



1. Title: MGM Resorts International – Casino Resort Project at National Harbor, MD
 National Avenue, Oxon Hill, MD 20745

2. Project Description

MGM National Harbor is a one billion, four hundred million dollar waterfront resort destination. Design collaboration between MGM Resorts International and three nationally acclaimed architects, MGM National Harbor will open in two thousand sixteen on the Beltway Parcel at National Harbor. MGM National Harbor will feature a twenty-three story, three-hundred and eight room luxury hotel with amenities including: fine dining from local and celebrity chefs, world-class entertainment, luxury retail shops, and a three thousand-seat theater and a resort spa.

Charting a new course for sustainable growth in Maryland, MGM Resorts International is pursuing the U.S. Green Building Council’s Leadership in Energy and Environmental Design® (LEED) Gold certification at MGM National Harbor. The three-million square foot, multi-use development will incorporate a variety of environmentally minded practices and sustainability elements — energy efficient systems, occupancy comfort and wellness minded material selection, preferred parking spaces for electric and high-efficiency vehicles, and emphasis on a number of technologies and innovations to manage water — to make MGM National Harbor a destination as a premier environmentally sustainable urban community.

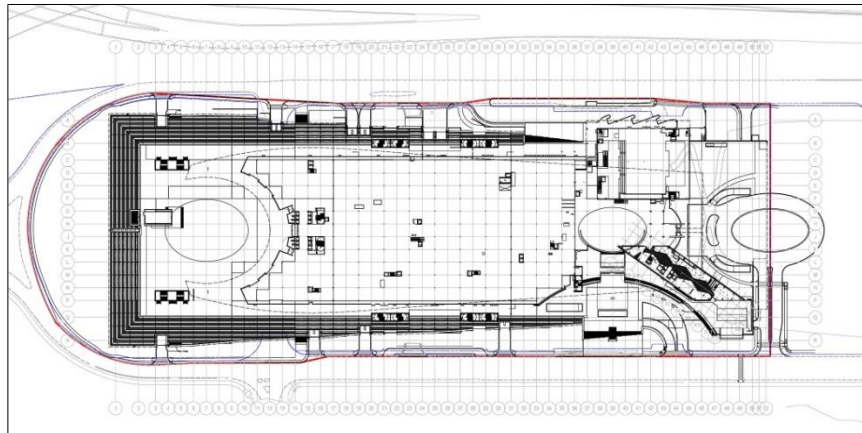


MGM National Harbor

3. LEED Facts

Building Name:	MGM National Harbor, LLC	Sustainable Sites:	18/26
Owner:	MGM Resorts International	Water Efficiency:	10/10
Completion Anticipated:	December 2016	Energy and Atmosphere:	16/35
Location:	National Harbor, MD	Materials and Resources:	7/14
Rating System:	USGBC LEED Building Design and Construction, version 2009	Indoor Environmental Quality:	9/15
Certification Anticipated:	LEED Gold	Innovation and Design:	6/6
		Regional Priority:	2/4
		Total Points Anticipated:	68/110

4. Overview



MGM National Harbor LEED Project Boundary

5. Project Team

Owner/Developer:	MGM Resorts International
Architect of Record:	SmithGroupJJR
General Contractor:	Whiting Turner
HVAC Engineer:	SmithGroupJJR
Commissioning Authority:	Q&S Engineering, Inc.
LEED Consultant:	SmithGroupJJR

6. Strategies

Building a Sustainability Team and Ensuring Success

Promoting sustainability and environmentally preferred designs and practices has been communicated openly between the Project Team and from its inception. Sustainably focused design requirements and guidelines, were distributed to twelve design teams, and more than sixty design and consultant teams. With the help of all team members, many environmentally preferred technologies and materials were incorporated throughout the final design. Under MGM leadership and guidance, a team of experienced sustainability specialists were constructed under both the Architect and Contractor teams, giving the entire team a comprehensive understanding of best practices and compliance concerns.

LEED Category: Sustainable Sites

Urban Heat Island Reduction

MGM National Harbor has constructed parking below ground level to reduce the impacts on urban heat island effect. Similarly, use of a white roofing system will further reduce impacts to the site's microclimate while also reducing the buildings operational energy use.

