tech-savvy, so campuses that deploy clean energy technologies can attract prospective students. A 2020 Princeton Review survey of more than 10,000 college applicants found that two-thirds of them would factor in schools' environmental commitments – including commitments related to energy use – when deciding where to attend.³³

Organizations like Second Nature and the Association for the Advancement of Sustainability in Higher Education (AASHE) have helped lead the way in organizing colleges and universities across the country in making ambitious commitments to fight climate change and invest in sustainable solutions. The Presidents' Climate Leadership Commitments, organized by Second Nature, have brought together hundreds of campuses, with more than 400 currently active participating institutions.³⁴

To power their campuses with 100 percent renewable energy, colleges and universities are reducing their energy consumption; obtaining their electricity from renewable energy sources; meeting their heating, cooling and other building energy needs with renewable electricity or other renewable energy sources; and transitioning their campus-owned vehicles away from fossil fuels. Small private colleges, large public universities and community colleges from Maine to Texas are already taking these steps – laying the path for all campuses to follow their lead.

Reducing energy consumption

Leading colleges and universities are reducing their energy consumption, making it easier to power their campuses with 100 percent renewable energy. Colleges are reducing energy consumption through energy efficiency improvements in their buildings and appliances, and through programs that encourage students and employees to conserve energy. Many campuses have older buildings that can be made more energy efficient by adding insulation, replacing windows, or adding storm windows, as well as by upgrading appliances, lighting, and heating and cooling equipment. When campuses construct new buildings, they have the opportunity to use the most advanced energy efficient building practices, appliances, and heating and cooling systems.

Certain campus facilities, such as research laboratories, are highly energy-intensive, so reducing energy use in these facilities can lead to big savings. Campuses across the country are taking measures to reduce operational costs in labs by installing motion sensor lighting and reorganizing lab layouts to optimize efficiency.³⁵ Labs often contain fume hoods that provide ventilation to protect lab workers. Shutting the front of these fume hoods can save a lot of energy, so many campuses have adopted programs to encourage this behavior.³⁶ Harvard University, for instance, has competitions amongst its labs to “shut the sash” and turn off the lights.³⁷

Many campuses also reduce energy consumption through programs that encourage students and staff to conserve energy. Simple shifts in how students and employees use energy on campus could save as much as 20 percent of energy consumption and help colleges achieve their clean energy goals.³⁸ Social interaction programs like competitions are relatively cheap and easy to implement and can result in big energy savings, but ongoing programs that continually encourage conservation are best. Colleges also use smart sensors and displays to show employees and students their energy use in real time to encourage conservation.³⁹

Shifting to renewable electricity

Leading colleges and universities are generating and purchasing 100 percent of their electricity from on- and off-campus renewable energy sources like solar energy and wind power. Based on EPA Green Power Partnership data, which tracks schools’ voluntary purchases and production of renewable power (excluding any renewable energy that is part of the university’s ordinary purchases of power from the grid), over 40 colleges and universities in the U.S. are obtaining 100 percent or more of their electricity from renewable sources.⁴⁰ (For complete list, see Appendix B.)

On-campus solar photovoltaic (PV) energy is a great choice for schools because it can be installed on existing rooftops and is becoming increasingly affordable. Arizona State University (ASU), for example, has deployed solar panels and solar heating systems at 90 locations on its four campuses and its research park.⁴¹ Solar PV is becoming available to more and more schools thanks to plummeting prices – between 2010 and 2018, solar installations dropped in price by 70 percent, making solar energy often cheaper than energy from fossil fuels.⁴²

Universities can also be good locations for wind energy. For example, the University of Delaware has the only commercial-sized wind turbine in Delaware, which produces enough electricity to power the buildings at its Lewes campus, as well as 108 homes in the city of Lewes.⁴³

Wind and solar energy systems on campus are not only powering universities, but are also being used to train future renewable energy industry workers and provide engineering students with the opportunity to do cutting-edge research. To create a renewable energy system throughout the U.S., we will need many more students trained in these fields.

While some campuses have ample opportunities to install solar and wind power on site, colleges with limited space or cash reserves can purchase renewable energy generated off-campus or help to finance its production. Purchasing options such as power purchase agreements (PPAs) and renewable energy credits (RECs)

enable colleges to purchase clean energy and drive the deployment of new renewable energy installations without incurring the upfront costs of installing renewable energy themselves.⁴⁴

Colleges can even team up with one another to collectively fund renewable energy projects. In 2018, five New England colleges – Bowdoin, Smith, Amherst, Hampshire and Williams – partnered with NextEra Energy Resources to construct a solar PV installation in Farmington, Maine. All of the colleges will share the clean, renewable electricity generated by the new project.⁴⁵

Repowering buildings with clean energy

Heating, hot water, cooling, cooking, laundry and other activities on college campuses are often powered directly by fossil fuels. Over half of universities' energy consumption – 53 percent on average – is for water heating and space heating, which are primarily powered by gas and other fossil fuels.⁴⁶ Increasingly, colleges are transitioning these systems to be powered by electricity or renewable energy sources such as solar thermal or geothermal energy, helping these campuses move toward 100 percent renewable energy.

Stanford University in California, for example, swapped its natural gas heating and cooling system for one primarily powered by electricity in 2015 to cut emissions and costs.⁴⁷ The school's electric heat recovery chiller is twice as efficient as natural gas heating systems, which leads to significant cost savings – \$420 million over 35 years for Stanford's system. This system also features storage tanks that allow the university to heat and cool the water in the tanks at night when electricity costs are low and circulate it through the buildings during the day when demand is high.⁴⁸

Solar heating and hot water systems are another option campuses are using to clean up their buildings' energy use. While solar photovoltaic panels convert sunlight into electricity, solar thermal systems capture heat from freely available sunshine to heat water for cooking, bathing or laundry. These systems can cut hot water costs by more than half.⁴⁹ Solar thermal systems can also heat or cool air in buildings using efficient and cost-effective

solar air heat collectors.⁵⁰ Campuses can also meet heating and cooling needs without mechanical systems through smart building design, layout and materials choices – harnessing the sun's heat or limiting sun exposure depending on the weather and the season.⁵¹

In addition to renewable electricity and solar thermal energy, campuses are reducing energy demand for hot water, heating and cooling needs by using ground-source heat pumps that take advantage of the stable temperature of the earth. These systems transfer heat to or from the ground using pipes that weave through buildings in order to provide heating during the winter and cooling during the summer.⁵² Ground-source heat pumps have lower operating and maintenance costs than some conventional heating systems and can be scaled to work in individual buildings or whole campuses.⁵³ According to a report by the National Wildlife Federation, 160 campuses in 42 states were already using geothermal energy for heating and cooling by 2011.⁵⁴

Adopting sustainable transportation

To create 100 percent renewable energy systems, colleges are also transitioning their campus-owned vehicles away from fossil fuels. Electric vehicles (EVs) can serve this purpose and provide additional benefits, such as reducing vehicle exhaust, heat and noise.⁵⁵ Currently,



A new electric bus in the University of Montana's campus fleet. Credit: Vickie Rectenuwald, used with permission from the University of Montana.

in the U.S., it costs roughly half as much per mile to fuel an EV as a gasoline-powered car.⁵⁶ This means that while EVs might have a higher purchase cost, their lifetime costs are often much lower. Adopting EVs can also make it easier to integrate more wind and solar power on college campuses because any excess power produced from those sources can be used to charge the vehicles.⁵⁷ Electric campus shuttles may charge at night in a campus garage or even along their route.

While cleaning up campus vehicles is critical, transportation emissions associated with other types of travel – especially commuting with private cars – are also important to address. Campuses are providing infrastructure and programs to enable and encourage their students and employees to commute using sustainable means. Campuses are encouraging biking by providing bike lanes, covered bike storage and showers to commuters. Schools are also encouraging commuters to use transit by providing free, electric shuttles around campus and the local community, and by providing free local transit passes to students and employees. Lastly, some schools are encouraging EVs by providing charging infrastructure on campus.⁵⁸

America's leading college campuses are moving rapidly toward 100 percent renewable energy

Small liberal arts colleges, large research universities and community colleges, from every corner of the U.S., are deploying renewable energy. The following lists rank the top colleges and universities currently leading the way in producing or purchasing renewable energy for electricity, heating, hot water and other building energy needs, and in adopting clean vehicles.

These rankings are based on the EPA's Green Power Partnership data and data from the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment & Rating System (STARS). Only schools that have reported since 2016 are included in the analysis. See the Methodology section for full details on how these rankings are generated.

Some schools featured in these rankings use forms of energy that are often considered "renewable" but that are not necessarily pollution-free. These forms of energy include biomass and renewable fuel oil such as biodiesel. Because schools do not report the share of their renewable energy that comes from particular sources, there is no consistent way to exclude sources of energy that are not clean.

