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Need to tackle building sector

ALMOST no country in the world can hope to achieve carbon dioxide-reduction targets without including the building sector into their plan of action, declared a United Nations Environment Programme (UNEP) expert, Dr Arab Hoballah.

Hoballah, who heads the Sustainable Consumption and Production Branch of UNEP, delivered this sobering assessment at the International Green Buildings Conference 2009, the anchor event of the Singapore Green Building Week held in the last week of October.

What he says makes sense once we consider these figures from UNEP and OECD (Organisation for Economic Cooperation And Development): the built environment accounts for 25 to 40% of total energy use worldwide, 30 to 40% of solid waste generation, and 30 to 40% of greenhouse gas emissions.

Other estimates point out that if the energy consumed in manufacturing the steel, cement, aluminium and glass used in building construction is included, the amount of energy consumed can easily exceed 50%.

Speaking against the backdrop of the conference theme of *Build Green: The Future Is Now*, Hoballah bemoaned that not many governments, corporations or institution realise the immense role of buildings in stemming carbon dioxide emissions. "There are just so many low-hanging fruits for picking just by the implementation of simple measures, especially in the retrofitting of existing buildings," he said.

However, harvesting the so-called low-hanging fruits still requires critical thought, and the need to be wary of populist measures like asking people to change light bulbs.

Maria Atkinson, Lend Lease Corp's head for sustainability, cautioned against reliance on measures like white certificates.

"Handing out (energy efficient) light bulbs is not the solution. These measures hardly make a dent, and there is no guarantee that the bulbs that are given out are even installed," said Atkinson, who is founding CEO of the Green Building Council of Australia.

A strong advocate for incentives to drive emission-reduction in the building sector, she said the building sector was quite often ignored by policymakers when they attempt to find solutions to curb emissions. "Governments need to know the emission from each building on each street, and this can already be done."

A huge part of the problem, according to the UNEP-Sustainable Building and Climate Initiative (UNEP-SBCI), is that no common measurement or baseline has been developed that enables different parties to measure the contribution and role of different buildings in different climatic conditions.

As it is, there is no universal agreement on what constitutes a sustainable building, though SBCI's Think Tank on Global Benchmarks, composed of leading building experts from around the globe, is leading an open process to develop a globally accepted system to define sustainable buildings.

This lack of awareness about the possibilities offered by sustainable construction methods can mean a lot of frustration for the early adopters, especially those wanting to retrofit sizable buildings to be more efficient.

Obtaining financing can be a barrier, as financial institutions are unfamiliar with the tradeoffs and paybacks.

While speakers at the conference roundly acknowledged that change was taking place, they asserted that the pace was way too slow.

A pressing problem is the low rate of replacement or retrofitting of inefficient buildings all over the world.

Market and policy failures, as well as behavioural resistance, stand in the way of achieving the significant progress that the world so urgently needs.

Prominent Malaysian architect, Raja Datuk Kamarul Bahrin Shah, urged for governments to lead the way.

“These matters cannot be entirely left to the discretion of the private sector. The government has to step in with the right carrots and sticks to guide things towards the right direction. In this regard, the Singapore government has taken many positive steps. Malaysia should adopt this approach closely.

“It is no longer time for just making policy announcements, but to deliver the long-awaited follow-through in the implementation. Guidelines have already been there for a long time. What is needed is political will to make things happen,” he said.