

## **Green Buildings**

Civic Party believes that Hong Kong's future is dependent how we strike the right balance between sustainable urban development to keep for our economy competitive, and concurrently contemplate their environmental impact on our health, well-being and living quality.

Our buildings constitute 90% of our electricity energy consumption, we need to pass legislation to ensure they consume energy efficiently, and lower our city's carbon foot-print.

Only 25% of Hong Kong's overall 1,100 hectares land mass is suitable for development, resulting in our infamous 'vertical city' phenomena. While this has led to the development of highly efficient mass transportation systems and infrastructural developments, and our famously dynamic and varied urban scenery, there is a limit. As a result of our 'vertical city' development, we are now suffocated by 'over-congestion', 'urban canyon heat pockets' and 'walled building effects'. As our global climate gets warmer, urban temperature will continue to climb, resulting in the use of more air conditioning, further aggravating our unventilated heat pockets, and increasing our energy demand, feeding a close-looped cycle damaging our living quality.

We believe it is now high time to review our policies on requirement for green building features, and fundamentally review the government's Green Building Features Concessionary Schemes. The following are our recommendations;-

A. Controlling Urban Development Density

- The government should continue to utilize our established mechanisms, e.g. 'Outline Zoning Plans', 'Land Lease Conditions' and 'Building Ordinances' to control development densities, and lower urban development densities.
- 2. The government should implement a **'City-Wide Development Blueprint'** plan to stipulate 'breathing' gap spaces between each building within the same or on different plots;
  - a. Require large developments with site areas larger than 2 hectares, to incorporate a 60m wide gap between individual towers.
  - b. Require mandatory setbacks for lots on narrow streets (less than 15m) in width.
  - c. Where feasible, stipulate spacing requirements between buildings between neighboring lots.



## B. Green Building Features Concessionary Schemes

- We believe it is not feasible in practice to apply an 'across the board' cut on all concessionary GFA schemes for all 'green building features'. For example, Parking Spaces or amenity features e.g. Telecommunications and Broadcast Rooms, Refuse Collection Rooms, Loading and Unloading areas, Public Lobbies, Internal Drainage and Plumbing Rooms ...etc, are fundamentally less profitable for the developer than individual residential units. In practice, by withdrawing concessionary schemes for these areas, developers will allocate minimum spaces for these features, limiting design flexibilities in improving building designs, compromising the living quality for new developments, and sacrificing the health and well being of occupants.
- 2. To control building sizes and masses, the government should look into lowering the 'Car Parking Requirement' stipulated in 'Land Lease Conditions' by reviewing the 'Hong Kong Standards Planning Guidelines'. Areas well served by public transportation and MTR should have less 'car parking spaces'.
- 3. Through reviewing the 'Outline Zoning Plan', the government should require underground parking for large residential and commercial developments.
- 4. We believe the following amendments should be applied to concessionary GFA schemes;
  - i. Except sky gardens, covered walkways, podium gardens, all other green features should be capped depending on the total developable GFA.
  - Concessionary grant for GFA for working platforms and balconies for each internal unit to be reduced by 50% of what was previously allowed. The combined area to be no larger than 2% of the gross internal floor area of the said unit.
  - iii. Reduce the concessionary GFA for pre-fabricated external wall systems from the previously allowed 300mm to 150mm.
  - iv. Cancel all concessionary GFA for mail delivery rooms.
  - v. No concessionary GFA be granted to any public lift lobbies or corridors unless natural ventilations, natural lighting and open views of a certain percentage are provided.
  - vi. For clubhouse amenities, depending on the size of gross residential floor area, we recommend a sliding scale for concessionary GFA to be adopted. For example, if the gross residential floor area is more than 100,000 sq meters, a cap of 3% concessionary GFA would be granted. The size of the concessionary floor area should be increased on a sliding scale for smaller lots,



with an upper cap of 5% grant for developments with a gross residential floor area with more than 50,000 sq meters.

- vii. Cancel all concessionary GFA for multiple level mail delivery areas.
- viii. Concessionary GFA for guard houses/areas and other related amenities for guards should be kept.
- ix. Green features such as solar canopies, sound barriers, solar panels, electricity generating wind turbines and other green technologies which helps lower building energy consumption, and improve urban ventilations should be encouraged through concessionary GFA schemes, as long as such these features do not contribute to excessive additional building bulk size.
- x. Allow more flexible interpretation of double height spaces for public areas to encourage creative design solutions which could allow better natural ventilation and natural lighting.
- xi. A cap to be applied for bay windows depending on the size of the overall building size. The larger the building's size or developable GFA, smaller bay window sizes would be granted.

## C. Building Energy Efficiencies and Consumption

- 1. The government and legislature should pass laws requiring a maximum cap on energy consumption and a minimum requirement on energy efficiency in proportion to the scale of the development. Larger developments requiring a higher energy efficiency rate, while smaller developments requiring less.
- 2. Energy consumption reduction and green electric generation technologies should be encouraged in new building designs. Concessions in the form of GFA and reduced property taxes should be awarded to developments and building owners, for adopting new technologies proven to reduce energy consumption and ensured continued maintenance and upgrading.

## D. Legislating for Green Building Designs

While we do not believe in a total cut on all green building features concessionary schemes, we would not oppose to the government in studying the feasibility and proposing legislations to stipulate **'certain'** green features as mandatory requirements.

In theory, legislating for green building design is a strong and bold move towards making our city greener. But in practice, the implementation needs to be considered carefully, as building design in practice is fundamentally laid-in with many variables. Universal applications should only be applied to laws which affect our health, well being



and safety. It should be recognized that 'good' and 'creative' architectural designs cannot be legislated. Professionals in HK have complained for years, that Hong Kong's stale design environment is due to the complex legal framework and dead-pan interpretation behind building practices. More laws could potentially aggravate the situation. The following outlines some of our concerns when considering legislations;

- 1. We do not believe 'good' architectural designs can be legislated. As a city of high rises, we are well known for our building industries' professionalism and efficiencies, but we are relatively weak when it comes to 'ingenious' and 'creative' designs for our public spaces and building designs. By passing complicated legislations to an already complex building regulation framework, the problem could be aggravated, especially in an environment already principally driven by market interests. We need 'broad' legislations which would;
  - a. Encourage green building features be widely considered in the act of building, without stifling innovation and creativity.
  - b. To protect and widen opportunities for greater creativity and ingenuity in architectural and green building design.
- 2. A problem also stems from the inability for inter-governmental departments communications to happen effectively. Currently, although civil servants operate with great efficiency, they tend to vet building designs mechanically according to guidelines and laws, 'often practicing with neither a flexible sense of interpretation nor good judgment'. We need to give them more room for interpretation and responsibility, and a set up which would encourage cooperation among architects and urban planners to arrive in good and sound design solutions. Passing narrowly defined laws would stifle room for interpretation. If legislation is to be considered, they should be in broad terms, and leave room for vetting officials to interpret, and work with professionals to arrive with good solutions, not to discourage innovation. If the 'Metro Harborview' saga taught us anything, it is that good judgment is more valuable than stringent rules.
- 3. Lastly, it is important to recognize that most green building features cannot be universally applied. In building design, fundamental site and environmental variables vary hugely. The act of building design requires flexibility. Laws drawn up for green features need to account and anticipate for alternatives in case of inapplicability. It is better to have broad legal terms and design guideline for green building designs, with which's purpose is to ensure green ideas are considered and implemented, but allow room for flexible interpretation and implementation. Architects and government officials need to work together, not in opposition against narrowly defined laws.