Renewable electricity

Forty-two schools reporting to the U.S. Environmental Protection Agency (EPA) Green Power Partnership (GPP) produce or purchase 100 percent or more of their electricity from renewable sources.

This long list of schools obtaining 100 percent or more of their electricity from renewable energy sources includes small, private liberal arts colleges in New England, large public research universities in the Midwest, community colleges and more. This diverse list of schools is laying the groundwork for all schools to shift to 100 percent renewable energy.

Schools of different sizes face different obstacles when it comes to making the transition to renewable energy. While large schools tend to have more resources at their disposal to make the necessary investments, small schools have the benefit of smaller campuses and less overall consumption to shift. Table 2 and Table 3 (page 16) break down the list of top schools by large and small schools, with the cutoff point being a student population of 10,000. For large schools, Georgetown University in Washington, D.C., and Saint Louis University in Missouri are the top two, while Hobart and William Smith Colleges and Emerson College are the leaders in the small schools category.

TABLE 1: The 42 U.S. EPA Green Power Partnership (GPP) colleges and universities obtaining 100 percent or more of their electricity from renewable sources⁵⁹

| School | State | Percent of electricity from renewable sources | School | State | Percent of electricity from renewable sources |
|-----------------------------------|-------|---|---|-------|---|
| Georgetown University | DC | 130% | City Colleges of Chicago | IL | 100% |
| Hobart and William Smith Colleges | NY | 125% | Columbia University | NY | 100% |
| Emerson College | MA | 123% | Southern Illinois University Edwardsville | IL | 100% |
| Whitman College | WA | 119% | University at Buffalo, the State University of New York | NY | 100% |
| Unity College | ME | 115% | University of New Hampshire | NH | 100% |
| Lewis & Clark College | OR | 110% | Abilene Christian University | TX | 100% |
| Swarthmore College | PA | 110% | Boston Architectural College | MA | 100% |
| Ithaca College | NY | 109% | Colby College | ME | 100% |
| Bentley University | MA | 107% | Colgate University | NY | 100% |
| Saint Louis University | MO | 105% | College of the Atlantic | ME | 100% |
| Carnegie Mellon University | PA | 105% | Goucher College | MD | 100% |
| Lewis and Clark Community College | IL | 105% | Lebanon Valley College | PA | 100% |
| Regis University | CO | 105% | Northampton Community College | PA | 100% |
| Goshen College | IN | 104% | Principia College | IL | 100% |
| University of Vermont | VT | 101% | Southwestern University | TX | 100% |
| Knox College | IL | 101% | St. Olaf College | MN | 100% |
| The Evergreen State College | WA | 100% | The Catholic University of America | DC | 100% |
| Colby-Sawyer College | NH | 100% | University of Wisconsin - Stevens Point | WI | 100% |
| Bates College | ME | 100% | Wells College | NY | 100% |
| Bryn Mawr College | PA | 100% | Allegheny College | PA | 100% |
| Austin College | TX | 100% | | | |
| Raritan Valley Community College | NJ | 100% | | | |

TABLE 2: Top 10 large schools for percent of electricity from renewable sources

| School | State | Percent of electricity from renewable sources |
|---|-------|---|
| Georgetown University | DC | 130% |
| Saint Louis University | MO | 105% |
| Carnegie Mellon University | PA | 105% |
| University of Vermont | VT | 101% |
| City Colleges of Chicago | IL | 100% |
| Columbia University | NY | 100% |
| Southern Illinois University Edwardsville | IL | 100% |
| University at Buffalo, the State University of New York | NY | 100% |
| University of New Hampshire | NH | 100% |
| American University | DC | 97% |

TABLE 3: Top 10 small schools for percent of electricity from renewable sources

| School | State | Percent of electricity from renewable sources |
|-----------------------------------|-------|---|
| Hobart and William Smith Colleges | NY | 125% |
| Emerson College | MA | 123% |
| Whitman College | WA | 119% |
| Unity College | ME | 115% |
| Lewis & Clark College | OR | 110% |
| Swarthmore College | PA | 110% |
| Ithaca College | NY | 109% |
| Bentley University | MA | 107% |
| Lewis and Clark Community College | IL | 105% |
| Regis University | CO | 105% |

The most direct and powerful way that campuses can encourage renewable energy is by installing wind turbines, solar panels or other forms of clean energy right on their own campuses. Butte College, which leads the nation for renewable energy installed on campus, was the first college campus in the country to become “grid positive” back in 2011, generating more electricity than it used, in large part thanks to the 25,000 solar panels that it operates.⁶⁰ Table 4 (right) lists the top schools for the percentage of electricity they consume that comes from renewable projects that they own and operate.

TABLE 4: Top five schools for percent of electricity that is generated by energy projects that are owned and operated by the school

| School | State | % Self supply |
|---------------------------------|-------|---------------|
| Butte College | CA | 79% |
| University of Minnesota, Morris | MN | 58% |
| Carleton College | MN | 22% |
| University of Missouri | MO | 20% |
| Luther College | IA | 20% |

Renewable heating, cooling and other building energy needs

Schools are not just transitioning their electricity to renewable energy sources, but they are also increasingly meeting their heating, cooling, hot water and other building energy needs without the use of fossil fuels. Top schools are leading this charge by making use of various technologies, including solar hot water panels and geothermal heating and cooling systems.

Colby College is ranked first for obtaining the most non-electrical energy from renewables per student,

thanks in part to a geothermal system that draws from the earth's stable temperature to provide heating for its Alumni Center and the Davis Science Center.⁶¹ Colgate University, ranked fourth, includes a closed-loop geothermal heating and cooling system for the Chapel House, the campus' spiritual retreat center. This system draws from the stable temperature of the earth to cool the building in the summer and heat it in the winter, without the use of polluting fossil fuels.⁶² The university also recently installed a 600 square-foot solar thermal system on one of its dormitories to provide hot water for the building.⁶³

TABLE 5: Top 10 schools for renewable heating, cooling, hot water and other non-electric energy produced per student

| Rank | School | State | Amount of non-electric renewable energy produced on campus per FTE student (MMBtu) |
|------|-----------------------------|-------|--|
| 1 | Colby College | ME | 55.3 |
| 2 | Chatham University | PA | 40.2 |
| 3 | University of Idaho | ID | 36.2 |
| 4 | Colgate University | NY | 33.5 |
| 5 | University of Iowa | IA | 22.3 |
| 6 | Cornell University | NY | 22.1 |
| 7 | University of New Hampshire | NH | 20.9 |
| 8 | University of Missouri | MO | 20.2 |
| 9 | Bates College | ME | 19.5 |
| 10 | Binghamton University | NY | 14.2 |

Campus-owned electric vehicles

College and university campuses across the country are moving their vehicles away from fossil fuels and are switching to electric vehicles (EVs). Of the schools that reported to STARS between 2017 and 2019, 82 percent have at least one EV. And over 60 percent of the campus-owned vehicles at each of the top 10 schools in this ranking are EVs. Schools in California are overwhelmingly leading this charge – claiming six of the top 10 spots in this ranking.

Many schools have invested in other types of green transportation, including improving campus accessibility in a way that reduces vehicle use and greenhouse gas emissions. Whether it's making campuses more pedes-

trian friendly, building bike lanes, or encouraging students and faculty to commute via public transit, colleges and universities have the opportunity to reduce carbon emissions in the transportation sector in ways that go beyond adopting EVs.

The technologies needed to create a 100 percent renewable energy system have been developed in colleges and universities around the country. As the leaders in these rankings demonstrate, those same institutions are now leading the transition to 100 percent renewable energy by transforming their own campuses to reduce energy consumption, adopt renewable energy for electricity, heating and other energy needs, and by switching to electric vehicles.

TABLE 6: Top 10 schools with the highest percentage of campus-owned vehicles that are EVs⁶⁴

| Rank | School | State | Percent of campus-owned vehicles that are 100 percent clean powered |
|------|--|-------|---|
| 1 | Ringling College of Art and Design | FL | 85% |
| 2 | University of the Pacific | CA | 81% |
| 3 | Rice University | TX | 76% |
| 4 | Harvey Mudd College | CA | 73% |
| 5 | Loyola Marymount University | CA | 72% |
| 6 | California State University, Northridge | CA | 70% |
| 7 | California State University, Dominguez Hills | CA | 67% |
| 8 | California State University, Long Beach | CA | 63% |
| 9 | Florida Gulf Coast University | FL | 63% |
| 10 | Southwestern University | TX | 61% |

The next leaders: Colleges and universities with impressive renewable energy goals

There are colleges and universities all over the U.S. that are transitioning to renewable energy systems. Most of the following schools do not appear in the top 10 for any category in this report, either because they do not have up-to-date reports in the database used, or because their renewable energy projects have not yet been completed. However, these schools have some of the most impressive commitments to renewable energy in the country and are taking action on multiple fronts – showing other schools the way to transition to 100 percent renewable energy.

