



Legislative Council
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Public consultation on Green Buildings
Submission of Civic Exchange

Executive Summary

The approach taken in “Building Design to Foster a Quality and Sustainable Living Environment: Invitation for Response Document” (IRD) will not take sustainable development of the built environment or building design in Hong Kong further, not only because the consultation is too narrowly focussed but its framing of the issues are confused, and it also leaves the underlying causes of unsustainable development undisturbed.

The major fault of the document is that it starts and ends with the government’s “existing approaches” and extrapolates from them rather than seek to change them to achieve sustainability.

As the engagement process has been based on the limited issues raised in the IRD Document, the engagement is also flawed and not a good instrument for public education.

The approach taken also does not fulfil the Government’s and the Council for Sustainable Development’s (CSD) own interpretation of what sustainable development means. The document sees definitions as mantras to be repeated but not as operational guidelines to improve both human and environmental well-being.

Introduction

The CSD seeks to use the IRD to start a public engagement process on a narrow range of issues placed within the context of the design of buildings within their own site boundary.¹ This timid and limited approach will not trigger the pace, scale, scope and depth of change that is needed to make development sustainable.

¹ Paragraphs 1.5, 2.6 and 2.7 of the IRD refer to building separation, setback from narrow streets, greenery, building height and bulk (canyon and wall effects of buildings), and energy efficiency.

I: How does the IRD look at ‘sustainable development’?

The Government and CSD use the definition of sustainable development of the World Commission on Environment and Development,² and interpret it for Hong Kong to mean:

- Finding ways to increase prosperity and improve the quality of life while reducing overall pollution and waste; and
- Meeting the needs and aspirations of the current generation without doing damage to the prospects of future generations.³

The IRD also places the operation of the definition within the context of the Government’s desire to build Hong Kong into a “world-class city”⁴ with “a quality and sustainable built environment that is well balanced for the needs of the present and the future from the economic, social and environmental perspectives”.⁵ In relation to the built environment, the IRD essentially repeats the same definition like a mantra that a ‘sustainable built environment’ is one that “is well balanced for the needs of the present and the future from the economic, social and environmental perspectives”.⁶

The document does not provide a definition of what is a sustainable building, however. This is presumably because the consultation’s primary focus seeks to deal with building separation, setbacks from narrow streets, building height and bulk, and greenery and amenities provision, as a response to public complaints in recent years with the advent of a new generation of extremely tall and bulky buildings, many of which are stacked on large podiums. In other words, this document’s purpose is not about sustainable buildings. If it were, its ambit would have to be much wider.

The problems noted in the preceding paragraph arose from policy changes in 2001 and 2002 to give property developers GFA concessions in return for better amenities and environmental features in buildings.⁷ A question must be raised as to whether those changes resulted in sustainable buildings, which in turn enhanced Hong Kong’s built environment overall. In fact, the tall and bulky buildings on podiums are not only perceived to be environmentally unsustainable but also seen by the public as

² Our Common Future (1987): “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

³ The Chief Executive’s Policy Address 1999. There is a third leg that relates to the South China region that is less relevant for the purpose of this consultation.

⁴ Ibid and paragraph 3.1.2 of the IRD.

⁵ IRD, paragraph 3.1.2.

⁶ Ibid, page 12.

⁷ Ibid, paragraph 4.3, pp. 18-27.

evidence of “collusion” between property developers and the Government because while there may be more amenities for residents and profit for developers, the siting (often by waterfronts) and size of the structures do not serve the wider public interest.

Those supposedly green and innovative features covered under revised Practice Notes issued in 2001 and 2002 are limited when one takes into account what sustainable buildings should be.⁸ A sustainable building is one that increases the efficiency of resource use for energy, water and materials while reducing impacts on human and ecological health during the building’s lifecycle, through better siting, design, construction, operation, maintenance, and ultimate decommissioning.⁹ The reason given for the document taking a very narrow approach is that it would be “too substantial, complex and simply impractical” to do more.¹⁰ Yet, it is impossible to have a ‘sustainable built environment’ if the buildings are unsustainable. The document also makes no distinction between new development areas and existing areas. The IRD suffers from flipping back-and-forth from talking about building design, building features and the built environment but fails to link them to a trees-with-forest perspective.¹¹ Perhaps this is inevitable because of the limited focus and the absence of any discussion that would educate the public about the underlying causes of unsustainable development.

