

THE GREENING OF COMMERCIAL REAL ESTATE



HOLLY R. CAMISA is a real estate attorney in Holland & Knight's Philadelphia office. She focuses her practice on commercial real estate transactions, including the purchase, sale, and development of real property, from agreement through closing.



MARIA Z. CORTES is a real estate attorney in Holland & Knight's Philadelphia office, where she handles all aspects of commercial real estate transactions, including the acquisition, disposition, leasing, development, and financing of commercial real estate. In addition, she advises institutional lenders in a broad range of financing transactions for multifamily and commercial properties. Maria represents owners, developers, and investors in the purchase, sale, and development of real property from agreement through closing and counsels clients on zoning and land use matters.



MARCY HART is a real estate attorney in Holland & Knight's Philadelphia office who focuses on real estate, business, and corporate law matters. A seasoned transactional attorney with more than 35 years of experience in real estate and corporate finance, Marcy uses her extensive in-house and law firm background to solve her clients' complex issues and challenges. She implements business and practical-minded strategies with respect to real estate acquisitions, dispositions, financing, and capitalization.



OLUFUNKE O. LEROY is a real estate attorney who handles all aspects of commercial real estate transactions, including the acquisition, disposition, leasing, development, and financing of commercial real estate. She represents owners, developers, and investors in the purchase, sale, and development of real property from agreement through closing and counsels clients on zoning and land use matters. Based in Holland & Knight's Philadelphia office, Olufunke's practice encompasses work within Pennsylvania, New Jersey, and Delaware as well as the District of Columbia.

GREEN LOAN GUIDELINES

Lenders and investors alike have become progressively concerned about climate change and the effect their lending and investment decisions may have on the environment. As such, they are seeking ways to reduce their carbon footprint to achieve environmentally beneficial outcomes while also meeting their investment objectives and financial returns. To meet these concerns, green loans were introduced. A green loan is defined as "any loan instrument made available exclusively to finance or re-finance, in whole or in part, new and/or existing eligible Green Projects."¹ This includes term loans, revolving credit facilities, and working capital facilities.

The growth of green loans necessitated the establishment of specific guidelines to ensure consistency across the wholesale green loan market. In March 2018, the Loan Market Association (LMA), together with the Asia Pacific Loan Market Association (APLMA) and the Loan Syndications and Trading Association (LSTA), published the Green Loan Principles (GLP) and Guidance on Green Loan Principles (GLP Guidance). An updated version of the GLP and the GLP Guidance were published in February 2021.²

The GLP set out a framework of market standards and voluntary recommended guidelines to be applied by participants on a deal-by-deal basis. To qualify as a green loan, the loan must comply with the following four components of the GLP: (i) use

of proceeds for green projects; (ii) communication of the process for project evaluation and selection; (iii) management of proceeds; and (iv) reporting of the use of proceeds. Eligible green projects for a loan's proceeds include:

- Green buildings that meet regional, national, or internationally recognized standards or certifications;
- Renewable energy, including production, transmission, appliances, and products;
- Pollution prevention and control, including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, and waste recycling;
- Environmentally sustainable management of living natural resources and land use; and
- Climate change adaptation, including information support systems such as climate observation and early warning systems.

It is important to note that a green loan may only be marketed or labeled as such if it complies with the GLP. The GLP provides that "[g]reen loans should not be considered interchangeable with loans that are not aligned with the four core components of the GLP." A loan party must indicate that the loan complies with the GLP; the fact that the loan is being used to finance an environmentally friendly project does not make it a green loan.

Use of proceeds

The fundamental basis of a green loan is the utilization of the loan proceeds, which must be generally applied to an environmentally friendly purpose. All green projects should provide environmental benefits that will be assessed and, where feasible, quantified, measured, and reported by the borrower. The proceeds of a green loan may be used to finance a new green project or refinance existing debt on a green project.

Process for project evaluation and selection

In order for lenders to understand and assess the environmental attributes of a green loan, the borrower should clearly communicate: (i) its environmental sustainability objectives; (ii) the process by which the borrower determines how its project fits within an eligible green project; and (iii) the eligibility criteria it uses to identify and manage potentially material environmental and social risks associated with the proposed project.