Vanderbilt University

In 2019, Vanderbilt University made a commitment to power its entire campus with renewable energy and achieve carbon neutrality by 2050. Not only that, but leaders of the university have also stated that they plan to produce more renewable energy than needed and have a surplus of clean energy.⁶⁵ To meet this goal, Vanderbilt plans to invest in on-site and off-site renewable energy, reduce its carbon footprint from transportation, expand green spaces and pedestrian walkways, and invest in sustainable infrastructure.⁶⁶

Vanderbilt has already taken steps to promote sustainability and reduce its environmental impacts, such as stopping the use of coal in its on-campus power plant in 2014.⁶⁷ Earlier this year, Vanderbilt announced a 20-year agreement with the Tennessee Valley Authority and Nashville

Electric Service to build a new 35 MW solar farm that will help offset around 70 percent of Vanderbilt's annual indirect greenhouse gas emissions.⁶⁸ It has also spearheaded numerous sustainability projects, including a dockless bikeshare program, the building of solar-powered charging stations, as well as a solar-powered water heating system installed in the Currey Tennis Center.⁶⁹

University of Arizona

On December 10, 2019, the University of Arizona voted to approve a renewable energy agreement with Tucson Electric Power (TEP), the largest deal ever between a university and a utility company in the state.⁷⁰ The plan means that TEP will dedicate portions of two new renewable energy projects to the university: a solar-plus-storage system southeast of Tucson and a wind farm in New Mexico. Both projects are set to start generating electricity in late 2020.⁷¹ The planned solar array and storage system will include more than 300,000 solar panels, while the Oso Grande Wind Project will include 61 high-efficiency turbines installed across 24,000 acres.⁷²

With these new projects, TEP expects to generate more than 28 percent of its power from renewable sources by 2021. The utility is also working with climate scientists at UA in order to develop carbon-reduction targets, as well as to provide educational opportunities through the Solar Zone at Tech Parks Arizona, one of the largest solar demonstration sites in the country.⁷³

Harvard University

Harvard University aims to be carbon neutral by 2026 by dramatically reducing its energy consumption, investing in renewable energy projects, and purchasing offsets for its remaining emissions.⁷⁴ The university has also committed to stop using fossil fuels entirely by 2050.⁷⁵ To achieve this goal, the university will purchase 100 percent of its electricity from renewable energy sources; transition to emission-free vehicles; obtain heating, cooling and other building energy needs from fossil fuel-free energy sources; and purchase goods and services, such as food and travel, that minimize the use of fossil fuels.⁷⁶

Harvard is taking steps toward these goals by rapidly cutting energy consumption through efficiency upgrades and conservation efforts. For example, Harvard used a competition to encourage students, faculty and staff to conserve energy in research laboratories by turning off the lights and closing fume hoods, which provide ventilation and can leak large amounts of energy if left open. This is an impactful program because research laboratories account for 44 percent of Harvard's energy use.⁷⁷ Thanks to efforts such as this, Harvard cut its total energy consumption by 10 percent between 2006 and 2016, in spite of a growing campus.⁷⁸

University of Hawai'i

In 2015, the University of Hawai'i (UH) committed to produce as much renewable energy as its campuses use by 2035.⁷⁹ To achieve this goal, UH is creating an energy management system that can monitor energy use, increasing energy efficiency in its buildings, encouraging energy conservation, and deploying solar energy.⁸⁰

In 2019, a 1-megawatt installation of PV panels at the University of Hawai'i at Mānoa's parking structure came online, and another megawatt of solar power is expected to be built in the summer of 2020.⁸¹ Five community colleges in the UH system are also deploying solar PV plus battery storage systems; combined with energy efficiency measures, these PV systems will reduce those campuses' fossil fuel use for electricity by 70 to 98 percent.⁸²

University of California

In the fall of 2018, the University of California (UC) system committed to obtain 100 percent of its electricity from renewable sources and hydropower, and to power all heating, hot water and other energy needs in new buildings with electricity.⁸³ This commitment will help UC achieve its goal to be carbon neutral by 2025.⁸⁴ UC's campuses are among over 600 across the country that have committed to tackle climate change as part of Second Nature's Climate Leadership Network, in which schools can publicly track their climate commitments and progress.⁸⁵ To achieve its goals, UC is increasing energy efficiency, deploying renewable energy sources, transitioning away from gas for building energy needs such as heating, and switching to electric campus-owned vehicles.⁸⁶

One of the most impressive parts of UC's commitment is its policy to avoid onsite combustion of fossil fuels for space heating and water heating in all new campus buildings and those undergoing major renovations.⁸⁷ In a scoping study, UC found that increasing energy efficiency over time will be more feasible in all-electric buildings than in buildings combining electricity and gas. The study also determined that all-electric buildings will be comparable in cost with or slightly cheaper than combined electric and gas buildings over time.⁸⁸

Brown University

In February 2019, Brown University committed to reduce its greenhouse gas emissions by 75 percent by 2025 and to eliminate the use of fossil fuels for heating and cooling by 2040. To achieve these ambitious goals, Brown is reducing its energy use, transitioning to 100 percent renewable electricity, and switching to renewable energy sources for campus heating and cooling.⁸⁹

To meet 100 percent of its electricity needs with renewable energy sources, Brown is pursuing two projects. The university is partnering with two private companies to construct a solar array at a former gravel pit in nearby North Kingstown, Rhode Island. This installation will produce electricity equivalent to about 70 percent of Brown's electricity consumption. The remaining 30 percent will be covered by RECs from a wind farm in Texas.⁹⁰

University of Richmond

In 2007, the University of Richmond in Virginia signed the Presidents' Climate Commitment to reduce greenhouse gas emissions and achieve carbon neutrality as quickly as possible. To uphold that commitment, the school adopted a climate action plan that aims to cut the campus' greenhouse gas emissions 30 percent by 2020 and 100 percent by 2050.⁹¹

The campus is moving toward those goals through energy efficiency upgrades and renewable energy adoption. On the energy efficiency front, the campus has adopted energy efficient lighting and appliances, thermal windows and an energy management system that optimizes heating, cooling and ventilation to save energy.⁹² For renewable energy, the University of Richmond constructed a rooftop solar array on its recreation center in 2016, which classes use as a laboratory for research. This project was the first to be completed in Virginia under a new PPA pilot program.⁹³ The university has also contracted with the renewable energy company sPower to build an off-campus solar project that is expected to be completed in 2020 and produce as much electricity as the entire campus uses.⁹⁴

The University of Richmond has also done a lot to help its students and employees commute to and from campus sustainably – by foot, bike, bus or EV. The campus has 50 bikes that anyone can use, and the school provides access to showers, covered bike parking and bike racks across campus. The university also pays for local bus passes for full-time students and employees and runs free, regular campus shuttles throughout the city of Richmond. The campus has five Zipcars for carsharing and partners with RideFinders to facilitate carpooling. Lastly, the campus has charging stations in two parking lots for EV drivers.⁹⁵ This suite of infrastructure and programs demonstrates that colleges can do a great deal to encourage and enable their students and employees to get to campus without the use of fossil fuels.

Cornell University

Cornell University is currently ranked sixth for deriving its heating, cooling and other non-electric building energy needs from renewable sources, but the school is

aiming to go much further. Cornell is working to use 100 percent renewable energy and to be carbon neutral by 2035.⁹⁶ The school has adopted a climate action plan to achieve these goals that includes reducing energy consumption, supplying electricity with renewable energy sources, transitioning to clean campus-owned vehicles, encouraging students and employees to commute sustainably, and testing and deploying a renewable energy system to heat the campus.⁹⁷

Cornell is pursuing a diverse array of renewable energy technologies to power its campus, including solar PV, solar hot water, lake-source cooling and deep geothermal energy for heating.⁹⁸ Cornell has installed enough renewables to meet 20 percent of the Ithaca campus' net annual needs.⁹⁹ Cornell also uses solar thermal panels to meet some of its hot water and heating needs.¹⁰⁰

One of Cornell's most innovative projects is its lake source cooling system, which uses the deep, cold waters of nearby Cayuga Lake to cool campus buildings. Through heat exchangers, heat from campus water is transferred to the cold lake water, which is able to cool using no energy except to move the water through pipes. The chilled water is then circulated through campus buildings to provide cooling needs. This project has reduced the campus' energy use for cooling by 80 percent and uses no refrigerants, some of which can contribute to ozone depletion.¹⁰¹



Cornell University's Lake Cooling System. Credit: Jon Reis Photography, used with permission of Cornell University.

Recommendations

To prevent the worst impacts of global warming, the U.S. needs to take bold action to reduce emissions as quickly as possible – including transitioning to a 100 percent renewable energy system by electrifying the energy grid, buildings and transportation systems. As centers for research and innovation, and the institutions training the leaders of tomorrow, colleges and universities are well positioned to lead this transformation. As the nation’s colleges and universities emerge from the disruption caused by COVID-19, they have an opportunity to make bold strides toward a future that is cleaner and healthier both for their students and the broader world.