Public Transportation

In order to help reduce the transportation impacts of the guests and employees of MGM National Harbor, the Project Team worked, in conjunction with the local transportation authority to enhance public transit services. A new transportation stop, located directly adjacent to the MGM National Harbor has been constructed to expand public transportation routes and frequency.

Green Vehicles

To demonstrate and encourage the use of more environmentally minded modes of transportation, MGM National Harbor has installed twenty-four electric vehicle (EV) charging stations and low-emitting-fuel efficient (LEFE) vehicle parking spaces in some of the most preferable locations throughout our parking garage for use by guests and employees. This initiative helps to reduce energy consumption, vehicle emissions, and environmental and public health harms associated with motor vehicle use. Prioritized parking for EV and LEFE vehicles is part of MGM National Harbor taking responsible action toward addressing climate change, increasing access to clean energy technologies, and reducing dependence on nonrenewable resources.

LEED Category: Water Efficiency

The Project has taken the concept of water as a precious resource very seriously throughout its design, construction and operations. To help preserve and improve the water quality in the Potomac River and Chesapeake Bay, MGM National Harbor integrates design and function with the adjacent park for stormwater quantity control.



MGM National Harbor

Rainwater Harvesting

MGM National Harbor designed and constructed a 700,000 gallon cistern to collect, store, treat, and reuse rainwater captured from the roof structures. The Resort has been designed to use this rainwater as an alternative to municipal water for our irrigation, cooling, and sanitary needs.

Irrigation Efficiency

MGM National Harbor's landscape design includes a highly efficient irrigation system with native and adaptive plant species. Intelligent irrigation technologies use reclaimed water to irrigate 100% of the planting at MGM National Harbor.

Water Conservation

MGM National Harbor has worked to reduce its water consumption by more than 45% below a design baseline. The project is using high-efficiency equipment for water conservation through automatic faucets in sinks, low-flow toilets and shower fixtures. Our water features use recirculated water and are sealed to minimize water loss due to evaporation.

LEED Category: Energy and Atmosphere

Cogeneration Energy Plant

MGM National Harbor generates electricity through the use of cogeneration, combined heat and power (CHP) production, a system that provides building chilled water and heating water from waste heat off a natural gas generator. MGM National Harbor's CHP system will significantly reduce its greenhouse gas emissions and the site's environmental footprint compared to conventional systems. Performance will be optimized using The Project's measurement and verification (M&V) plan, a tool for ongoing accountability of energy performance and a tool that helps verify cost savings associated with energy efficiency measures incorporated into the MGM National Harbor's design.

- MGM National Harbor has designed and built one of the largest privately operated CHP Energy Plants in the Washington D.C. region producing 750kWh.
- The project has achieved a predicted energy cost reduction of 31.7% compared to a code-compliant building.

LEED Category: Materials and Resources

The MGM National Harbor team's strategic efforts in waste management and material selection helped on two issues in green building: the environmental impact of building materials used on the project, and maximizing waste and demolition materials that can be diverted from landfills. The Project Team identified environmentally preferred products and methods that minimize embodied energy and environmental impacts associated with the extraction, processing, transport, maintenance, and disposal of building materials.

- Recycled content represents over 24% of the building's material cost. More than 80% of new-wood based materials at MGM National Harbor are Forest Stewardship Council certified representing responsibly managed forests of sustainably harvested lumber.
- Collectively throughout all project phases, more than 96% by weight of construction and demolition waste was diverted from landfills.
- Materials manufactured and extracted within a 500 mile radius of the project site represent 22% (projected) of the building's material cost.

LEED Category: Indoor Environmental Quality

Indoor Air Quality Management

Design and construction have combined traditional approaches and emerging strategies for indoor air quality. Green buildings with optimal indoor air quality protect the health and comfort of their occupants.

Air quality considerations for MGM National Harbor extended beyond construction of The Resort. Interior finishes such as paints, sealants, coatings, adhesives, carpeting, and composite wood products have been specified in The Project to be low-VOC and free of urea-formaldehyde.

MGM National Harbor is committed to the long-term health and integrity of our air quality and local environment.

- Interior finish products, such as paints, sealants, adhesives, and flooring elements, are low-VOC.
- 100% of all composite wood and agrifiber products used on the interior of the building have zero added urea-formaldehyde content contributing to comfort and well-being of our guests.

