

WSP team achieves six-star Green Star-rated building in Rwanda

Multi-disciplinary engineering consultancy, WSP | Parsons Brinckerhoff Africa, has achieved a six-star rating for its Nobelia Office Tower in Kigali, Rwanda.



This is not only the first six-star rated green building in Rwanda, but also on the entire continent outside of South Africa.

The Nobelia Office Tower will be a 19 storey tower, of which 16 floors will be dedicated to office space. With a total gross floor area of 11,469m², the building site is on previously developed land, to prevent urban sprawl. It is also located within close proximity to commercial, residential, recreational and retail zones. The final assessment for the design of the building is completed, where the project owner is lobbying for funding to go ahead with construction.

WSP's Green by Design team was appointed to this project based on the company's expertise and reputation as sustainability consultants, as well as its working relationships within the broader industry. "We are extremely proud of this six star rating achievement. At the onset of the project the owner's brief was to produce a design that would set the bar for green buildings in the country - and we have certainly met the client's brief," says Eloshan Naicker, sustainability consultant with the company.

Benchmark for future

"We are so impressed with the six-star Green Star rating of this project that we are aiming to use the design of the Nobelia Office Tower as the benchmark for all future green buildings in Rwanda and the wider Central East African region," says Eudes Kayumba of the Green Building Council of Rwanda.

The design phase of the project commenced in 2014 and was completed in October 2015 where WSP Green by Design was involved from conceptualisation through every phase of design - finding ways to be innovative and delivering consultation to the project team around Green Star requirements. Additionally, the consultants developed a high level strategy for the project team and facilitated the implementation, to ensure quality of services could be maintained.

"The six-star rating was not easily achieved, as we had a number of challenges on this project - not least of all developing the rating standards, which first had to be established for a Green Star rating to be possible in Rwanda," adds Naicker.

As the Green Building Council in Rwanda is in its infancy, a local context report had to be developed so as to establish the groundwork for the Green Star and set the appropriate standards for the climate and environment in Rwanda, as this is to be the standard to which all building projects will be rated. This process required a significant amount of research and assessment, all undertaken by WSP Green by Design, and submitted for assessment by the Green Building Council governing body.

Invaluable insights

However, Naicker comments that undertaking this process also provided the Green by Design team with invaluable insights on the local environment, which was influential to key innovations within this project.

"Overall, during the design assessment the building achieved a high score for its energy performance potential. This score can be attributed to the reduced carbon footprint and CO2 emissions that the design was able to achieve.

"To achieve a six star rating you need to be prepared to push previously conceived boundaries. And, through the collective and dedicated efforts of the project team, not only were we able to achieve the best possible outcome on this project, but we have certainly set the benchmark high for future green building projects in Rwanda," concludes Naicker.

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