All colleges and universities should set a goal to obtain 100 percent of their energy from renewable sources. To achieve that goal, each school should adopt a plan with defined steps and clear timelines.

As the schools featured in this report demonstrate, there are many ways to make progress toward 100 percent renewable energy, but to achieve the goal, campuses must:

- *Reduce energy consumption.* Reducing energy consumption will make it easier for colleges and universities to power their campuses with 100 percent renewable energy. Campuses can reduce consumption through:
 - **Energy efficiency** improvements and high efficiency standards for new buildings.
 - **Energy conservation**, which can be encouraged in the campus community through initiatives such as competitions and real-time feedback displays.
- *Generate or buy 100 percent of their electricity from renewable energy sources.*
 - **On-Campus:** Most campuses have many rooftops suitable for solar PV installations and some have space for wind power. Campuses that install on-campus renewable energy systems can pair them with energy storage technologies, such as batteries, and connect their campuses through microgrids. To ensure that their clean energy purchases are actually resulting in the net addition of renewable energy to the grid, responsible campuses should make sure that they retain ownership of the renewable attributes of the clean energy they produce and/or procure verified, high-quality renewable energy certificates (RECs).
 - **Off-Campus:** Schools without enough space for wind or solar energy, or that are unable to finance the upfront cost of renewable energy systems, can purchase renewable energy and help finance the construction of new off-campus renewable energy projects through power purchase agreements and renewable energy certificates.
- *Transition all other building energy systems – including heating, hot water and cooling – to be electric or powered by renewable energy sources, such as solar hot water or ground-source heat pumps.*
- *Transition all campus vehicles from fossil fuels to electricity.*

See the Environment America Research & Policy Center reports *Renewable Energy 101: Tools for Moving Your Campus to 100% Clean Energy* and *Renewable Energy 100: The Course to a Carbon-Free Campus* for more information, case studies and resources to transition to renewable energy.¹⁰² Also see Environment America Research & Policy Center and U.S. PIRG report *Electric Buildings: How to Repower Where We Live, Work and Learn with Clean Energy* for information and recommendations on how to transition energy systems like heating, hot water, cooling, and other appliances to clean renewable sources.

While not necessary to achieve 100 percent renewable energy for their own operations, campuses should also:

- *Encourage and enable students and employees to commute to and from campus sustainably.* At most schools, thousands of employees and students commute to and from campus every day, generating significant amounts of carbon pollution. Luckily, there are numerous actions schools can take to reduce emissions from commuting.
 - **Biking:** Schools can provide bike lanes, covered bike storage and showers. Schools should also advocate for bike lanes and other safe infrastructure in their communities. Colleges and universities are often among the largest institutions in their communities and can therefore influence local transportation decisions.
 - **Transit:** Colleges should provide frequent electric bus service around campus and through the local community and/or provide free passes for the local transit system to students and employees.
 - **Electric vehicles:** Campuses should offer access to shared EVs and install EV charging stations on campus.
- *Purchase goods and services that minimize the use of fossil fuels.* Campuses should purchase goods, such as food for dining halls, and services, such as travel for students and employees, that utilize the smallest amount of fossil fuels possible.

Methodology

The rankings in this report are based on colleges' and universities' most recent reports to the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment & Rating System (STARS) database versions 2.0, 2.1, and 2.2, and from the Environmental Protection Agency's (EPA) Green Power Partnership (GPP). STARS data were acquired in January 2020 and data in this report reflect conditions as of that date. Only STARS reports submitted between 2017 and 2019 are included. Green Mountain College was excluded from the top schools for non-electric renewables, as it closed in 2019. Austin Peay State University in Tennessee and California State University, San Marcos, reported errors in the data for electric vehicles for those schools in the STARS database. These schools were removed from all rankings in this report using STARS data.

AASHE provided access to the STARS data displays, which include all schools' entries in spreadsheet form. The on-campus non-electric renewable energy ranking (for heating, cooling, hot water, etc.), is based on: "Non-electric renewable energy generated on-site, performance year." For that ranking, the amount of energy schools produced or purchased was divided by "full-time equivalent student enrollment (undergraduate and graduate)" to account for the differences in size between schools.

Some schools featured in these rankings use forms of energy that are often considered "renewable" but that are not necessarily clean. These forms of energy include biomass and renewable fuel oil, such as biodiesel. The sustainability of these forms of energy depends critically on how they are obtained. Because schools do not report the share of their renewable energy that comes from particular sources, there is no consistent way to exclude sources of energy that are not clean from the data used for the rankings. Therefore, energy production from sources such as biomass remain in the final dataset and are reflected in the rankings.

The campus-owned vehicles ranking is based on schools' entries for "Total number of vehicles (e.g., cars, carts, trucks, tractors, buses, electric assist cycles) in the institution's fleet," "Number of 100 percent electric vehicles in the institution's fleet (including electric assist utility bicycles and tricycles)," and "Number of hydrogen-fueled vehicles in the institution's fleet." Using these entries, we calculated the percent of campuses' vehicles that were 100 percent electric or hydrogen-fueled. None of the top 10 schools had any hydrogen-fueled vehicles. For the breakdown between large and small schools for percent of electricity generated by clean renewables, a cut-off point of 10,000 student population was used based on data from the Carnegie Classification of Institutions of Higher Education, provided by the EPA Green Power Partnership.

Appendix A: AASHE STARS data

The following table includes data from all schools' self-reported data to AASHE STARS versions 2.0, 2.1, and 2.2 for at least one of the metrics used in this report's rankings, organized alphabetically by state and institution name. (Note: Enrollment figures are from STARS and do not necessarily match the student population figures in Appendix B.)

