

Green Buildings and the Role of Government

By investing in better technology, better design, better construction and better management, developers and building owners can create benefits for the community with a reduction in air pollution, reduction in heating, water consumption, among others. For this reason we want mandatory rules. Developers want mandatory rules too to maintain a level playing field.

Beyond the role of government, the government must set an example.

Public housing makes up 50% of the housing stock in Hong Kong and another 500,000sq.m. of public housing will be built in Kai Tak.

Right outside these public housing estates is Hong Kong's first district cooling system (DCS) – a HK\$2 billion dollar titanium pipe paid for by the public (current estimates are HK\$1.2bln but cost overruns are likely).

Hooking up these 35,000 people in 19,000 flats to the district cooling would save 30% in their electricity. The accumulated benefits means an annual saving of 25 million kilowatt per annum, or reducing 17,500m tonnes of carbon dioxide, 90 ton of Nox and 100 ton of SO2 emissions.

Housing Authority will have to make a small up front investment to install a simple internal distribution system for the cooling liquid, install condensers in each unit and a control box so that the tenants only pay for what they use. And then they need to administrate the billing as part of the rent.

Simple stuff. Singapore has done it, Hong Kong can do it.

If not, then how can Government make 'green buildings' features mandatory for others, without themselves setting the example by implementing the hard work required to realize green benefits for Hong Kong?

In Kai Tak there is another benefit. The community will invest up front in the DCS. By 2012 only 7% capacity will be used, by 2016 only 50% will be used – by primarily DAY TIME, non-domestic users. The marginal cost of adding the housing units is almost nil, because most of the investment is paid for upfront and the domestic users will primarily use the night time capacity.

By setting an example and amend the design of public housing on Kai Tak, Hong Kong will save electricity, reduce air pollution and make better use of its expensive DCS. In the long run, it will save money for the developer and tenants of the housing estates.

Verbal presentation to the Joint Meeting of the Panel on Environmental Affairs and the Panel on Development of the Legislative Council on 14 December 2009 by Paul Zimmerman, Chief Executive Officer, Designing Hong Kong Limited