

Greening the Philippines

Text by Liza Morales-Crespo, a registered architect in the Philippines and New York state and a LEED accredited professional.

The recent calamities that have struck the Philippines brought the realities of global warming closer to home. We have begun to realise that the need to take care of the environment is a lot more urgent than what most people think. The need to reduce the country's carbon footprint: either by looking for alternative sources of energy or reduction of carbon dioxide emissions is critical together with the use of sustainable local materials.

Aside from the environmental benefits of switching to sustainable alternatives, the decision to go green also has serious economic implications on various industries as companies are looking for ways to reduce their operational expenses. The reality is that the Philippines is included in the list of countries with the highest electricity rates in the Asia Pacific region ironic, considering that the Philippines is considered a developing economy.

Fortunately, the Philippines is rich in natural resources with mild temperature swings throughout the year making it a good candidate for alternative sources of energy: hydropower, geothermal, wind and solar. Solar seems to be an extremely viable alternative as sunlight is available for most parts of the year.



Liza Morales-Crespo

About the author

Liza Morales-Crespo is a registered architect in the Philippines and New York state and is a LEED accredited professional. Her Manila based design firm, Liza Crespo Ecotecture, works on projects of varying scales from retail developments, residences, office buildings, to masterplan developments with a focus on sustainability. Liza can be contacted at the following e-mail address: liza@lizacrespo.com



Among the features encouraged by the Quezon City Green Building Ordinance is the provision of a green roof as part of the open space requirements.

The Philippine Renewable energy act of 2008 includes provisions for Net metering, which allows households and commercial facilities to receive credit for the surplus they feed into the distribution system. It also provides for Feed in tariffs, which helps accelerate **investment in renewable energy technologies through long-term contracts offered to those producing renewable energy. This policy mechanism works, as it is based on how much it costs to generate each technology.**

People are now looking into the feasibility of going solar in their homes and businesses. When before people were resisting the switch to harnessing the power of the sun due to the high capital investment commonly associated with the technology....they are now slowly embracing this green energy with the use of grid tie systems. This technology generates semi-autonomous electricity through a grid energy storage system. It works by feeding excess capacity back to the local mains electrical grid through links. It is expected that the first grid tie systems to make use of the feed-in tariff scheme will be operational in 2014.

Rating Systems

Buildings in the Philippines seeking certification usually adopt LEED (Leadership in Energy and Environmental Design). A rating system for the design, construction, operation and maintenance of green structures and neighbourhoods, LEED helps both building owners and operators become more environmentally responsible and efficient with resources. The suite of rating systems was developed by the US Green Building Council (USGBC).

There is also **Building for Ecologically Responsive Design Excellence (BERDE)**, the rating system which adapts international standards and criteria to the local setting.

Certification with these two rating systems is optional for building owners, slowly however, more and more cities within the Philippines are adopting an environment friendly stand with regard to the construction of new buildings. Cities, like Quezon City within Metro Manila, are offering incentives such as tax rebates as reward for green building certification. Various green features are encouraged to be part of new construction such as: bike racks, green spaces, the use of renewable energy sources for power generation and other sustainable elements.

Challenges

Among the many challenges the country has to deal with, with regard to becoming more sustainable, is that there is no certification system in place to rate products based on their impact to the environment. Unlike in Europe where certification systems such as EcoLabel are in place, there is no such thing in the Philippines, which often lead consumers to fall prey to greenwashing, wherein products are deceptively promoted as environmentally friendly without any actual standards to adhere to.

Another stumbling block is that there is this wide misconception that building green is always more costly than a conventional building. What property owners need to realise is that this is not always true, as the adoption of more passive techniques in building design can ensure a sustainable building and a financially sound one as well.

Conclusion

Despite it being a necessity in a country that is constantly plagued with the effects of global warming, sustainable building is still in its infancy in the Philippines. With the influx of donations and foreign aid after the recent calamity, there is a renewed interest in creating better buildings and infrastructure throughout the country. There is a need to incorporate green features as a requirement for new



The Public Safety Savings and Loan Association Inc. headquarters along EDSA incorporates a 12 storey high green wall, among the tallest in the region. Meant to help reduce the carbon dioxide emissions generated by vehicles along a busy thoroughfare, it uses recycled rainwater for irrigation.



An interior atrium provides natural daylight for all the office spaces.

construction to help mitigate the effects of global warming. With the help of recent policy changes in the local level as well as the national level, there is hope that the Philippines can become a model of sustainability, rising from the ashes.