



## Applying LEED to airport projects

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### What are the advantages of using LEED for airport facilities?

LEED-certified airport facilities are the triple bottom line in action, benefiting people, planet, and profit. LEED certification leads to healthier, more productive places, reduced stress on the environment, impressive savings through reduced utility costs, and enhanced building value. They are designed and operated to consume less water, less energy, fewer natural resources and are ultimately aimed to reduce the overall impact of the development on the local, regional, and global environment. Teams across the world are using LEED to ensure a more efficient, equitable, and sustainable future across all project types from airport terminals to fire stations to offices located at the airport. LEED is helping the [transportation industry](#) achieve ambitious sustainability goals while also helping airport projects generate significant savings on operating costs.

Airport terminal/concourse projects have different energy and water needs, higher footfalls, unique ventilation requirements, high equipment loads, and 24/7 operations that all make pursuing strong efficiency measures challenging. Recognizing the unique challenges that often exist for these airport terminal projects, USGBC and GBCI regularly work to support projects.

### How many airport projects are registered and certified under LEED?

As of September 2024, there are approximately 2,100 LEED-certified and registered projects associated with airports across the globe. This represents approximately 546 million square feet or 50 million square meters.

### How do airport facilities earn LEED certification?

Airport facilities can earn certification under different LEED rating systems at different stages of the building's lifecycle.

- LEED for Building Design and Construction (BD+C): New Construction and Major Renovation is usually the most appropriate rating type for buildings that are new construction or major renovation. At least 60% of the project's gross floor area must be [complete](#) by the time of certification and the project must include the entire building's gross floor area. For airport spaces, this may include areas dedicated to both administrative and support-related functions.
- LEED for Operations and Maintenance (O+M): Existing Building or Interiors can be applied to existing buildings or spaces that are fully operational and occupied for at least one year. The project may be undergoing improvement work or little to no construction and must also include the entire building's gross floor area in the project. Unless otherwise noted in the credit-specific requirements, this includes process-related operations and performance metrics.

### How does the latest version of LEED address the unique challenges of airport projects?

In developing LEED v4 and LEED v4.1, certain prerequisites and credits were adapted in a way that supports the unique needs of airport projects. Incorporating feedback from our industry stakeholders, LEED has published industry-specific guidance in the form of LEED Interpretations, Alternative Compliance Paths (ACPs) and pilot credits.

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The following may be of interest to airport projects. Many of them are designed to help projects with high process loads or high occupancy to meet the intent of the credits.

- LEED v4 BD+C EApc107: [Energy Performance Metering Path](#) option allows project teams to work with the first 12 months of energy performance data to earn credit for Optimize Energy Performance credit and prerequisite.
- [Energy Jumpstart Pilot Credit](#) is available for O&M projects with process loads of at least 60% and unable to meet the Minimum Energy Performance in LEED v4 O&M rating system.
- [LEED Interpretation 10493](#) allows LEED v4 and v4.1 BD+C projects using whole building energy simulation that can document more than 50% unregulated process load to use BD+C: Core & Shell energy performance improvement thresholds in lieu of the New Construction thresholds.
- [Whole Project Water Use Reduction Pilot Credit](#) allows LEED v4 BD+C projects to quantify water use with whole-building water balance modeling, like the compliance path for whole-building energy modeling. It also allows projects to include potentially significant water savings that previously went unrecognized, such as process water.

Additional LEED Interpretations for airports can be found in the [LEED Addenda database](#) by entering the term “airport” in the main search bar.

### **How can multiple buildings and structures in a campus setting earn LEED certification?**

Airports often operate on a large scale with multiple buildings spread across a single site. All these buildings, people, and processes are interconnected with each other. To address this, the [LEED Campus Guidance](#) was introduced for projects that are on a shared site under the control of a single entity. Its application to LEED projects in the airport setting represents the complexity and commonality of buildings and infrastructure on a site.

LEED Campus Guidance is a useful tool for airports with multiple buildings, common utilities, and site-wide management policies. By utilizing LEED Campus Guidance, airport operators and project teams can benefit from an increase in the streamlined review process, and reduced certification fees under the Master Site approach, leading to a successful implementation of LEED projects.

### **How can I use LEED to certify the entire airport?**

Airports are leveraging the LEED for Cities and Communities Rating System to certify the performance for the entire airport. This certification program is revolutionizing the way airport communities are planned, developed, and operated to improve their overall sustainability and quality of life. The LEED framework encompasses social, economic, and environmental performance indicators and strategies with a clear, data-driven means of benchmarking and communicating progress.

### **How does the Arc-platform relate to airports?**

The LEED v4.1 O+M rating system offers a unique performance-based pathway to certify your existing buildings and interior spaces. This new rating system uses [Arc](#), a state-of-the-art platform designed to collect, manage, and benchmark your building across five performance categories: energy, water, waste, transportation, and human experience.

And what does this mean for airports? LEED v4.1 can be used to compare airport projects to other similar facilities pursuing high-performance measures from around the world. Facility managers and owners can continuously monitor the data and make informed decisions about how to optimize the

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building performance based on real-time data and analytics. This performance pathway can then be used to certify and recertify the project every 3 years. [Learn more](#).

