



BUSINESS

More than green: German standard promotes sustainable buildings

German building standard is innovative, practical and cost-effective for Thailand, says DGNB

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The Dhanaphat building of Dhanarak Asset Development in Bangkok, designed by A&A Co Ltd, has been awarded the DGNB Platinum certificate for sustainability.

The introduction of the American LEED (Leadership in Energy and Environmental Design) certification system in Thailand has made green building popular with the developers of luxurious high-rises in downtown Bangkok.

On the one hand, the application of progressive design and construction approaches has led to buildings that offer better green performance and a healthier built environment.

On the other hand, many people get the impression that green equals expensive: achieving the required points on LEED checklists can require costly investments in technology, which often do not make sense for a specific project.

In Germany, where buildings are significantly more expensive than in Thailand, a new approach has become standard: instead of focusing on the green performance and "healthiness" of a building, a more holistic perspective is used, according to the German Sustainable Building Council (DGNB).

Sustainable buildings follow the concepts outlined in Our Common Future, a landmark UN report on the environment in 1987, and its definition of sustainability that consists of three main pillars: ecological quality, economical quality and sociocultural quality.

Investments in ecological quality, such as a solar system, and sociocultural improvements (for example, better indoor air quality and healthy construction materials) have to be well balanced with an innovative life cycle cost (LCC) calculation.

Using the LCC approach, the net present value of a building considers not only the investment cost but also energy, water, cleaning and maintenance costs for the next 50 years. This leads to buildings with a well-balanced, sustainable quality and higher customer satisfaction.

Ten years ago, this innovative approach and the experiences with existing green building rating systems such as LEED led to the development of the DGNB sustainability rating system. Besides the three pillars of sustainability, it offers many other innovative aspects:

A large variety of certification schemes for all building types (office, residential, industrial, laboratory, retail).

A performance-based approach as a basis for real optimisation, instead of just ticking boxes (for example, calculating the ecological footprint of the building instead of just investing in specific green technology).

A broader spectrum of criteria such as handicapped accessibility, rest areas, and safety and security features.

International adaptability, making it suitable for the challenging Thai real estate market.

The last aspect has proved true: the DGNB and the German ambassador in Thailand in November presented the first four certificates to building owners in Bangkok, Phuket and Rayong that had achieved DGNB sustainability certification. A small office building, a single-family house, a 15,000-square-metre factory building and a retail building were awarded Silver, Gold and Platinum labels.

Further projects are now in the certification process. Sustainability is clearly achievable and is creating value in Thailand. It should be applied in every construction project where the developer is aiming for higher quality. Even exceptional high-rise buildings can benefit from this broader view.



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