

Designing houses for a wider market

BY E JACQUI CHAN

Recently, we met a mother of two young lawyers who lamented that even with the decent salaries her children are earning, it is still impossible for them to buy a house in the Klang Valley. "I bought my first house when I was 30 years old and I was only a saleswoman," she said.

Indeed, with the rising cost of living and increasing property prices, housing — in particular affordable housing — has become a pressing issue. For a long time, affordable housing was perceived as inferior in quality and reserved for the poor.

It is a mindset that Lafarge Malaysia Bhd and Malaysian Institute of Architects (PAM) aim to change with their joint PAM-Lafarge Architecture Student Competition 2013 in Designing Affordable Housing.

"The ultimate objective is to change the mindset of what affordable housing is, and promote construction efficiency and sustainability," says Chan Seong Aun, president of PAM.

The competition is open to all PAM student members. Entries will be evaluated based on design, innovation, communal living qualities, incorporation of passive designs, green technologies and sustainable elements, costing, and universal values. The competition was launched on Sept 26 and the deadline for submissions is Nov 29.

The competition is a first for Lafarge, currently the largest cement producer in Malaysia. Its core business include the manufacturing and sale of cement, ready-mixed concrete and other related building materials. The company is celebrating its 60th anniversary in Malaysia this year and has launched a new corporate branding, "Building Better Cities".

"We want to be able to contribute towards how society grows and develops. We have a responsibility in the products that we produce," says Bradley Mulrone, CEO of Lafarge.

Its new corporate branding, adds Mulrone, reflects the company's contribution to building more housing and cities that are more compact, durable, beautiful and connected in a sustainable manner.

The competition is focused on architecture students. As Mulrone points out, these students will help shape the future landscape of Malaysia.

"Everyone talks about affordable housing and its challenges but not many people are working on not compromising on the standard and quality of affordable housing. We want to help young aspiring Malaysian architects contribute to Malaysia going forward.

"The idea was to find an organisation that we can work with to get the students to think about real challenges the country faces. For us, affordable housing is one key challenge. We believe with PAM, we can inspire them to try and think about this issue and what needs to happen to make it a reality. Everyone has the



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right to live in a decent home, but with escalating property prices, it is becoming increasingly difficult," shares Mulrone.

The complexity of affordable housing

Affordable housing is not an issue exclusive to Malaysia, and it is a challenge for governments in every country, says Mulrone.

"I think affordable housing still has a bit of a negative connotation — people tend to think of it as low-quality housing. We have to change the way we think about affordable housing, including developers and the government. We have to learn to be smarter about the way we build affordable houses in terms of design and construction, and let people see that it can be good quality sustainable homes," he adds.

To Chan, changing mindsets is a process that is easier said than done. Keeping prices of houses affordable depends on three key broad areas, he opines.

"Financing, market forces and building cost. Market forces here is supply and demand for housing, and cost and price are two different things. A common factor across all three areas is government policies. The gov-



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ernment plays a big role in the cost of housing. The situation is more complex than most think."

Chan feels that cross-subsidies and the low-cost housing quota in the national housing policy need to be re-examined as they are no longer viable.

At present, housing developments exceeding five acres have to allocate at least 30% of their houses as low-cost units. Some states have different quotas. In Selangor, the state government has a 20% low-cost, 20% low-medium-cost and 10% medium-cost quota for residential developments exceeding 10 acres in the Klang Valley.

Chan says developers have to cross-subsidise the cost of building low-cost housing via the sale of higher-cost units. The selling prices of low-cost units are fixed by the local authorities.

"Policies must be economically viable. Why would anyone venture into a project if they end up losing money? Personally, I think the best way to lower the cost is to have a policy that encourages the construction of affordable housing. Cross-subsidy is getting more difficult because the cost of construction and land have gone up. I think stakeholders have to work together to create one national policy



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for affordable housing and work towards the goal," says Chan.

He notes that the only area architects can have a major influence is in the building cost, which is reflected as one of the criteria in the competition.

"This is where we can look at the efficiency of planning and explore innovative ideas, as well as how to deliver better value. Quality is crucial. The moment architects let quality slip, the whole project can go down the drain," says Chan.

Mohd Zulhemlee An, PAM vice-president and chairman of PAM Education Committee, concurs: "As architects, we cannot allow low-quality and aesthetically unappealing housing, no matter the category. If we're designing low-cost housing, it has to be done right because it will be someone's home."

Zulhemlee categorises affordable homes as those between RM80,000 and RM150,000.

"Recent graduates earn between RM2,500 and RM3,000 per month. But if you look at the current house prices, it's very difficult to find decent houses in that price range," he says.

The demand for housing in general is there, opines Chan.

"If you look at the population

and housing ratio, we stand at one house to every five or six persons. In developed countries such as Australia and the UK, the ratio is one house to two persons. So the demand is definitely there, and will increase as more people move to the cities. In cities, we have to look at high-rises because land is limited and expensive. This is where we need innovative ideas."

Thinking out of the box

Lafarge, which has a dedicated research and development team of 200 globally, is constantly working on the next generation of its products, and creating prototypes. Mulrone expects to see this kind of innovative quality in the entries. While the goal is to create awareness and education, he doesn't rule out using the winning design to build a house.

"We are putting in place a construction lab where we will experiment with different systems. Our engineers will look at the winning design and stimulate the construction and look at the cost element. If it's a really effective design, we will run with it.

"The challenge to the students is to think out of the box and create an affordable house that doesn't compromise on quality and aesthetics. They need to think about the speed of construction, the way it is constructed, and the right materials and solutions," says Mulrone.

Zulhemlee feels that architects in general should move out of their comfort zones and explore new ideas.

"How is it that in developed countries, people are able to live in smaller spaces but here, we think big? Let's look at flexible spaces. In the old days, the Malay kampung houses were small but very flexible. The area used for breakfast in the morning was later partitioned in the evening for sleeping. This is just one thing we can look at. The other areas are the materials and systems. We are so used to labour-intensive construction whereas in developed countries, industry players have moved on to more efficient systems and better materials that help reduce the cost," shares Zulhemlee.

He supports the use of the industrialised building system (IBS), which he believes is especially ideal for affordable housing as it can save time and cost, while still maintaining quality.

"With IBS, the construction time is shortened, which leads to lower cost, and the quality is better. But the problem is currently, there are no economies of scale because we don't have the quantity. This makes IBS expensive. So the challenge is convincing our clients to spend more on a system that's supposed to save time and money. But if more developers use IBS, then the cost will go down and construction cost will follow."

New innovative ideas are becoming more and more important, says Chan.

"Conditions are changing — we have less capital, less land and more people needing housing. The challenge is getting bigger. We need to approach it in a different way. We have to do more with less, that's how we move forward," he says.



Building cost is one of the criteria in the competition