

Insider



Can green building projects take root in Thailand in such challenging economic times?

BY STEVE PEARM

Building green when times are lean

In last December's edition of *Property Report* we looked at how some unscrupulous property developers in Thailand preferred to market "greenwash" rather than embrace the concept of sustainable building design and construction. Indeed it seemed as if property developers were suddenly falling over themselves in their rush to surf the green wave, with project billboards proclaiming to save the planet sprouting up everywhere in Bangkok. Unfortunately for the environment, however, one had only to scratch the surface of these claims to find that the green credentials of the many new developments rarely extended beyond planting a few trees and installing more energy efficient air conditioning units.

But even in this cynical and depressing environment, there were some positive signs that change was in the air, leading the optimists amongst us to believe that we were witnessing the green shoots of a sustainable building revolution here in Thailand. The challenge facing us all now is how we nurture these sensitive green shoots in the face of one of the worst economic downturns in recent history. We must not allow the recession to distract us from the fact that climate change and global warming represent a clear and present danger to our very way of life, and the building sector is responsible for almost half of all greenhouse gas (GHG) emissions annually. Recessions tend to be cyclical but experts now generally concur that once the climate change tipping point is reached, there will be no going back.

Green building does not necessarily have to come with a high price tag. Innovative - and often simple - modifications to construction and services design can lessen their impact on our environment through energy and resource efficiency. Relatively simple passive solutions in tropical countries include sun shading, building orientation/ placement, solar reflective paints, greywater treatment and reuse, green roofs, use of lower thermal mass materials, rainwater harvesting, use of sustainably sourced and recycled materials, natural ventilation systems (such as solar chimneys) and recycled and non toxic building and finishing materials. More active solutions include the use of solar panels, bio-mass boilers, air conditioning waste heat capture



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new development above a certain threshold should be subject to a formal third party green building rating and certification process such as the Leadership in Energy and Environmental Design (LEED) promoted by the U.S. Green Building Council (USGBC). LEED has become the international de facto green building standard and LEED certification provides independent, third-party verification by accredited professionals that a building project meets the highest green building and performance standards, is environmentally responsible and will provide a healthy place to live and work.

Since the last article was written there have been no 'New Construction' LEED projects certified in Thailand although there are currently 5 projects registered; including a Six Senses resort in Koh Kood and a new Kasikorn Bank commercial building in Central Bangkok. LEED Certification is awarded on a sliding scale of Bronze through to Platinum based on the building's quantified commitment to sustainable building design and operation. LEED accreditation is a complex process with significant financial and design implications, and it is therefore critical that a LEED Accredited Professional (LEED AP) is consulted at the conceptual stage of any proposed project. A LEED AP will assess the project specific requirements, advise on the appropriate rating systems and certification levels, coordinate between the client and third party design teams and administer (or

Thailand could also establish a Green Building Council (GBC) under the auspices of the World Green Building Council (<http://www.worldgbc.org/home>), a union of national councils whose mission is to accelerate the transformation of the built environment towards sustainability. WorldGBC support their members with the development of effective rating systems; facilitates knowledge transfer and co-operation between councils and provides an impartial forum to share best practices globally. To date, 14 GBC's have been established with a further 7 more granted "Emerging Council" status, including ASEAN's only representative in Vietnam.

There have been some encouraging signs from the government, the Office of Natural Resources and Environmental Policy and Planning (ONEP) has recently tightened its Environmental Impact Assessment standards and now requires larger green spaces. The Energy Ministry has also revised its codes to require new or renovated buildings with floor spaces greater than 2,000sqm to set design standards that include a 10 percent energy saving target.

There are also encouraging signs that Thai society is starting to awaken to the importance of building green, as evidenced at this year's Architect'09 fair where the Association of Siamese Architects under Royal Patronage (ASA) highlighted the importance of environmentally responsible building with its "ASA Green Awards". These awards were presented to nine buildings, ranging from commercial buildings to a Buddhist temple, which included energy efficiency, water conservation and other environmental quality improvement measures in their design. They also presented a wide choice of locally made building materials including products made from recycled agricultural waste and other renewable sources.

Finally one should not overlook the importance of the general public in nurturing green building in Thailand. There is a growing awareness of the importance of protecting the natural environment amongst the younger and more progressive elements of Thai society, and it is these green consumers of the future that will truly create and sustain the demand for green buildings and products.