Management of proceeds

The proceeds of a green loan should be credited to a dedicated account or tracked by the borrower in a way that maintains transparency and promotes the integrity of the loan product. In the case where a green loan takes the form of one or more tranches of a loan facility, each green tranche must be clearly designated, with proceeds of the green tranche credited to a separate account or tracked in the appropriate manner by the borrower.

Reporting

The borrower should prepare a report and keep it updated with information on the use of proceeds to be renewed annually until fully drawn and as necessary thereafter in the event of material developments. The report should include a list of green projects to which the green loan proceeds were allocated, a brief description of each project, the amounts allocated to each project, and the expected impact of each project.

ZERO-EMISSIONS BUILDING STANDARD

In order to obtain and maintain a green real estate loan, the loan recipient must construct or renovate existing buildings to have minimal impact on the environment. The ultimate goal for green architecture is to achieve a zero-emissions (also known as "net-zero") building standard. A zero-emissions building uses only renewable energy sources (meaning sources that do not emit carbon dioxide) for its energy supply, including lighting, heating, cooling, and vehicle charging.

A building cannot achieve the net-zero standard through the use of high-efficiency energy sources alone; supplemental renewable energy generation is also necessary. For properties that have limited space for the generation of renewable energy (primarily in heavily populated, densely built cities), energy may be produced by renewable sources off-site at nearby locations.

Practically speaking, what energy alternatives can help a building produce minimal emissions? One significant step toward accomplishing a net-zero building standard is to replace technologies that consume fossil fuels with technologies that operate via carbon pollution-free electricity (CFE). Currently, the US federal government is working to use 100 percent CFE in government buildings in order to cut emissions from federal buildings in half by 2032 and achieve net-zero emissions by 2045.³ According to the US General Services Administration (GSA), sources of CFE include marine, solar, wind, and geothermal energy, among others.

Solar energy

Solar energy is produced by converting sunlight into energy. This conversion is performed by reflecting sunlight off mirrors (solar panels) and concentrating it onto receivers that then harness and convert it into heat. This heat may be used to produce electricity or stored for later use. Solar panels perform best when installed on south- and west-facing roofs sloped at angles between 15 and 40 degrees. Solar panels are wired and connected to an interior electrical panel. According to the US Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy, enough sunlight touches the earth in just 90 minutes to provide the entire earth with all of its energy supply for one entire year.

Wind energy

Wind energy is created when the blades of wind turbines capture the blowing wind's energy. The wind spins a turbine's blades, which are connected to a generator (either directly or through a shaft and gears). The aerodynamic force of the spinning blades rotates the generator, producing electricity.

A professional can install a wind electric system (which includes, among other elements, the wind turbine, tower, and wiring) after assessing the ideal location based on wind patterns. The installer also determines whether the system should be connected to the electric grid or isolated and off the grid. It is essential to confirm that installation of a wind energy system complies with local zoning ordinances.

Geothermal energy

Geothermal energy is produced by the earth's heat, created by reservoirs of hot water (either naturally existing or manmade) below the earth's surface. By drilling wells into underground waters, steam and hot water can be tapped and then pulled to the earth's surface to generate electricity. A geothermal heat pump and system may be built beneath a property's yard or installed directly under a building. The installer will decide whether a vertical or horizontal loop is best and determine the size of the system. According to the Office of Energy Efficiency and Renewable Energy, realizing America's maximum geothermal potential would result in a reduction in emissions equivalent to removing 26 million cars from US roads each year.

Marine energy

Marine energy uses the kinetic energy of waves, currents, tides, and temperature changes and can be produced by oceans, rivers, lakes, streams, and other bodies of water to generate clean energy. Marine energy is particularly accessible and advantageous for coastal communities that can rely on it during storms and outages of traditional electricity. Marine energy is lauded for its reliability, as it depends largely on the guaranteed movement of the ocean. To harness marine energy, large-scale infrastructure along with cost-effective, reliable energy technology is required. According to the National Renewable Energy Laboratory, nearly 60 percent of America's annual electricity demand could be met with the use of available marine energy.