II: How does the IRD approach achieving ‘balance’?

The CSD sees achieving “balance” as a matter of “trade offs”¹² and that these are seen essentially within the current framework of government policies, legislation, guidelines and practices concerning the built environment and buildings.¹³ By not questioning the current framework and approaches, the IRD in effect accepts them as the foundation of the way forward.¹⁴ Here lies the fundamental problem of the whole

⁸ Ibid, paragraph 4.3.6 and the Box on page 23 entitled ‘Green and Innovative Features Covered by Joint Practice Notes 1 & 2’.

⁹ The elements here are typical of the many definitions there are for green buildings, see for example, Anne B Frej, *Green Office Buildings: A Practical Guide to Development*, Urban Land Institute, 2005, pp. 4-8.

¹⁰ IRD, paragraph 3.1.4.

¹¹ In Part 6 of the IRD, in raising questions on characteristics that define a quality and sustainable built environment, the questions flips between building features and built environment.

¹² IRD, paragraph 2.7.

¹³ Ibid, paragraph 4.3.2, and in particular reference is made to the Building Ordinance, Practice Notes for Authorized Persons and Registered Structural Engineers and Joint Practice Notes, and the regulatory regime and policies relating to energy efficiency.

¹⁴ The authors of the IRD may turn to bits here and there to defend the document. They may also point to the Questions in Section 6 to argue the questions allow people to respond broadly. The problem with the document is that it is framed in a way that it does not major changes to the relevant policies and legislation. It envisages adjustments to administrative practices mainly, which is insufficient to drive the scale and pace of change that is necessary to achieve sustainable development.

consultation exercise, which can be illustrated by looking at how the document discusses the balancing of the economic, social and environmental perspectives.

On the economic front, the IRD states that better building design will affect affordability in owning or renting property, implying that a sustainable built environment would cost much more than what is being built today. Had the document addressed the issue of what is a sustainable building (see above), it would address buildings that are designed with sustainability in mind could well be at a similar cost (or even cheaper) to build because they should be designed using the least resources to produce the highest post-construction performance outcomes without having to sacrifice on design. The Construction Industry Institute believes it is a “fallacy common to many uninformed developers” that green buildings cost a lot more to erect, contributing to an unsustainable built environment.¹⁵ Moreover, that a sustainable building should be cheaper to maintain and manage in the long-term needs to be stated upfront.¹⁶

On the social front, the sustainability assessments are made from the perspective of provision of recreational facilities for residents of buildings and the immediate neighbourhood through creating more space by means of building separation and setbacks and adding greenery.¹⁷ It is seen from this perspective because that is the picture from “existing approaches”.¹⁸ This is an acknowledgement that the policy changes to date are only focussed on those aspects. Within the narrow construct of the consultation, broader social issues of town planning and mobility, as well as regeneration in some areas of Hong Kong are not discussed. The document accepts the benefit to the broader community derived from the current approaches “is limited”¹⁹ but is prepared to leave the problem unaddressed.

On the environmental front, the IRD acknowledges existing approaches have led to negative impacts on the environment, and in particular poor air circulation and air quality, as street canyons and the wall effect prevent dispersal of pollution from diesel-powered road transport, especially buses and trucks, as well as increase the urban heat island effect.²⁰ In assessing the benefits of greenery, the document envisages the increased use of fertilizers, pesticides and other chemicals but does not

¹⁵ Construction Industry Institute, statement from the Executive Board, *Research Summary: Green Building: Costs and Financial Benefits of Undertaking Green Building Assessments*, 2008.

¹⁶ IRD, paragraph 3.1.6 and page 48. It isn't till the end of the document on page 48 that there is acknowledgement green features in a building may lower operating costs.

¹⁷ Ibid, paragraph 3.1.7 and Table 2 on pg. 32, Table 3 on pg. 34, and Table 4 on pg. 36.

¹⁸ Ibid, paragraph 4.4.1.

¹⁹ Ibid, paragraph 4.4.3.