### What resources are available for airports?

There are various resources available for airports pursuing LEED certification.

#### Industry Report:

- [LEED in Motion: Transportation](#)

#### Industry Articles:

- [PEER Certified Airports in India take flight power resilience](#)
- [USGBC+ LEED-certified airports help provide safe and sustainable travel](#)
- [Airports and LEED: What's new?](#)
- [Atlanta airport becomes first to earn LEED for Communities precertification](#) Link to certification detail: [Atlanta airport LEED for Communities certification](#)
- [Beijing Daxing International Airport Area is first precertified LEED Platinum city in China](#) Link to certification detail: [Beijing Daxing International Airport Eco](#)
- [Teaming up on carbon with Costa Rica Green Building Council](#)

### Where can I find more owner profiles and case studies on airports?

#### Hamad International Airport (HIA)

- In Doha, Qatar the HIA [Terminal Expansion](#) includes “innovative measures of energy efficiency across the entire building, thus staying true to its commitment to improving environmental performance and effectively addressing climate change.”
- LEED Project profile [HIA Central Concourse](#)

#### El Dorado Airport (BOG)

- First airport in the world obtains LEED Zero Energy Certification [El Dorado Airport Achieves LEED Zero Energy Certification](#)
- [How Colombia's "Golden" airport achieved LEED Platinum](#) El Dorado Airport [project profile](#)

#### Kansas City Airport (KCI)

- Kansas City International Airport new LEED Gold certification [Showcases How LEED Serves Infrastructure Projects](#)

#### Istanbul Airport (IST)

- Istanbul Airport includes one of the largest individual LEED certified projects in the world see the [project profile](#) and [LEED playbook](#)
- LEED commercial interior projects [Istanbul Y.H. THY A.O Main Lounge](#) and [Istanbul Y.H. THY A.O Domestic Lounge](#)

#### Orlando International Airport (MCO)

- Orlando International [Airport Business](#) sustainability initiatives leverage LEED certification
- LEED v4 certified projects: [MCO South Airport APM & ITF](#) and [GOAA Maintenance Administration Building](#)

#### San Francisco International Airport (SFO)

- LEED v4 BD+C: New Construction Platinum certified [SFO Harvey Milk Term. 1 Boarding Area B](#) and [other LEED work at SFO](#)

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- Entire airport campus certified using LEED for Cities and Communities framework [SFO Achieves Airport-Wide LEED Platinum Certification, First in the World](#)
- SFO Construction Guidelines – achieve LEED Gold minimum: [Concessions Tenant Guidelines](#)

### Seattle-Tacoma International Airport (SEA)

- LEED certification achievements: [Feel-Good Green Features of the New North Satellite](#), [Sea-Tac Airport North Satellite](#), and [Sea-Tac Airport Concourse D Holdroom](#)

### Indira Gandhi International Airport

- Terminal 3 LEED Gold [New Delhi Airport Terminal Achieves LEED-Gold Rating](#)
- First airport to work with performance-based LEED certification in Arc: [Delhi Airport first in the world to adopt Arc](#)
- Indira Gandhi Airport video: [LEED On: T3 Terminal at Indira Gandhi International Airport](#)

### Hartsfield-Jackson Atlanta International Airport (ATL)

- LEED & Energy Conservation: [Greening ATL](#)
- Atlanta's Maynard H. Jackson International Terminal LEED Silver: [New LEED Certified Atlanta Airport International Terminal](#)
- Atlanta airport LEED for Communities certification: [HJAIA Airport LEED for Communities](#)

### Denver International Airport (DEN)

- LEED projects at DEN: [Green Building](#)
- Facilitating the Airport LEED Campus Certification Process [DEN Campus](#)
- Westin Denver at [Denver International Airport Earns First LEED Platinum Status Among Major U.S. Airport Hotels](#)

### San Diego International Airport (SAN)

- [San Diego Now Home to World's First LEED Platinum Certified Commercial Airport Terminal](#)
- [Green Build Gallery](#)
- LEED certified as existing building [SAN facilities maintenance building](#)
- [San Diego International Airport earns LEED Gold certification for consolidated Rental Car Center](#)

### Port Authority New York New Jersey

- [LaGuardia](#) Airport Terminal B is world's first Airport: Terminal/Concourse project to earn LEED v4 GOLD under the more stringent v4: [LGA Phase 1 : CCB+HH+CHRP](#)
- Terminal 4 at New York's [JFK International Airport LEED](#) for Existing Buildings: Operations & Maintenance Gold certification
- LaGuardia & Newark: [LaGuardia, Newark Liberty airport redevelopment projects must meet LEED standards to support Port Authority energy goals](#)

View non-confidential LEED registered and certified projects in the project directory by entering key terms like 'airport' in the search bar. This will show projects with such terms in their project title. You can also filter by region and rating system type to get more specific results.

### **Does USGBC offer any education for project teams wanting to learn more about airport facilities pursuing green building measures?**

Yes! Check out the following sessions in the USGBC online course catalog.

- [LEED and Airport Facilities Educational Resources](#)

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- [Airports drive change resilience, decarbonization & wellness](#)
- [PEER Case Study - Campuses](#)

**Who can I contact for more information about applying LEED at an airport?**

For more information, [contact us](#).