## I MINA 'TRENTAI UNU NA LIHESLATURAN GUÅHAN 2011 (FIRST) Regular Session

Bill No. 2-30 - 31 (cor)

Introduced by:

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D.G. RODRIGUEZ, Jr. 77 T.C. ADA 2

AN ACT MANDATING NEW GOVERNMENT OF GUAM **BUILDINGS INTEGRATE SUSTAINABLE DESIGN** SOLUTIONS AND SYSTEMS AND TO REQUIRE THAT **ALTERATIONS** RETROFITS, RENOVATIONS AND EXISTING GOVERNMENT BUILDINGS INCLUDE ENERGY EFFICIENT AND SUSTAINABLE DESIGN METHODS BY ADDING A NEW §66104.1 TO ARTICLE 1, CHAPTER 66, TITLE 21, GUAM CODE ANNOTATED, AND A NEW §5011 and §5012 TO PART A OF ARTICLE 1, CHAPTER 5, TITLE 5, GUAM CODE ANNOTATED [GUAM PROCUREMENT LAW].

## BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative findings and intent. I Mina'Trentai Unu Na Liheslaturan Guåhan finds that Guam's energy resources are extremely limited, and provided at a high cost to the people of Guam. Past and current construction codes and practices have resulted in a greater, more costly dependence upon imported energy resources. In the case of many states and municipalities, it has been the government which has taken the first steps in implementing energy efficient practices in the construction and/or renovation of public structures. I Liheslaturan finds that an energy efficient building design is vital for an island environment such as Guam to help reduce the increasing costs of energy for public buildings, and by example, encourage the reduction of the island's overall energy usage by the private sector implementation of energy efficient designs and

practices. Further, energy efficient designs and practices also promote healthier environments for all who utilize them, as well as to preserve the environment and reduce pollution.

I Liheslaturan finds that there are funds available to assist in the construction and/or renovation of government of Guam buildings to become energy efficient through President Barak Obama's Energy Plan. Further, that a recognized sustainable design measuring system should be included in the planning, design and construction process so as to quantify the benefit of the sustainable design methods, tools and systems in measured results in the reduction of energy use, water consumption, and construction waste generated, the improvement of indoor air quality and the reduction of pollution and damage to aquifers', watersheds, waterways, and indigenous flora and fauna.

I Liheslaturan takes due note that LEED, or Leadership in Energy and Environmental Design, is an internationally recognized green building certification system. Developed by the U.S. Green Building Council (USGBC) in March 2000, LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. LEED promotes sustainable building and development practices through a suite of rating systems that recognize projects that implement strategies for better environmental and health performance; to include a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. Over the past few years, an increasing number of jurisdictions have done one of two things: They've adopted the Leadership in Energy and Environmental Design green building standard, mostly for public buildings, or they have strengthened requirements detailing what materials and construction techniques new buildings

should be using to conserve energy, primarily through systems for heating, cooling, insulation and lighting. Many jurisdictions have done both.

Further, the American Society of Heating, Refrigerating and Air conditioning Engineers (ASHRAE) and the International Code Council (ICC) – are two organizations charged with developing the nation's model energy codes for use by states as the basis for their own building regulations for private and public developments. Known as the ASHRAE 2010 Standard 90.1 and the International Energy Conservation Code (IECC) 2012, they represent the latest standards and are purported to be 30 percent more efficient than earlier versions.

I Liheslaturan further finds that there are only two (2) civilian buildings on Guam that have integrated LEED certification specifications in their structures. The Guam Community College (GCC) Learning Resource Center and the Coast 360 Federal Credit Union building have both incorporated environmental and sustainable methodologies in the design and construction of their structures. The Guam Community College is presently undergoing renovations of existing campus buildings that are also integrating LEED certification methods inclusive of construction of Rainwater Harvesting system technology. The third building currently under construction involves a Gold LEED certification for a \$59.2 million military project.

It is the intent of *I Liheslaturan Guåhan* to the extent necessary and practicable for Guam, to adopt relevant portions of the Leadership in Energy and Environmental Design (LEED) Green Building certification system(s) standards, the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and the International Code Council (ICC) model energy codes and standards. It is further, the intent of *I Liheslaturan* that other recognized standards relative to sustainable

Section 2. A new §5011 is hereby added to Part A of Article 1, Chapter 5, Title 5, Guam Code Annotated [Guam Procurement Law], to read:

"§5011. Policy in Favor of Energy Efficient and Environmentally Sound Standards and Practices in the Design, Construction and/or Renovation of Government Buildings. To the extent practicable, all government of Guam buildings shall be designed, constructed and/or renovated using certified recognized sustainable design measurement systems so as to be energy efficient, achieve cost effective operation and environmental compatibility.

