



# HOK Partners With U.S. Green Building Council on Design of New Orphanage and Children's Center in Haiti

Published on 11 Jan 2012

Written by Marisa Long

Posted in [Media](#)

*Passive design principles and biomimicry give form to a sustainable, restorative environment for the children of Haiti*

NEW YORK - (Jan. 11, 2012) - HOK is the U.S. Green Building Council's official design partner for Project Haiti, a facility targeting LEED® Platinum certification that will replace a Port-au-Prince orphanage and children's center devastated by the magnitude 7.0 earthquake that rocked Haiti and killed 316,000 people two years ago, on Jan. 12, 2010.

The project seeks to provide a safe, healthy home for the children who will occupy the Fondation Enfant Jesus orphanage and children's center. And it is a commitment of the Clinton Global Initiative, which convenes global leaders to create innovative solutions to the world's most urgent challenges.

"The challenge — to design, build and operate a highly sustainable project that will help these Haitian children — is an amazing opportunity," said HOK Director of Sustainable Design Mary Ann Lazarus, FAIA, LEED AP BD+C. "We are creating a replicable, living textbook of sustainable design tailored to the Haitian culture that we hope will influence the future of architecture in the region."

The main three-story, L-shaped structure is organized around a central courtyard -- a focal point for the orphanage's social life. It is flanked by kitchen, dining and training spaces. The design responds to the dense urban condition and prevailing easterly trade winds by organizing all the spaces around a courtyard facing east. As with the vernacular "Gingerbread" style of Haiti, the building rises around this courtyard and features deep outdoor balconies.

Our goal is to create a nurturing and restorative place," said HOK's Thomas Knittel, AIA, LEED AP, design leader in the firm's Seattle studio. "We are striving for net zero water and waste, and for the building to provide a net positive energy source."

The design of the building massing, orientation, openings and materials take full advantage of passive design principles to provide a healthy, comfortable environment. Building systems will require minimal maintenance and provide independence from the city's unreliable power grid. They will harness excess energy to power street lights and public charging stations on the street.

"Creating a healthy, safe environment for children is the most important work we can do in the green building industry, and Project Haiti Orphanage and Children's Center is about helping the children of Haiti who are facing ongoing devastation following the earthquake that took place two years ago," said Rick Fedrizzi, president, CEO and founding chair of the U.S. Green Building Council. "We are deeply honored to have HOK's support as the committed design partner for Project Haiti. They bring incredible expertise that will allow us to create a replicable, resilient model for rebuilding that can be replicated throughout the world."

HOK's design team is integrating biomimicry to create a locally attuned and responsive building solution. The building references the local Kapok tree, both in the branching support system of the balcony system and the low emissivity, heat-shedding characteristics of its second skin.

The below-grade area will serve as the building's "roots," cleaning and storing water and recycling nutrients from waste into biogas for cooking. The first three stories will function as the structure's "trunk." Protecting the building like tree bark, a "boundary layer" will shield exterior walkways and vertical surfaces from direct sunlight while allowing for daylighting and natural ventilation. Rooftop gardens will serve as the "foliage," supporting the solar energy system and providing additional green space.

To guarantee a safe water supply, HOK's team designed a closed-loop system that collects, treats and stores water on the site. A biodigester will treat the waste and provide gas for cooking.

Security is important in Port-au-Prince. Visitors will enter through a series of thresholds: from public, to semi-private, to private space. The design includes a safe zone that will protect residents during natural disasters.

To promote Haiti's rich artistic heritage, the design team will use local materials and artwork, especially ironwork, murals and woodwork crafted by local artisans.

Established in 2003, Fondation Enfant Jesus is a non-government, non-

denominational charitable organization that operated the original orphanage on the building site. The construction site and currently condemned orphanage is located in Del Mas, Rue Fernand de Baudiere, in Port-au-Prince.

To view the renderings for the project, please visit:

<http://www.flickr.com/photos/hoknetwork/sets/72157628815703727/>

#### About HOK

HOK is a global architectural firm that provides planning and design solutions for high performance, sustainable buildings and communities. HOK's involvement in Project Haiti is an initiative of HOK IMPACT, the firm's approach to social responsibility through pro bono design work, charitable donations and volunteerism. The Project Haiti design team is an all-volunteer group of architects, engineers, designers and sustainable experts from HOK offices in St. Louis, Seattle and San Francisco. For more information, visit [hok.com](http://hok.com), <http://hoklife.com/tag/project-haiti> or [@hoknetwork](https://twitter.com/hoknetwork).

#### About the U.S. Green Building Council


The U.S. Green Building Council (USGBC) is committed to a prosperous and sustainable future through cost-efficient and energy-saving green buildings. USGBC works toward its mission of market transformation through its LEED green building certification program, robust educational offerings, a nationwide network of chapters and affiliates, the annual Greenbuild International Conference & Expo, and advocacy in support of public policy that encourages and enables green buildings and communities. For more information, visit [usgbc.org](http://usgbc.org) and connect on [Twitter](https://twitter.com/usgbc), [Facebook](https://www.facebook.com/usgbc) and [LinkedIn](https://www.linkedin.com/company/usgbc).

Contact:


Corinne Drobot, HOK

212.981.3754

[corinne.drobot@hok.com](mailto:corinne.drobot@hok.com)



**Marisa Long**  
Public Relations & Communications Director  
U.S. Green Building Council



USGBC staff

0 comments

[Leave a comment](#)

Leave a comment Don't have an account? [Create one](#)

---

You must be signed in to leave a comment.

**Email**

**Password**

---