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|---|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| Auburn University | AL | 24,849 | NA | - | 165 | 4.6% |
| University of Alabama in Huntsville | AL | 7,150 | NA | - | 156 | 5.2% |
| University of Montevallo | AL | 2,291 | NA | - | 205 | 2.1% |
| University of Arkansas | AR | NA | NA | - | 242 | 0.4% |
| Arizona State University | AZ | 76,018 | 36 | 0.11 | 21 | 47.9% |
| Northern Arizona University | AZ | 28,657 | NA | - | 233 | 0.7% |
| University of Arizona | AZ | 41,631 | 35 | 0.15 | 90 | 13.1% |
| California College of the Arts | CA | 1,877 | 28 | 0.27 | 37 | 33.3% |
| California Polytechnic State University | CA | 20,272 | NA | - | 35 | 35.2% |
| California State Polytechnic University, Pomona | CA | 19,741 | NA | - | 28 | 41.0% |
| California State University, Bakersfield | CA | 7,764 | NA | - | 36 | 34.8% |
| California State University, Chico | CA | 16,335 | NA | - | 44 | 29.3% |
| California State University, Dominguez Hills | CA | 11,325 | NA | - | 9 | 67.2% |
| California State University, East Bay | CA | 13,735 | NA | - | 47 | 26.9% |
| California State University, Fullerton | CA | 32,494 | NA | - | 16 | 51.6% |
| California State University, Long Beach | CA | 31,175 | NA | - | 10 | 63.4% |
| California State University, Los Angeles | CA | 23,599 | NA | - | 19 | 49.5% |
| California State University, Monterey Bay | CA | 7,567 | NA | - | 78 | 16.0% |
| California State University, Northridge | CA | 32,111 | 21 | 0.74 | 8 | 70.1% |
| Harvey Mudd College | CA | 885 | NA | - | 6 | 73.1% |
| Humboldt State University | CA | 8,228 | NA | - | 88 | 13.7% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|---|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| Loyola Marymount University | CA | 7,641 | NA | - | 7 | 71.6% |
| San Diego State University | CA | 31,402 | NA | - | 82 | 14.8% |
| San Francisco State University | CA | 24,499 | NA | - | 23 | 44.0% |
| Santa Clara University | CA | 8,702 | 23 | 0.48 | 22 | 47.0% |
| Santa Rosa Junior College | CA | 18,038 | NA | - | 177 | 3.8% |
| Stanford University | CA | 16,517 | NA | - | 26 | 42.4% |
| University of California, Berkeley | CA | 42,103 | 48 | 0.02 | 166 | 4.6% |
| University of California, Irvine | CA | 33,093 | NA | - | 30 | 38.6% |
| University of California, Merced | CA | 8,038 | NA | - | 27 | 42.0% |
| University of California, San Diego | CA | 31,921 | 26 | 0.30 | 25 | 42.5% |
| University of California, Santa Barbara | CA | 21,799 | NA | - | 100 | 11.6% |
| University of California, Santa Cruz | CA | 19,142 | NA | - | 102 | 10.5% |
| University of San Diego | CA | 7,671 | NA | - | 81 | 15.2% |
| University of the Pacific | CA | NA | NA | - | 3 | 81.3% |
| Colorado College | CO | 2,278 | 25 | 0.31 | 122 | 8.5% |
| Colorado State University | CO | 25,373 | 33 | 0.17 | 173 | 4.2% |
| University of Colorado Boulder | CO | 26,124 | NA | - | 141 | 6.5% |
| University of Colorado Colorado Springs | CO | 10,475 | 29 | 0.21 | 129 | 7.5% |
| Antioch College | CT | 133 | NA | - | 65 | 21.4% |
| University of Connecticut | CT | 21,776 | NA | - | 167 | 4.6% |
| Yale University | CT | 12,402 | 66 | 0.00 | 244 | 0.2% |
| American University | DC | 12,504 | 56 | 0.01 | 93 | 12.7% |
| George Washington University | DC | 22,866 | 46 | 0.02 | 79 | 15.7% |
| University of Delaware | DE | 20,512 | NA | - | 179 | 3.7% |
| Florida Gulf Coast University | FL | 12,551 | NA | - | 11 | 63.2% |
| Florida Institute of Technology | FL | 4,509 | NA | - | 40 | 30.7% |
| Florida International University | FL | 30,620 | NA | - | 53 | 25.1% |
| Florida State University | FL | 35,340 | NA | - | 188 | 3.2% |
| Miami University | FL | 17,700 | 15 | 1.93 | NA | 0.0% |
| Nova Southeastern University | FL | 18,000 | NA | - | 158 | 5.0% |
| Ringling College of Art and Design | FL | 1,321 | NA | - | 2 | 85.4% |
| University of Central Florida | FL | 40,071 | 59 | 0.00 | 74 | 17.5% |
| University of Florida | FL | NA | NA | - | 186 | 3.2% |
| University of Miami | FL | 16,397 | 61 | 0.00 | 56 | 23.7% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|--|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| University of South Florida | FL | 33,413 | NA | - | 109 | 9.7% |
| University of South Florida St. Petersburg | FL | 4,080 | NA | - | 15 | 55.6% |
| Agnes Scott College | GA | 917 | 19 | 0.87 | 67 | 21.1% |
| Emory University | GA | 14,521 | NA | - | 46 | 27.3% |
| Georgia College & State University | GA | NA | NA | - | 24 | 42.6% |
| University of Georgia | GA | 35,165 | 64 | 0.00 | 196 | 2.9% |
| University of West Georgia | GA | 11,877 | NA | - | 70 | 19.9% |
| Drake University | IA | 4,130 | NA | - | 106 | 10.0% |
| Iowa State University | IA | 33,634 | NA | - | 240 | 0.4% |
| Luther College | IA | 1,988 | NA | - | 153 | 5.4% |
| University of Iowa | IA | 29,288 | 5 | 22.35 | 208 | 1.9% |
| University of Idaho | ID | 8,287 | 3 | 36.16 | 227 | 1.0% |
| College of Lake County | IL | 8,365 | 51 | 0.01 | 204 | 2.2% |
| Eureka College | IL | 502 | NA | - | 123 | 8.3% |
| Illinois Institute of Technology | IL | 5,456 | NA | - | 39 | 32.3% |
| Knox College | IL | 1,378 | NA | - | 120 | 8.6% |
| Loyola University Chicago | IL | 14,802 | 44 | 0.05 | 55 | 24.5% |
| Northwestern University | IL | NA | NA | - | 144 | 6.3% |
| University of Illinois at Chicago | IL | 24,509 | 31 | 0.18 | NA | 0.0% |
| University of Illinois, Urbana-Champaign | IL | 45,533 | NA | - | 246 | 0.2% |
| Butler University | IN | 4,644 | NA | - | 185 | 3.3% |
| Earlham College | IN | 1,085 | NA | - | 83 | 14.8% |
| Indiana State University | IN | 9,793 | NA | - | 152 | 5.5% |
| Indiana University Bloomington | IN | 38,219 | 63 | 0.00 | 110 | 9.7% |
| University of Notre Dame | IN | 12,255 | NA | - | 226 | 1.0% |
| Johnson County Community College | KS | 22,372 | NA | - | 207 | 2.0% |
| Berea College | KY | 1,635 | 62 | 0.00 | 111 | 9.5% |
| Eastern Kentucky University | KY | 13,789 | NA | - | 120 | 8.6% |
| University of Kentucky | KY | 28,550 | 65 | 0.00 | 112 | 9.3% |
| University of Louisville | KY | 21,449 | 17 | 1.48 | 229 | 0.9% |
| Western Kentucky University | KY | 16,143 | NA | - | 211 | 1.6% |
| Louisiana State University | LA | 27,656 | NA | - | 43 | 29.4% |
| Amherst College | MA | 1,836 | NA | - | 214 | 1.4% |
| Babson College | MA | 3,471 | 45 | 0.03 | 118 | 8.7% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|---------------------------------------|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| Bentley University | MA | NA | NA | - | 54 | 24.6% |
| Boston College | MA | 12,972 | NA | - | 160 | 5.0% |
| Clark University | MA | 3,000 | NA | - | 33 | 36.4% |
| Hampshire College | MA | 1,244 | NA | - | 200 | 2.5% |
| Massachusetts Institute of Technology | MA | 11,053 | NA | - | 139 | 6.6% |
| Mount Holyoke College | MA | 2,177 | 24 | 0.45 | NA | 0.0% |
| Smith College | MA | 2,804 | NA | - | 225 | 1.1% |
| Tufts University | MA | 10,598 | NA | - | 235 | 0.6% |
| University of Massachusetts Amherst | MA | 28,412 | 60 | 0.00 | 146 | 6.1% |
| University of Massachusetts Lowell | MA | 14,357 | NA | - | 105 | 10.4% |
| Wellesley College | MA | 2,419 | NA | - | 151 | 5.6% |
| Wentworth Institute of Technology | MA | 3,973 | NA | - | 34 | 35.3% |
| Williams College | MA | 2,073 | NA | - | 194 | 3.0% |
| Worcester Polytechnic Institute | MA | 5,718 | 42 | 0.06 | 168 | 4.5% |
| University of Maryland, College Park | MD | 37,384 | NA | - | 218 | 1.3% |
| Bates College | ME | 1,772 | 9 | 19.47 | 95 | 12.2% |
| Bowdoin College | ME | 1,814 | 30 | 0.19 | NA | 0.0% |
| Colby College | ME | 1,917 | 1 | 55.34 | 150 | 5.8% |
| College of the Atlantic | ME | 332 | 13 | 3.62 | 123 | 8.3% |
| Saint Joseph's College - ME | ME | 1,995 | NA | - | 174 | 4.0% |
| Unity College | ME | 705 | 16 | 1.88 | 206 | 2.0% |
| Calvin University | MI | 3,915 | NA | - | 133 | 7.1% |
| Delta College | MI | 6,043 | NA | - | 92 | 12.8% |
| Grand Valley State University | MI | 24,707 | NA | - | 17 | 50.6% |
| Hope College | MI | NA | NA | - | 222 | 1.2% |
| Michigan State University | MI | 45,677 | NA | - | 161 | 4.9% |
| Siena Heights University | MI | 1,320 | NA | - | 127 | 7.7% |
| University of Michigan | MI | 43,147 | NA | - | 237 | 0.5% |
| Washtenaw Community College | MI | 7,904 | NA | - | 103 | 10.4% |
| Western Michigan University | MI | 18,413 | NA | - | 213 | 1.5% |
| Concordia College - Moorhead | MN | 2,092 | NA | - | 181 | 3.6% |
| Macalester College | MN | 2,121 | NA | - | 31 | 38.5% |
| University of Minnesota, Duluth | MN | 10,505 | NA | - | 134 | 6.9% |
| University of Minnesota, Morris | MN | 1,688 | 11 | 12.48 | 158 | 5.0% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|---|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| University of St. Thomas | MN | 8,546 | NA | - | 147 | 6.1% |
| Missouri State University | MO | 18,720 | NA | - | 155 | 5.3% |
| Missouri University of Science and Technology | MO | 7,941 | 12 | 7.84 | 203 | 2.3% |
| Saint Louis University | MO | 12,281 | NA | - | 216 | 1.4% |
| University of Missouri | MO | 31,194 | 8 | 20.16 | NA | 0.0% |
| Washington University in St. Louis | MO | 15,252 | 68 | 0.00 | 116 | 8.8% |
| Montana State University | MT | 15,124 | 52 | 0.01 | NA | 0.0% |
| University of Montana | MT | 10,223 | NA | - | 144 | 6.3% |
| Appalachian State University | NC | 18,099 | 53 | 0.01 | 217 | 1.3% |
| East Carolina University | NC | 25,065 | NA | - | 130 | 7.5% |
| Elon University | NC | 6,610 | NA | - | 115 | 9.0% |
| University of North Carolina at Chapel Hill | NC | 27,518 | NA | - | 187 | 3.2% |
| University of North Carolina, Greensboro | NC | 18,303 | NA | - | 97 | 12.1% |
| Wake Forest University | NC | 6,829 | 41 | 0.07 | 91 | 12.9% |
| Creighton University | NE | 8,228 | NA | - | 149 | 5.8% |
| Metropolitan Community College | NE | 9,771 | NA | - | 132 | 7.1% |
| University of Nebraska – Lincoln | NE | 23,340 | NA | - | 231 | 0.9% |
| University of Nebraska at Omaha | NE | 12,733 | NA | - | 214 | 1.4% |
| Keene State College | NH | 4,400 | NA | - | 76 | 16.7% |
| Southern New Hampshire University | NH | 68,000 | NA | - | 75 | 17.4% |
| University of New Hampshire | NH | 14,292 | 7 | 20.87 | NA | 0.0% |
| Princeton University | NJ | 8,032 | NA | - | 68 | 20.3% |
| Raritan Valley Community College | NJ | 5,463 | NA | - | 168 | 4.5% |
| Stockton University | NJ | 9,191 | NA | - | 116 | 8.8% |
| Central New Mexico Community College | NM | 14,813 | NA | - | 85 | 14.3% |
| New Mexico State University | NM | 18,255 | NA | - | 247 | 0.1% |
| Bard College | NY | 2,111 | NA | - | 183 | 3.5% |
| Binghamton University | NY | 16,930 | 10 | 14.19 | 20 | 48.0% |
| Clarkson University | NY | 4,367 | NA | - | 202 | 2.3% |
| Colgate University | NY | 2,865 | 4 | 33.53 | 201 | 2.3% |
| Columbia University | NY | 23,716 | NA | - | 85 | 14.3% |
| Cornell University | NY | 23,162 | 6 | 22.15 | 239 | 0.4% |
| Hobart and William Smith Colleges | NY | 2,186 | 39 | 0.10 | 172 | 4.3% |
| Orange County Community College | NY | 3,714 | NA | - | 73 | 19.2% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|--|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| Pratt Institute | NY | 4,829 | NA | - | 58 | 23.1% |
| Rochester Institute of Technology | NY | 13,699 | NA | - | 162 | 4.9% |
| Skidmore College | NY | 2,555 | 38 | 0.10 | NA | 0.0% |
| St. Lawrence University | NY | 2,415 | NA | - | 52 | 25.4% |
| State University of New York at Brockport | NY | 7,679 | NA | - | 77 | 16.1% |
| State University of New York at Cortland | NY | 6,565 | 50 | 0.01 | 72 | 19.4% |
| State University of New York at Fredonia | NY | 4,556 | NA | - | 148 | 5.9% |
| State University of New York at New Paltz | NY | 7,027 | NA | - | 114 | 9.0% |
| State University of New York at Oneonta | NY | 6,098 | NA | - | 113 | 9.2% |
| State University of New York College of Environmental Science and Forestry | NY | 1,826 | 14 | 2.98 | 87 | 13.8% |
| Syracuse University | NY | 19,331 | NA | - | 171 | 4.4% |
| University at Albany | NY | 16,259 | NA | - | 101 | 11.4% |
| University at Buffalo | NY | 28,125 | NA | - | 212 | 1.6% |
| University of Rochester | NY | 10,707 | NA | - | 163 | 4.8% |
| Vassar College | NY | 2,409 | 22 | 0.62 | 197 | 2.9% |
| Case Western Reserve University | OH | 10,820 | NA | - | 180 | 3.6% |
| Cleveland State University | OH | 13,947 | NA | - | 178 | 3.8% |
| Oberlin College | OH | NA | NA | - | 176 | 3.9% |
| Ohio University | OH | 24,654 | 67 | 0.00 | 224 | 1.1% |
| The Ohio State University | OH | 54,759 | NA | - | 198 | 2.9% |
| The Ohio State University at Newark | OH | 2,224 | NA | - | 181 | 3.6% |
| University of Cincinnati | OH | 28,922 | NA | - | 228 | 1.0% |
| University of Dayton | OH | 10,208 | NA | - | 89 | 13.7% |
| University of Mount Union | OH | 2,254 | NA | - | 50 | 25.7% |
| Oklahoma State University | OK | 21,240 | NA | - | 220 | 1.2% |
| Lewis & Clark College | OR | 3,250 | NA | - | 49 | 26.7% |
| Oregon State University | OR | 23,879 | 49 | 0.02 | 119 | 8.7% |
| Pacific University | OR | 3,703 | NA | - | 13 | 57.1% |
| Portland Community College | OR | 28,019 | NA | - | 232 | 0.8% |
| Southern Oregon University | OR | 4,218 | 40 | 0.08 | 98 | 12.1% |
| University of Oregon | OR | NA | NA | - | 136 | 6.8% |
| Bucknell University | PA | 3,781 | NA | - | 236 | 0.5% |
| Carnegie Mellon University | PA | 11,264 | NA | - | 42 | 29.6% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|---------------------------------------|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| Chatham University | PA | 1,525 | 2 | 40.23 | 51 | 25.5% |
| Dickinson College | PA | 2,357 | 58 | 0.01 | NA | 0.0% |
| Haverford College | PA | 1,268 | 43 | 0.05 | 84 | 14.5% |
| Lehigh University | PA | 6,659 | NA | - | 234 | 0.7% |
| Muhlenberg College | PA | 2,504 | 32 | 0.18 | 45 | 27.7% |
| Pennsylvania State University | PA | 45,661 | NA | - | 238 | 0.4% |
| Slippery Rock University | PA | 9,062 | 57 | 0.01 | 143 | 6.4% |
| Susquehanna University | PA | 2,150 | NA | - | 18 | 50.0% |
| Swarthmore College | PA | 1,619 | NA | - | 58 | 23.1% |
| Temple University | PA | 35,750 | NA | - | 219 | 1.2% |
| University of Pennsylvania | PA | 21,358 | NA | - | 191 | 3.0% |
| Villanova University | PA | 9,942 | NA | - | 137 | 6.8% |
| Bryant University | RI | 3,380 | NA | - | 131 | 7.4% |
| Clemson University | SC | 22,307 | NA | - | 189 | 3.2% |
| Furman University | SC | 2,981 | NA | - | 14 | 56.6% |
| Black Hills State University | SD | 3,034 | NA | - | 108 | 9.8% |
| Belmont University | TN | 7,987 | NA | - | 99 | 11.8% |
| Sewanee - The University of the South | TN | 1,725 | NA | - | 104 | 10.4% |
| Tennessee Technological University | TN | 9,125 | NA | - | 96 | 12.2% |
| University of Tennessee at Knoxville | TN | 24,535 | NA | - | 199 | 2.6% |
| Vanderbilt University | TN | 12,344 | 55 | 0.01 | 38 | 32.3% |
| Austin College | TX | 1,232 | NA | - | 71 | 19.5% |
| Baylor University | TX | 16,001 | NA | - | 175 | 4.0% |
| Rice University | TX | 6,554 | NA | - | 5 | 75.8% |
| Southwestern University | TX | 1,508 | NA | - | 12 | 60.9% |
| Tarleton State University | TX | NA | NA | - | 125 | 8.0% |
| Texas A&M University | TX | 58,691 | NA | - | 140 | 6.6% |
| Texas Tech University | TX | 34,090 | NA | - | 170 | 4.4% |
| The University of Texas at Dallas | TX | 24,175 | NA | - | 29 | 39.9% |
| University of Houston | TX | 43,774 | NA | - | 66 | 21.1% |
| University of Texas at Austin | TX | 46,453 | 54 | 0.01 | 60 | 23.0% |
| University of Texas Rio Grande Valley | TX | 21,724 | NA | - | 61 | 22.5% |
| Weber State University | UT | 17,436 | NA | - | 135 | 6.9% |
| Westminster College - Utah | UT | 2,533 | NA | - | 63 | 22.2% |