(a) Promulgation of Rules and Regulations. The Policy Office, as provided pursuant to §5102 of this Chapter 5, shall develop and promulgate applicable rules and regulations for the purposes of this section. In the development of applicable rules, the Policy Office shall duly consider the relevant portions, as deemed appropriate, of the Leadership in Energy and Environmental Design (LEED) Green Building certification system(s) standards, the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and the International Code Council (ICC) model energy codes and standards, as well as existing Guam building codes, which are to be utilized as the standards to follow, in conformance with §66104.1 of Article 1, Chapter 66, Title 21, Guam Code Annotated.

Definition. For the purposes of this policy, generally, *sustainable* shall mean a recognized sustainable design measuring system should be included in the planning, design and construction process so as to quantify the benefit of the sustainable design methods, tools and systems in measured results, using certified recognized sustainable design measurement systems so as to achieve energy efficiency, cost effective operation and environmental compatibility.

**Section 3.** A new §5012 is hereby added to Part A of Article 1, Chapter 5, Title 5, Guam Code Annotated [Guam Procurement Law], to read:

**"§5012. Policy in Favor of Energy Efficient Equipment and Systems Procurement.** To the extent practicable, all government owned and leased buildings should be retrofitted with energy efficient equipment, such as, but not limited to, energy-efficient light bulbs, energy-efficient air-conditioners, energy-star rated appliances, and energy-star rated computer equipment, and to include, all associated electrical devices and systems promoting energy conscious procedures that will reduce energy consumption. These retrofits shall commence as appropriate due to the usual circumstances mandating replacements due to normal wear and depreciation.

Leased Facilities. In the case of government leased buildings, and prior to the retrofitting or installation of permanent systems which shall remain with the leased facilities subsequent to the expiration of the lease, a cost benefit analysis shall be conducted to determine the feasibility of retrofitting the leased premises in consideration of savings to be realized relative to the term of the lease. If the retrofit or installation is determined not to be cost effective, then the mandate pursuant to this §5012 shall not be applicable."

**Section 4:** A new §66104.1 is hereby added to Article 1 of Chapter 66, Title 21, Guam Code Annotated, to read:

"§66104.1 Applicable Sustainable energy efficient and environmentally sound designs and practices for Government Buildings. To the extent practicable, all government of Guam buildings are mandated to be constructed and/or renovated using a certified recognized sustainable design measurement system(s) which promote a whole-building approach to sustainability by recognizing performance in at least five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. In addition, all new government buildings and structures shall, to the extent practicable, include provisions that will

incorporate Rainwater Harvesting methods that will effectively promote water conservation. *Rainwater Harvesting* is the accumulating, processing and storing, of rainwater for reuse, before it reaches the aquifer.

(a) Promulgation of Rules, Regulations and standards for *Sustainable Government Buildings*. The Director, Department of Public Works (DPW), in conjunction with the Director, Guam Energy Office, the Director, Island Sustainability Program, University of Guam, and the President of the Guam Community College (GCC) shall, within six (6) months of enactment of this Act, promulgate administrative rules and regulations establishing the guidelines with which new and renovated government of Guam buildings must comply with.

In the promulgation of applicable rules and standards, they shall duly consider the relevant portions, as deemed appropriate, of the Leadership in Energy and Environmental Design (LEED) Green Building certification system(s) standards, the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and the International Code Council (ICC) model energy codes and standards, as well as existing Guam building codes, which are to be utilized as the standards to follow. If deemed appropriate, standards from other reputable national and international sources may also be considered for incorporation. For the purposes of this policy, generally, *sustainable* shall mean a recognized sustainable design measuring system in the planning, design and construction process so as to quantify the benefit of the sustainable design methods, tools and systems in measured results in the reduction of energy use, achieve cost effective operation, and environmental compatibility.

Section 6. Saving Clause. This Act shall not be applicable to the design, construction and/or renovation of government buildings already approved for construction or renovation as of the date of enactment of this Act, *unless* such

- applicability is otherwise determined to be cost effective and in the interest of the government and should be made applicable.
- Section 8: Severability. If any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall *not* affect other provisions or applications of this Law which can be given effect without the invalid provisions or applications, and to this end the provisions of this Law are severable.
- Section 6: Effective Date. This act *shall* take effect upon enactment.