

South Korea's Green Building Policies

SONG Yongchan
Deputy Director-General,
Housing and Urban Affairs Bureau,
Ministry of Construction
and Transportation,
KOREA

Background and Purpose

Economic development had been pursued in Korea with little regard for the environment throughout most of the last 40 years. The adverse consequences have increasingly become apparent, and awareness of the need for environmental protection has been rising in Korea and throughout the world. The international consensus is that development and environmental protection go hand-in-hand, that one cannot be pursued without the other.

Concrete global action plans that address both have already been developed. Following the adoption of the 1992 Climate Convention, the international community recently agreed on rules for enforcing the 1997 Kyoto Protocol in Marrakech, Morocco, taking a meaningful step toward requiring steep reductions in global emissions of carbon dioxide and other greenhouse gases. Korea, classified as a developing country, has been exempted from mandatory emissions targets for the time being. Because it is an OECD member country, however, it will face binding emission limits over the long term. The Korean government has, therefore, been preparing a comprehensive action program on the general level, while developing and implementing specific environment-friendly policies at the department level. One of Korea's initiatives is its green building certification system (Green Building Certification System; GBCS). This system is now being formulated based on the prior experience of the Ministry of Construction and Transportation (MOCT) and the Ministry of Environment (MOE). The green building certification system is an integration of the MOCT's pilot certification program of best construction practices (KOEAM2000) and the MOE's pilot certification program for green buildings.

The green building certification program is intended to 1) reduce the environmental impacts of buildings by incorporating green building principles and practices into every aspect of a

buildings life-cycle, from design and construction to use and maintenance, and 2) to provide comfortable living and working environments for occupants and visitors. In addition to making Korean real estate more environment-friendly, the green building certification program is expected to raise awareness of the importance of the natural environment, encourage the development and use of environment-friendly technologies, and promote environmental research.

Fifteen developed countries, including Canada, the United States and Switzerland, have already implemented green building certification programs. Several countries such as Finland, France, and Denmark intend to have such programs in place in the near future. Korea has been working on its own green building certification system since 1999, the implementation plan of which was finalized in early December 2001 with input from the MOCT, MOE, and numerous experts from research institutions, the academic community, and industry. The government decided on the certification agency in January, 2002, and the green building certification system shall become operable this year.

I would now like to give you a brief overview of the implementation procedures of the certification system.

GBCS Implementation Plan

It was fully understood throughout the formulation process that the green building certification program must be objective, realistic, and technically sound if it were to be viable. For these reasons, the MOCT and the MOE shall jointly manage the certification program. They shall be responsible for monitoring compliance and making major changes such as the establishment and revision of certification criteria. The original set of criteria was determined through deliberation by the GBCS steering committee, consisting of experts from relevant fields. Furthermore, the MOCT and MOE shall jointly make public notice of the Green Building Guidelines for Implementation, which lay out the certification procedures and other major aspects of implementation. Certification shall be handled by a certification body, jointly designated by the MOCT and the MOE. This body shall evaluate the environmental soundness of a new building based on the criteria set out in the GBCS guidelines, and it shall award green building certificates for buildings that meet the GBCS environmental criteria.

Certification Method and Process

The implementation of the Korea GBCS certification program shall occur in three phases. The program shall initially apply only to apartment buildings, which were covered by the pilot certification program, and later to buildings that serve dual residential/commercial uses and, finally, to office buildings. The application for the green building certification may be submitted by the building owner or by the building contractor with the consent of the building owner. Certification fees shall range from 10,000 to 20,000 won per living unit. The green building certification shall be awarded only for new and existing buildings; preliminary certifications may be obtained at time of building permit issuance for not-yet-constructed buildings based on evaluation of the construction blueprints.

The evaluation for green building certification shall address land use and transportation; energy efficiency and the load on the environment; site ecology; and indoor environment quality. A total of 44 specific criteria shall be evaluated under these four general headings. Different levels of green building certifications will be awarded depending on the total score earned out of maximum possible 100 points, including 20 bonus points. A score of 85 or higher is required for the best green building certificate, while a score of 65 to 84 points is required for an excellent green building rating. In order to ensure objectivity in the certification process and ease of evaluation, each evaluation criteria have been explained in the clearest possible terms. And in order to help ensure fairness in the certification process, the evaluation results by the certification body shall be validated by at least four outside experts, including members of the GBCS steering committee, before being finalized.

Korea's GBCS has now been officially launched. While incorporating into the GBCS some of the evaluation criteria set out in the Green Building Tools, the international assessment standards, most of the criteria were specified to satisfy the unique needs of Korea. One entire year of research and deliberation went into their preparation. I believe that, in addition to this system, a variety of support measures should be instituted in order to more strongly encourage adoption of green building practices and principles.

It is expected that the level of voluntary application of green building practices will be low in private sector at the initial stage of implementation of the GBCS due to a lack of incentives for certified green buildings. In closing this presentation, I would like to ask you all for suggestions as to how to promote the green building certification system.

Thank you very much.