| School | State | Full-time equivalent student enrollment (undergraduate and graduate) (FTE) | On-campus non-electric energy (heating etc.) | | % of campus-owned vehicles that are EVs or hydrogen-fueled | |
|---------------------------------------|-------|--|--|---------------|--|---|
| | | | Rank | MMBtu per FTE | Rank | % of vehicles that are EVs or hydrogen-fueled |
| Eastern Mennonite University | VA | 1,465 | NA | - | 57 | 23.7% |
| George Mason University | VA | 28,019 | NA | - | 41 | 30.0% |
| James Madison University | VA | 20,837 | NA | - | 223 | 1.2% |
| Radford University | VA | 9,165 | NA | - | 157 | 5.1% |
| Randolph College | VA | 671 | NA | - | 94 | 12.5% |
| University of Richmond | VA | 3,633 | NA | - | 62 | 22.3% |
| Virginia Commonwealth University | VA | 28,377 | 37 | 0.10 | 241 | 0.4% |
| Washington and Lee University | VA | 2,170 | 34 | 0.15 | 126 | 7.8% |
| Champlain College | VT | 3,891 | 20 | 0.79 | NA | 0.0% |
| Middlebury College | VT | NA | NA | - | 210 | 1.7% |
| Saint Michael's College | VT | 2,167 | NA | - | 184 | 3.5% |
| University of Vermont | VT | 12,251 | NA | - | 128 | 7.6% |
| Central Washington University | WA | 18,441 | NA | - | 154 | 5.3% |
| Evergreen State College, The | WA | 3,924 | NA | - | 164 | 4.8% |
| Gonzaga University | WA | NA | NA | - | 221 | 1.2% |
| North Seattle College | WA | 3,828 | NA | - | 80 | 15.4% |
| Portland State University | WA | 20,507 | NA | - | 64 | 21.8% |
| Seattle University | WA | 6,681 | NA | - | 32 | 37.3% |
| South Seattle College | WA | 4,562 | NA | - | 47 | 26.9% |
| University of Washington, Seattle | WA | 52,466 | NA | - | 142 | 6.4% |
| Western Washington University | WA | 14,619 | NA | - | 195 | 3.0% |
| Whatcom Community College | WA | 3,771 | NA | - | 69 | 20.0% |
| Northland College | WI | 579 | 27 | 0.30 | 138 | 6.7% |
| University of Wisconsin-Green Bay | WI | 4,720 | NA | - | 209 | 1.8% |
| University of Wisconsin-Madison | WI | 39,624 | NA | - | 243 | 0.3% |
| University of Wisconsin-Oshkosh | WI | 10,654 | 18 | 1.15 | 230 | 0.9% |
| University of Wisconsin-Platteville | WI | 7,878 | NA | - | 192 | 3.0% |
| University of Wisconsin-River Falls | WI | 6,927 | 47 | 0.02 | 107 | 9.9% |
| University of Wisconsin-Stevens Point | WI | 7,814 | NA | - | 190 | 3.2% |
| University of Wisconsin-Whitewater | WI | 10,888 | NA | - | 192 | 3.0% |
| University of Wyoming | WY | 9,803 | NA | - | 245 | 0.2% |