²⁰ Ibid, paragraph 3.1.8 and Tables 2, 3 and 4.

discuss whether and how sustainable landscaping can be implemented²¹ or how to extend nature back into urban life.²² This is a surprising omission since greenery is a major part of the consultation. Perhaps this illustrates the vision of the document is very much based on how things are visualised and done today rather than a vision of what may be a much improved and highly sustainable practice.

III: Energy efficiency and buildings?

The IRD rightly points out the importance of achieving energy efficiency for buildings. The document notes the Government will finally legislate to mandate minimum legal standards for building energy efficiency performance, and that it has also recently put forward carbon audit guidelines.²³ It appears the document is being used as a convenient way to collect public views on the upcoming legislation, especially what features should become mandatory where no GFA concessions would be given.²⁴

As currently framed, the document remains within the constraints of Hong Kong's current approach, evidenced by the three questions posed on page 48.²⁵ Focussing on those three areas will not produce sustainable buildings with high energy efficiency because too many things are left out of consideration. To give this very important topic its rightful consideration, there must first be a vision that drives the definition for sustainable buildings that the Government wishes to adopt and implement. That definition should encompass the elements noted in Part I above. The Government should articulate the business case for Hong Kong to build, retrofit and operate high performance buildings that drives a new set of building and energy codes with legislative backing.

IV: How might achieving greater sustainability impact government revenue?

The IRD emphasizes that a sustainable built environment would reduce government revenue from land sales, land premium and property taxes. This implies that for Hong Kong to enjoy a less densely built-up environment, the government would not be able

²¹ Sustainable landscaping is about planting the right plants in the right places that prevents pollution, recycle green waste, minimize runoff, provide cooling and takes ecological value into account.

²² Innovative ideas would consider weaving together stream/water/harbor management and habitat protection/restoration as part of creating sustainable built environments.

²³ IRD, paragraphs 4.3.12 and 4.3.13.

²⁴ Ibid, paragraph 5.5.4 and page 48.

²⁵ The three questions relate to (a) what energy efficient design features should be encouraged; (b) how they should be promoted; and (c) should GFA concessions include energy efficiency or renewable energy features.

to squeeze maximum value from land.²⁶ This is another example of the mindset of the current approach, where the Government's maximisation of land value is an essential economic consideration.

Moreover, the fact that land-related revenues go to the Capital Works Reserve Fund, which is used almost exclusively for physical infrastructure projects is not mentioned. This arrangement tends to promote overbuilding of hardware although there is widespread misunderstanding, even among professionals, that land revenues do not go into general revenue and thus cannot be used for all types of public expenditure.

It is hard to see how the single statement: "Land premium may be adjusted to reflect reduced value of developable space"²⁷ without a discussion of land revenues, how they are being used and what financial and non-financial public benefits can be derived if the system is changed can lead to meaningful deliberation of the subject.

V: What should be done to achieve sustainable development?

As noted in Part I, the HKSAR Government and CSD interpret sustainable development for Hong Kong to mean "finding ways to increase prosperity and improve the quality of life while reducing overall pollution and waste; and meeting the needs and aspirations of the current generation without doing damage to the prospects of future generations". The IRD recognises that in realizing sustainable development, a change of mindset is needed to bring about the full integration of the needs for economic and social development with the need to conserve the environment²⁸ but that has not in fact been done in the document. The document cannot change mindsets because it starts and ends from the present. Thus, even Approach III, which the document sees as representing "major change" is in fact quite minor.²⁹

The CSD accepts the need to conduct inclusive and transparent processes to engage stakeholders in dialogue to realize sustainable development. However, by starting from the present, the view of the future remains constrained, which in turn puts public engagement within the confines of the present. Elaborate engagement processes cannot cure the fundamental faulty approach of the document.

²⁶ IRD, paragraph 3.1.8.

²⁷ Ibid, paragraph 5.5.6.

²⁸ CSD website.

²⁹ IRD, paragraph 5.5.5.

On the point of transparency, the document does not even seek to increase the transparency of the current system, in particular in the non-transparent exercise of the discretionary power for the Director of Buildings to grant GFA and site coverage concessions.³⁰

The CSD should state its intention is to promote a sustainable built environment where the trees-and-forests are considered together using sustainability principles so that economic returns could be improve, environmental impacts reduced, and improve community benefits and amenities extended.

³⁰ Ibid, paragraph 4.3.4.