



HOUSE OF REPRESENTATIVES

H. No. 8912

BY REPRESENTATIVES MACAPAGAL-ARROYO, JAVIER, HOFER, GASATAYA, NOEL, NAVA, DIMAPORO (M.K.), ZUBIRI, GARCIA (G.), VIOLAGO, DALIPE, OLIVAREZ, ROCAMORA, NIETO, RODRIGUEZ (M.), TAMBUNTING, SALCEDA, VILLARICA, GONZALES (A.P.), SAMBAR, ROBES, TAN (A.), RAMIREZ-SATO, MANALO, AMANTE, VELOSO, MARINO, SANDOVAL, DUAVIT, GO (M.), AGGABAO, UY (J.), KHO, SAVELLANO, TEJADA, PINEDA, AMATONG, LANETE, UYBARRETA, LOBREGAT, VILLANUEVA, COJUANGCO, NUÑEZ-MALANYAON, AQUINO-MAGSAYSAY, CALIXTO-RUBIANO, SY-ALVARADO, YAP (V.), NOGRALES (K.A.), ZAMORA (M.C.) AND ANDAYA, PER COMMITTEE REPORT NO. 1114

AN ACT AUTHORIZING HIGHER EDUCATION CURRICULUM DEVELOPMENT AND GRADUATE TRAINING IN ADVANCED ENERGY AND GREEN BUILDING TECHNOLOGIES, AND APPROPRIATING FUNDS THEREFOR

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

1 SECTION 1. *Short Title.* – This Act shall be known as the
2 “Advanced Energy and Green Building Technologies Curriculum
3 Act”.

4 SEC. 2. *Declaration of Policy.* – It is hereby declared the
5 policy of the State to give priority to education, science and

1 technology, and other similar fields, as well as to support the
2 country's educational institutions in their efforts at initiating and
3 implementing curriculum development activities that will lead to
4 socioeconomic progress and technological advancement.

5 Towards this end, the State shall endeavor to provide
6 assistance to higher education institutions (HEIs) in preparing the
7 next wave of design and construction professionals, as well as the
8 existing pool of architects, engineers, landscape engineers,
9 landscape architects, and planners all over the country, to become
10 adept in the incorporation of advanced energy and green building
11 technologies in the design and construction of green or high
12 performance buildings.

13 SEC. 3. *Definition of Terms.* – As used in this Act:

14 (a) *Advanced energy* refers to the technologies and services,
15 both emerging and established, which are delivering an energy
16 system for the 21st century, and which are recognized as being
17 secure, clean and affordable;

18 (b) *Green building* refers to a building which, in its design,
19 construction or operation, reduces or eliminates the negative impact
20 on the climate and natural environment of a particular area and the
21 country in general and can create positive impact. Green buildings
22 preserve precious natural resources and improve the quality of life;

23 (c) *Green building technology* refers to the technology or the
24 application of processes which are environmentally responsible and
25 resource-efficient throughout a building's life cycle: from planning
26 to design, construction, operation, maintenance, renovation and
27 demolition. This requires close cooperation of the contractors,

1 architects, engineers and the clients at all project stages. The green
2 building practice expands and complements the classical building
3 design concerns of utility, economy, durability and comfort; and

4 (d) *High performance building* refers to a form of green
5 building with a singular focus on its energy performance and which
6 integrates and optimizes all major high-performance building
7 attributes, including energy efficiency, durability, life-cycle
8 performance, and occupant productivity.

9 SEC. 4. *Features of a Green Building or High-Performance*
10 *Building.* – A green building or high-performance building shall
11 have the following features:

12 (a) Uses all forms of renewable energy, such as solar energy;

13 (b) Efficiently uses energy, water and other resources;

14 (c) Provides good indoor or environmental air quality;

15 (d) Uses materials which are sustainable, ethical and
16 nontoxic;

17 (e) Adopts pollution and waste reduction measures, and
18 promotes reuse and recycling of materials;

19 (f) Employs a design that adapts to a changing environment;

20 and

21 (g) Considers environment-friendly design, construction and
22 operation.

23 SEC. 5. *Advanced Energy and Green Building Technologies*
24 *Curriculum Development.* – The Commission on Higher Education
25 (CHED), in consultation with the Department of Energy (DOE) and
26 CHED-recognized higher education institutions (HEIs), shall
27 develop a curriculum on advanced energy and green building

1 technologies at the undergraduate and graduate levels which shall
2 focus on design resilience, natural resource conservation, and
3 sustainable design and building practices, among others, to prepare
4 students for future careers in advanced energy and green building
5 technologies to enable future engineers, architects and urban
6 planners to incorporate advanced energy and green building
7 technologies in the design of high-performance buildings.

8 SEC. 6. *Graduate Training in Energy Research and*
9 *Development.* – The CHED, in consultation with the DOE,
10 is hereby mandated to develop graduate education curriculum
11 related to advanced energy technology research, development,
12 demonstration, and commercial application activities pertaining
13 to energy research and development.

14 SEC. 7. *Role of the DOE in Curriculum Development for*
15 *High Performance Building Design.* – The DOE shall assist the
16 CHED in curriculum development activities in advanced energy
17 and green building technologies for the purpose of improving
18 undergraduate and graduate interdisciplinary studies involving the
19 design and construction of high-performance buildings, including
20 the development of higher education curricula in engineering,
21 architecture, fine arts, and other related courses, laboratory
22 activities, training programs and practicums, and design projects.

23 For this purpose, the DOE shall contribute funds to the
24 curriculum development activities of the CHED, especially in the
25 conduct of research, development, demonstration, and commercial
26 application activities endorsed by the DOE in relation to
27 high-performance buildings.

1 In awarding grants with respect to which the DOE has
2 contributed funds under this section, the CHED shall give priority
3 to applications from the following:

4 (a) HEIs whose departments, programs, centers, or schools
5 of engineering are considered strong or prominent in engineering
6 and architecture education, including city, regional, or urban
7 planning; and

8 (b) HEIs whose departments, programs, centers, or schools of
9 engineering have partnered with other departments, programs,
10 centers, or schools of engineering which are considered strong or
11 prominent in engineering and architecture education, including
12 city, regional, or urban planning.

13 SEC. 8. *Project Grants.* – The Chairperson of the CHED
14 shall consult with the Secretary of the DOE when preparing
15 solicitations and awarding grants for projects described in this Act.

16 SEC. 9. *Appropriations.* – The amount necessary to carry
17 out the provisions of this Act shall be charged against the current
18 year's appropriations of the CHED and the DOE. Thereafter, the
19 amount necessary for the continued implementation of this Act
20 shall be included in the annual General Appropriations Act.

21 SEC. 10. *Implementing Rules and Regulations.* – Within
22 ninety (90) days from the effectivity of this Act, the CHED shall, in
23 consultation with the DOE and concerned stakeholders, promulgate
24 the implementing rules and regulations necessary to ensure the
25 efficient and effective implementation of this Act.

1 SEC. 11. *Separability Clause.* – If any provision, or part
2 hereof, is held invalid or unconstitutional, the remainder of this Act
3 or the provisions not otherwise affected shall remain valid.

4 SEC. 12. *Repealing Clause.* – Any law, presidential decree or
5 issuance, executive order, letter of instruction, administrative order,
6 or regulations contrary to or inconsistent with the provisions of this
7 Act is hereby repealed, modified, or amended accordingly.

8 SEC. 13. *Effectivity.* – This Act shall take effect fifteen (15)
9 days after its publication in the *Official Gazette* or in a newspaper of
10 general circulation.

Approved,

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