RENOVATING BUILDINGS TO BECOME GREEN

Green loans are available to the owners of existing structures as well. In fact, because restoration and renovation can consume less than half the energy of new construction and produce significantly less construction waste, “the greenest building ... is the one that is already built.”⁴ Retrofitting existing buildings not only reduces their energy consumption but also prevents the significant emissions produced by construction of a new building. “Occupying, maintaining, renewing, and adapting existing buildings” is “crucial” to meeting the decarbonization targets set by the Paris Agreement on Climate Change. The International Energy Agency estimates that 20 percent of existing buildings must be retrofitted to a zero-carbon-ready level by 2030 in order to reach net-zero emissions by 2050.⁵

In addition to protecting the environment, renovating with green loans provides a number of other benefits to both individual property owners and communities. Renovating existing buildings preserves historic architecture, which serves as a cultural, aesthetic, and educational legacy for current and future generations. Green renovation also provides public health benefits such as improved indoor air quality and reduced exposure to carcinogens and other harmful substances, including volatile organic compounds (VOCs) and plastic byproducts, that cause respiratory diseases, allergies, and even cancer.

Furthermore, green renovation is a wise economic investment. While initial renovation costs are typically higher than non-sustainable renovations, over time a green property saves more on energy costs, and the value of a green property is considerably higher. Heritage preservation and a historic ambience serve as a popular source of tourism, helping local businesses to attract customers.

How can existing buildings be made green?

In seeking to obtain a green loan, existing buildings may be renovated to employ the use of alternative energy sources that minimize carbon emissions, described above.

Other green improvements to historic buildings range from minimal interior updates to major structural renovations. Building owners may install, among plenty of other options:

- A metal roof made of recycled materials with a reflective surface, which reflects the sun’s light and prevents heat from entering the home, resulting in a significant reduction in energy costs;
- LED lighting, rather than traditional incandescent lighting;
- “Smart” high-efficiency lighting such as automatic light dimmers and sensor-activated lights that turn on and shut off automatically;
- Low-flow plumbing fixtures such as low-flow, dual-flush toilets and motion-activated, touch-free faucets;
- “Smart” automatic shutdown electrical sockets that use sensors or timers to turn off the power in a vacant room or sockets connected to unused devices;
- Heat-retaining flooring made of natural materials such as concrete and brick to absorb heat and cool rooms, reducing the need for air conditioning in the summer;
- Sustainable flooring that is made from materials that regenerate rapidly, such as bamboo, or flooring made of reclaimed wood;
- Insulation in the walls and roof to prevent air leaks and heat loss;
- Energy-efficient windows designed to prevent the escape of heated and cooled air;
- Well-planned landscaping to shade, cool (by reducing the amount of heat absorbed by a building), and act as a windbreak, thereby reducing energy bills; or
- No-VOC paint.

CITIES ARE GOING GREEN THROUGH SUSTAINABLE REAL ESTATE

Individual property owners are not alone in their ability to develop sustainable real estate. Community-driven green initiatives seek to improve the health of both the planet and its inhabitants. Goal 11 of the United Nation's (UN) 17 Sustainable Development Goals, for example, focuses on sustainable cities and communities, seeking to "make cities and human settlements inclusive, safe, resilient, and sustainable."⁶ This initiative promotes, among other objectives, sustainable land-use planning and management, and the integrated provision of environmental infrastructure (water, sanitation, drainage, and solid waste management).

Widespread sustainability has a proven success rate. With the passage of the Green Building Act of 2006, Washington, DC, became the first major American city to require green building certification for both the public and private sectors. As a result, it was the first city in the world to receive a Leadership in Energy and Environmental Design (LEED) Cities Platinum leadership certification. Real estate in Washington, DC, can serve as an inspiration to communities in pursuit of going green. For example:

- A 15-story hotel in the district is one of America's largest LEED Silver-certified hotels;
- A hotel in Georgetown houses more than 100,000 honeybees, which produce more than 150 pounds of honey for the hotel's diners each year;
- A hotel in the Dupont Circle area is topped by a rooftop garden used to grow produce for composting and herbs used in cooking programs with DC Public Schools;
- A hotel near the city center contains refillable water stations, a botanical rooftop, and smart LED lighting and air conditioning with infrared sensors for automatic shut-off;
- Restaurants in a farmer-owned restaurant group are LEED-certified and have in-house recycling and composting programs that allow for reuse of 90 percent of their waste; and

- A brewing company runs entirely on solar power and donates spent grain to local farmers.⁷

In January 2019, DC Mayor Muriel Bowser signed the Clean Energy DC Omnibus Amendment Act of 2018, setting a mandate of 100 percent renewable electricity by the year 2032.⁸ Under the updated Renewable Portfolio Standard, electricity suppliers must purchase all power from renewable sources by 2032, with five percent coming from local solar power.

