



Senate
Office of the Secretary

FIFTEENTH CONGRESS OF THE REPUBLIC)
OF THE PHILIPPINES)
First Regular Session)

'10 NOV -3 P 1:49

SENATE
S. No. **2574**

BY:

Introduced by Senator Miriam Defensor Santiago

EXPLANATORY NOTE

The Constitution, Article 2, Section 16 provides:

The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.

Buildings and development have significant environmental impacts on our natural resources. According to surveys conducted in the United States, for example, 107.3 million acres of the 1.983 billion acres of total land area in the U.S. has been developed as of 2002, a figure which represents an increase of 24 percent in developed land over the past 10 years. In terms of energy, buildings accounted for 39.4 percent of total U.S. energy consumption and 67.9 percent of total U.S. electricity consumption in 2002. Building occupants use 12.2 percent of the total water consumed in the U.S. per day. Buildings, and the transportation infrastructure that serves them, replace natural surfaces with impermeable materials, creating runoff that washes pollutants and sediments into surface waters. Urban runoff constitutes a major threat to water resources, as it has been identified as the fourth leading source of impairment in rivers, third in lakes, and second on estuaries. The energy used to heat and power our buildings leads to the consumption of large amounts of energy, mainly from burning fossil fuels – oil, natural gas, and coal – which generate significant amounts of carbon dioxide (CO₂), the most widespread greenhouse gas. Buildings in the U.S. contribute 38.1 percent of the nation's total carbon dioxide emissions.

Reducing the energy use and greenhouse gas emissions produced by buildings is therefore fundamental to the effort to slow the pace of global climate change. Buildings may be associated with the release of greenhouse gases in other ways, for example, construction and

demolition debris that degrades in landfills may generate methane, and the extraction and manufacturing of building materials may also generate greenhouse gas emissions.

Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation, and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. Green building is also known as a sustainable or high performance building.¹

Some practices, such as using local and renewable materials or passive solar design, date back millennia – the Anasazi in the Southwest built entire villages so that all the homes received solar heat in the winter. The contemporary green building movement arose out of the need and desire for more energy efficient and environmentally friendly building practices. The oil price increases of the 1970s spurred significant research and activity to improve energy efficiency and find renewable energy sources. This, combined with the environmental movement of the 1960s and 1970s, led to the earliest experiments with contemporary green building. The United Nations conferences in Rio,² Brazil and Johannesburg,³ South Africa brought the issue of sustainability to the forefront in international circles. Subsequently, the organization has defined goals that buildings should seek to achieve in order to obtain green building recognition. These six goals are: increase in reliability; increase in indoor air quality; decrease in natural resource use; considerable decrease of energy costs over the lifetime of the building; improving comfort due to improved energy efficiency in buildings; and rise of employment as a result of increased activity in energy improvements in buildings.

These benefits will theoretically take care of any type of increase (typically 3-5%) in construction costs, and making improvements will have a direct positive impact upon life cycle costs.⁴ This bill seeks to create the Green Building Commission to draft a new Green Building Code which shall be submitted to Congress within two years from approval of this measure.


MIRIAM DEFENSOR SANTIAGO

¹ <http://www.epa.gov/greenbuilding/pubs/about.htm>

² United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil.

³ World Summit on Sustainable Development (WSSD), Johannesburg, South Africa.

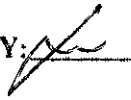
⁴ http://www.eoearth.org/article/Green_Building_Standards



FIFTEENTH CONGRESS OF THE REPUBLIC)
OF THE PHILIPPINES)
First Regular Session)

'10 NOV -3 P1:49

SENATE
S. No. 2574

RECEIVED BY: 

Introduced by Senator Miriam Defensor Santiago

1 AN ACT
2 TO CREATE THE GREEN BUILDING CODE COMMISSION
3 TO DRAFT THE NATIONAL GREEN BUILDING CODE

4 *Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:*

5 SECTION 1. *The Green Building Code Commission.* – The Green Building Code
6 Commission is created to be composed of the following members:

- 7 (a) Secretary of Environment and Natural Resources;
8 (b) Secretary of Energy;
9 (c) Secretary of Science and Technology
10 (d) Two (2) members from the academe who must be licensed engineers by
11 profession;
12 (e) Two (2) members from the construction industry who must be licensed engineers
13 by profession;

14 SECTION 2. *Green building standards inputs.* – In developing green building standards,
15 the Commission in proposing standards shall seek the input of government agencies including,
16 but not limited to, all of the following:

- 17 (a) Department of Public Works and Highways;
18 (b) Department of Environment and Natural Resources;
19 (c) College of Engineering of the University of the Philippines Diliman;
20 (d) National Water Resources Board;
21 (e) Department of Transportation and Communication;
22 (f) Department of Health;

- (g) National Housing Authority;
- (h) National Disaster Coordinating Council;
- (i) Department of Science and Technology;
- (j) Department of Energy.

SECTION 3. *Standards in Drafting the Code.* – The purpose of this code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact, and encouraging sustainable construction practices in the following categories:

- (a) Planning and design;
- (b) Energy efficiency;
- (c) Water efficiency and conservation;
- (d) Material conservation and resource efficiency;
- (e) Environmental quality.

The Commission must ensure that the cost to the public is reasonable, based on the overall benefit to be derived from the building standards. They can also leverage possible incentive mechanisms.

SECTION 4. *Report to Congress.* – Within two (2) years from the approval of this Act, the Commission shall submit its draft Green Building Code to the appropriate Committees in Congress.

SECTION 5. *Separability Clause.* – If any provision or part hereof is held invalid or unconstitutional, the remainder of the law or the provision not otherwise affected shall remain valid and subsisting.

SECTION 6. *Repealing Clause.* – Any law, presidential decree or issuance, executive order, letter of instruction, administrative order, rule or regulation contrary to or inconsistent with, the provisions of this Act is hereby repealed, modified, or amended accordingly.

SECTION 7. *Effectivity Clause.* – This Act shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation.

Approved,