Appendix B: EPA Green Power Partnership data

The following table includes data from the Environmental Protection Agency’s (EPA) Green Power Partnership (GPP). The table, which is sorted by state and then institution name, contains records from between 2016 and 2020. The data contains self-reported voluntarily obtained renewable electricity for which the school owns the energy attributes, which includes purchased power from RECs, PPAs and renewable power that the school owns and operates. (Note: Student population figures are from EPA and do not necessarily match the enrollment figures in Appendix A.)

| School | State | Student Population | Percent of electricity from renewable sources | | Percent of electricity from projects owned and operated by the school | |
|--|-------|--------------------|---|------------------|---|------------------|
| | | | Rank | % of electricity | Rank | % of electricity |
| Arizona State University | AZ | 50,320 | 51 | 86.9% | N/A | - |
| Chandler-Gilbert Community College | AZ | 14,906 | 95 | 24.8% | N/A | - |
| Northern Arizona University | AZ | 31,051 | 105 | 15.8% | 15 | 1.3% |
| Butte College | CA | 12,161 | 53 | 79.3% | 1 | 79.3% |
| California Polytechnic State University, San Luis Obispo | CA | 22,370 | 98 | 22.3% | 59 | 0.0% |
| California State University, Bakersfield | CA | 10,131 | 114 | 10.8% | N/A | - |
| California State University, Fullerton | CA | 40,905 | 109 | 14.2% | 11 | 3.0% |
| Loyola Marymount University | CA | 9,618 | 97 | 22.4% | 8 | 5.0% |
| Saint Mary's College of California | CA | 4,112 | 43 | 97.2% | N/A | - |
| Santa Clara University | CA | 9,015 | 70 | 54.3% | 28 | 0.3% |
| Stanford University | CA | 17,534 | 60 | 67.0% | N/A | - |
| University of California | CA | 285,216 | 88 | 30.4% | 36 | 0.2% |
| Colorado State University | CO | 33,083 | 82 | 37.4% | 32 | 0.3% |
| Fort Lewis College | CO | 3,332 | 67 | 57.7% | 17 | 0.9% |
| Regis University | CO | 8,341 | 13 | 104.6% | N/A | - |
| University of Colorado Colorado Springs | CO | 11,761 | 55 | 76.6% | 18 | 0.8% |
| Southern Connecticut State University | CT | 10,202 | 83 | 34.1% | 51 | 0.1% |
| American University | DC | 13,858 | 44 | 96.7% | 55 | 0.1% |
| George Washington University | DC | 25,613 | 73 | 50.2% | 64 | 0.0% |

| School | State | Student Population | Percent of electricity from renewable sources | | Percent of electricity from projects owned and operated by the school | |
|---|-------|--------------------|---|------------------|---|------------------|
| | | | Rank | % of electricity | Rank | % of electricity |
| Georgetown University | DC | 17,858 | 1 | 130.1% | N/A | - |
| The Catholic University of America | DC | 6,023 | 23 | 100.0% | N/A | - |
| Iowa State University | IA | 36,158 | 119 | 10.3% | N/A | - |
| Luther College | IA | 2,385 | 79 | 42.2% | 5 | 19.9% |
| City Colleges of Chicago | IL | 77,000 | 23 | 100.0% | N/A | - |
| DePaul University | IL | 22,769 | 92 | 28.4% | 42 | 0.1% |
| Knox College | IL | 1,399 | 16 | 100.9% | 46 | 0.1% |
| Lewis and Clark Community College | IL | 7,000 | 12 | 104.8% | 22 | 0.6% |
| Northwestern University | IL | 22,008 | 81 | 38.5% | 49 | 0.1% |
| Principia College | IL | 455 | 23 | 100.0% | N/A | - |
| Roosevelt University | IL | 4,457 | 94 | 25.8% | N/A | - |
| Southern Illinois University Edwardsville | IL | 13,796 | 23 | 100.0% | N/A | - |
| University of Illinois at Urbana-Champaign | IL | 45,140 | 126 | 7.3% | 58 | 0.0% |
| Goshen College | IN | 843 | 14 | 103.5% | N/A | - |
| Indiana University-Purdue University Indianapolis | IN | 29,791 | 121 | 10.0% | N/A | - |
| Babson College | MA | 3,329 | 121 | 10.0% | N/A | - |
| Bentley University | MA | 5,543 | 9 | 106.5% | N/A | - |
| Boston Architectural College | MA | 695 | 23 | 100.0% | N/A | - |
| Emerson College | MA | 4,545 | 3 | 123.1% | N/A | - |
| Gordon College | MA | 1,963 | 46 | 95.1% | N/A | - |
| Wellesley College | MA | 2,508 | 127 | 5.0% | 56 | 0.0% |
| Wentworth Institute of Technology | MA | 4,457 | 118 | 10.3% | N/A | - |
| Goucher College | MD | 2,236 | 23 | 100.0% | N/A | - |
| Loyola University Maryland | MD | 5,783 | 107 | 15.5% | N/A | - |
| Salisbury University | MD | 8,714 | 71 | 52.7% | N/A | - |
| St. Mary's College of Maryland | MD | 1,721 | 68 | 57.5% | 47 | 0.1% |
| University of Maryland | MD | 40,521 | 57 | 70.2% | 63 | 0.0% |
| Bates College | ME | 1,787 | 19 | 100.1% | 53 | 0.1% |
| Colby College | ME | 1,917 | 23 | 100.0% | 30 | 0.3% |
| College of the Atlantic | ME | 354 | 23 | 100.0% | 48 | 0.1% |
| Unity College | ME | 733 | 5 | 114.7% | 38 | 0.1% |
| Grand Rapids Community College | MI | 14,269 | 111 | 12.2% | N/A | - |
| Michigan Technological University | MI | 7,292 | 76 | 50.0% | N/A | - |
| Carleton College | MN | 2,078 | 86 | 32.4% | 3 | 21.8% |
| St. Olaf College | MN | 3,034 | 23 | 100.0% | 6 | 16.6% |
| University of Minnesota | MN | 51,147 | 108 | 15.4% | N/A | - |