Currently, the city is pursuing net-zero energy building designs that will allow buildings to generate sufficient on-site renewable energy to satisfy total energy usage. The city's goal is to have all power supplied by renewable sources by 2032.⁹ Benjamin Banneker Academic High School, for example, is one of the first DC public schools aiming for net-zero energy, in large part through the use of solar panels.

Mayor Bowser's 2018 plan is being updated with Clean Energy DC 2.0, which is being spearheaded by the DC Department of Energy & Environment (DOEE). According to the DOEE, Clean Energy DC 2.0 "will include an implementable, comprehensive policy roadmap covering the transportation, energy, and building sectors now through 2045."¹⁰

Washington, DC, is far from the only community making a more sustainable country:

- In 2015, Burlington, Vermont, became the first American city to be powered entirely by renewable energy sources. All of Burlington's energy is sourced from biomass (sustainable local wood), wind, solar power, or hydroelectric power;
- Also in 2015, San Diego was the first major US city to commit to 100 percent renewable energy and is the largest municipality to make such a commitment. The city's 2015 Zero Waste Plan aims for 90 percent waste diversion by 2035 and zero waste by 2040. San Diego's rooftop solar installations generate 37 megawatts, placing the city at the top of the industry;
- Denver aims to power its entire electric supply with renewable energy by 2030;

- Portland, Oregon, aims to run on clean energy-generated electricity by 2035 and plans to be powered entirely by renewable energy by 2050;
- Ithaca, New York, has committed to powering all government operations with entirely locally sourced energy by 2025 and becoming carbon neutral by 2030;
- Approximately 90 percent of Seattle’s electricity is generated by hydropower, and the city intends to be entirely carbon neutral by 2050;
- Boston also plans to be carbon-neutral by 2050;
- O’ahu, Hawaii will run on renewable energy by 2025 and plans to be completely carbon-neutral by 2045; and
- New York City plans to retrofit its public buildings with energy-efficient upgrades and become entirely carbon neutral by 2050.

Thus, communities, through the efforts of both individual property owners and their leadership, are harnessing their power to make the world more sustainable, one city at a time. 🌱

Notes

- 1 APLMA, LMA, and LSTA, Sustainable Lending Glossary, Aug. 2021, available at https://www.lma.eu.com/application/files/3316/2816/5371/LMA_Sustainable_Lending_Glossary_V10.pdf.
- 2 APLMA, LMA, and LSTA, Green Loan Principles, available at <https://www.lsta.org/content/green-loan-principles/#>; APLMA, LMA, and LSTA, Guidance on Green Loan Principles, available at <https://www.lsta.org/content/guidance-on-green-loan-principles-glp/#>.
- 3 For more information, see President Joe Biden’s Executive Order 14057, the Federal Sustainability Plan, or reach out to the authors.
- 4 Carl Elefante, The greenest building is..., available at <https://carlelefante.com/insights/the-greenest-building-is/>.
- 5 Net Zero by 2050: A Roadmap for the Global Energy Sector, Int’l Energy Agency, at 147 (Oct. 2021), available at https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmap-for-the-Global-Energy-Sector_CORR.pdf.
- 6 17 Sustainable Goals, United Nations, available at <https://sdgs.un.org/goals/goal11>.
- 7 Guide to LEED-Certified Hotels & Venues, Washington.org, available at <https://washington.org/meetings/leed-certified-hotels-venues-washington-dc#:~:text=As%20the%20only%20hotel%20adjacent,certified%20hotels%20in%20the%20U.S.>
- 8 Clean Energy DC Omnibus Amendment Act, D.C. Law 22-257 (2018).
- 9 Clean Energy Initiatives, District of Columbia Pub. Service Comm’n, available at <https://dcpsc.org/CleanEnergy/Clean-Energy-Initiatives.aspx#initiative1>.
- 10 Clean Energy DC 2.0 Plan, DC Dep’t of Energy & Environment, available at <https://clean-energy-dc-dcgis.hub.arcgis.com/>.