| School | State | Student Population | Percent of electricity from renewable sources | | Percent of electricity from projects owned and operated by the school | |
|---|-------|--------------------|---|------------------|---|------------------|
| | | | Rank | % of electricity | Rank | % of electricity |
| University of Minnesota, Morris | MN | 1,627 | 66 | 58.2% | 2 | 58.2% |
| Saint Louis University | MO | 14,581 | 10 | 105.1% | N/A | - |
| University of Missouri | MO | 35,425 | 85 | 33.3% | 4 | 20.0% |
| Colby-Sawyer College | NH | 995 | 18 | 100.1% | 39 | 0.1% |
| Dartmouth College | NH | 6,509 | 106 | 15.5% | 13 | 1.7% |
| University of New Hampshire | NH | 15,363 | 23 | 100.0% | N/A | - |
| Monmouth University | NJ | 6,340 | 99 | 20.8% | 25 | 0.3% |
| Raritan Valley Community College | NJ | 8,079 | 21 | 100.0% | N/A | - |
| Rider University | NJ | 5,073 | 61 | 64.7% | N/A | - |
| Bard College | NY | 2,293 | 116 | 10.4% | N/A | - |
| Colgate University | NY | 2,894 | 23 | 100.0% | N/A | - |
| Columbia University | NY | 30,454 | 23 | 100.0% | N/A | - |
| Cornell University | NY | 23,016 | 115 | 10.5% | 10 | 3.7% |
| Fordham University | NY | 16,037 | 125 | 7.7% | N/A | - |
| Hamilton College | NY | 1,901 | 112 | 12.1% | 40 | 0.1% |
| Hobart and William Smith Colleges | NY | 2,244 | 2 | 125.5% | 60 | 0.0% |
| Hofstra University | NY | 11,131 | 87 | 31.5% | N/A | - |
| Houghton College | NY | 1,043 | 80 | 41.6% | N/A | - |
| Ithaca College | NY | 6,516 | 8 | 109.1% | N/A | - |
| Rochester Institute of Technology | NY | 16,584 | 48 | 92.5% | 44 | 0.1% |
| Skidmore College | NY | 2,684 | 89 | 30.0% | N/A | - |
| St. Lawrence University | NY | 2,493 | 110 | 13.1% | N/A | - |
| State University of New York at Cortland | NY | 6,913 | 54 | 78.1% | 33 | 0.2% |
| Syracuse University | NY | 22,484 | 84 | 34.1% | N/A | - |
| Union College | NY | 2,267 | 45 | 96.3% | 35 | 0.2% |
| University at Buffalo, the State University of New York | NY | 30,648 | 23 | 100.0% | 27 | 0.3% |
| Wells College | NY | 488 | 23 | 100.0% | N/A | - |
| Cleveland State University | OH | 16,371 | 78 | 48.9% | N/A | - |
| Denison University | OH | 2,341 | 90 | 29.0% | 34 | 0.2% |
| Oberlin College | OH | 2,978 | 69 | 56.5% | 23 | 0.6% |
| Ohio University | OH | 29,369 | 74 | 50.1% | 41 | 0.1% |
| The Ohio State University | OH | 59,837 | 104 | 16.9% | N/A | - |
| Oklahoma State University | OK | 25,295 | 63 | 60.1% | N/A | - |
| University of Oklahoma | OK | 28,527 | 58 | 70.0% | N/A | - |
| Lewis & Clark College | OR | 7,000 | 6 | 110.4% | 37 | 0.2% |
| Portland Community College | OR | 28,005 | 102 | 18.4% | 12 | 2.5% |

| School | State | Student Population | Percent of electricity from renewable sources | | Percent of electricity from projects owned and operated by the school | |
|--|-------|--------------------|---|------------------|---|------------------|
| | | | Rank | % of electricity | Rank | % of electricity |
| Allegheny College | PA | 1,802 | 42 | 99.7% | 50 | 0.1% |
| Bryn Mawr College | PA | 1,640 | 20 | 100.0% | 57 | 0.0% |
| Bucknell University | PA | 3,678 | 113 | 11.6% | 54 | 0.1% |
| Carnegie Mellon University | PA | 13,869 | 11 | 104.9% | 62 | 0.0% |
| Chatham University | PA | 2,269 | 50 | 88.0% | 21 | 0.6% |
| Drexel University | PA | 24,190 | 72 | 51.7% | N/A | - |
| Duquesne University | PA | 9,190 | 65 | 58.5% | N/A | - |
| Gettysburg College | PA | 2,411 | 47 | 93.8% | N/A | - |
| Haverford College | PA | 1,296 | 49 | 90.5% | N/A | - |
| Lebanon Valley College | PA | 1,901 | 23 | 100.0% | N/A | - |
| Northampton Community College | PA | 9,921 | 23 | 100.0% | 9 | 4.5% |
| Slippery Rock University | PA | 8,495 | 120 | 10.0% | 61 | 0.0% |
| Swarthmore College | PA | 1,577 | 7 | 109.8% | N/A | - |
| Temple University | PA | 39,967 | 96 | 24.6% | N/A | - |
| University of Pittsburgh | PA | 28,642 | 101 | 19.3% | 65 | 0.0% |
| West Chester University | PA | 17,306 | 62 | 62.9% | N/A | - |
| Coastal Carolina University / The College of Science | SC | 10,663 | 93 | 27.5% | 31 | 0.3% |
| University of Tennessee, Knoxville | TN | 28,321 | 59 | 67.3% | 52 | 0.1% |
| Abilene Christian University | TX | 5,145 | 23 | 100.0% | N/A | - |
| Austin College | TX | 1,228 | 21 | 100.0% | N/A | - |
| Southwestern University | TX | 1,396 | 23 | 100.0% | N/A | - |
| University of Utah | UT | 32,800 | 77 | 49.5% | 45 | 0.1% |
| Weber State University | UT | 27,949 | 91 | 28.6% | 19 | 0.7% |
| Westminster College | UT | 2,570 | 123 | 9.1% | 20 | 0.7% |
| Emory & Henry College | VA | 1,038 | 52 | 81.9% | 26 | 0.3% |
| University of Richmond | VA | 4,182 | 116 | 10.4% | N/A | - |
| University of Virginia | VA | 24,360 | 103 | 17.5% | 43 | 0.1% |
| Goddard College | VT | 496 | 56 | 73.1% | N/A | - |
| Middlebury College | VT | 2,533 | 100 | 20.0% | 7 | 12.7% |
| University of Vermont | VT | 13,340 | 15 | 101.1% | 24 | 0.5% |
| Vermont Law School | VT | 632 | 64 | 58.8% | 14 | 1.5% |
| Gonzaga University | WA | 7,506 | 75 | 50.0% | N/A | - |
| The Evergreen State College | WA | 4,219 | 17 | 100.3% | 29 | 0.3% |
| Whitman College | WA | 1,498 | 4 | 119.4% | 16 | 1.0% |
| University of Wisconsin | WI | 42,977 | 124 | 9.0% | N/A | - |
| University of Wisconsin - Stevens Point | WI | 8,222 | 23 | 100.0% | N/A | - |

Notes

- 1 Received data from EPA Green Power Partnership on 4 August 2020.
- 2 U.S. Environmental Protection Agency (EPA), *Energy Use in Commercial Buildings*, accessed 19 December 2018, archived at http://web.archive.org/web/20181129150514/https://www.eia.gov/energyexplained/index.php?page=us_energy_commercial; Leia Guccione and Laurie Stone, “Higher education’s energy lessons: Why universities and colleges are big believers in campus microgrids” (blog post), *Rocky Mountain Institute*, 31 October 2013, archived at http://web.archive.org/web/20190130182200/https://rmi.org/blog_2013_10_31_higher_educations_energy_lessons/; Association for the Advancement of Sustainability in Higher Education, *How Do Campus Sustainability Initiatives Affect College Admissions?*, 2 March 2009, archived at <http://web.archive.org/web/20171007171202/http://www.aashe.org/campus-sustainability-initiatives-affect-college-admissions/>.
- 3 Second Nature, *Reporting Platform* (online database), accessed at <https://reporting.secondnature.org/home/>, 24 July 2020.
- 4 Princeton Review, *2020 College Hopes & Worries Survey Report*, downloaded 24 July 2020, available at <https://www.princetonreview.com/college-rankings/college-hopes-worries>.
- 5 National Grid, *Managing Energy Costs in Colleges and Universities*, 2003, available at https://www9.nationalgridus.com/non_html/shared_energyeff_college.pdf.
- 6 This ranking and the clean vehicle ranking are based on schools’ reports to AASHE STARS from 2017 through 2019. See Methodology for full details.
- 7 Association for the Advancement of Sustainability in Higher Education’s, Sustainability Tracking, Assessment & Rating System, *Chatham University OP-6: Clean and Renewable Energy*, 26 November 2018, archived at <https://web.archive.org/web/20200724174906/https://reports.aashe.org/institutions/chatham-university-pa/report/2018-11-26/OP/energy/OP-6/>.
- 8 Environmental Protection Agency, *Fast Facts on Transportation Greenhouse Gas Emissions*, accessed 10 February 2020, archived at <http://web.archive.org/web/20200207163346/https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions>.
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