

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

Bill No. 13-31(COR)

Introduced by:

D. G. Rodriguez, Jr. 

2011 JAN -3 PM 2:40



AN ACT TO MANDATE THE CONVERSION OF ALL PUBLIC STREETLIGHTS TO ALTERNATE ENERGY UNITS AND/OR ENERGY EFFICIENT LIGHT SOURCES UNDER THE DIRECTION OF THE EFFICIENT ENERGY TASK FORCE, IN CONJUNCTION WITH THE GUAM ENERGY OFFICE, GUAM POWER AUTHORITY AND THE DEPARTMENT OF PUBLIC WORKS.

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative findings and intent. *I Liheslaturan Guåhan* finds that public streetlights throughout our island are essential to the safety of our people. It is the responsibility of the Guam Power Authority to provide adequate streetlights to communities and public roads as mandated by 12 GCA 8105.1. The Department of Public Works (DPW) has failed to establish a plan to ensure adequate lighting on all public roads. *I Liheslatura* also finds that public streetlights are currently not metered making it difficult to track the total energy consumption of these lights. As the custodians of our island's streetlights, it is DPW's responsibility to put a plan in place that would seek alternative methods of powering these streetlights. History has demonstrated that the annual budget allotment for streetlights is insufficient for our island's needs, and given these budgetary constraints, it is imperative that the Government of Guam find other means for powering public streetlights.

I Liheslatura finds that under President Barack Obama's Energy Plan, 10 percent of our

1 electricity shall come from renewable sources by the year 2012. *I Liheslatura* also finds that in
2 line with the President’s plan, federal resources through the U.S. Department of Energy may be
3 available for states and territories to utilize for energy efficient improvements.

4 The ultimate sustainability of our island is of the utmost importance. *I Liheslatura* finds
5 that one way to move toward island sustainability is through the conversion of public streetlights
6 to alternate energy units and/or energy efficient light sources. The most commonly used types of
7 public High Density Discharge (HDD) Lamps in streetlights are High Pressure Sodium (HPS),
8 Low Pressure Sodium (LPS), Mercury Vapor (MV) and Metal Halide (MH). Each of these types
9 of lamps consumes more power and, therefore, cost more to use than more energy efficient
10 lamps. *I Liheslatura* finds that alternatives to these HDD Lamps, such as Light Emitting Diodes
11 or LED, are more energy efficient, have a longer life span, and can reduce power consumption
12 by up to 50-70% than current streetlight units. Alternatives, such as LED lights, may also
13 decrease cost in maintenance and replacement. *I Liheslatura* accepts the Energy Savings
14 Estimates as published by the United States Department of Energy that “Light emitting Diodes
15 (LED), offer the electric lighting market a new and revolutionary light source that saves energy
16 and improves quality, performance, and service. Today, LEDs are competing successfully with
17 conventional, incandescent light sources that use color filters to generate the desired colored light
18 emission, such as those found in traffic signals and exit signs. In these and other applications,
19 consumers choose LEDs because they offer more cost-effective performance than incandescent
20 lamps.”

21 *I Liheslatura* finds that alternate energy sources should also be considered as a way to
22 minimize dependency on fossil fuels and lower overall public power consumption. Alternate
23 energy sources such as, but not limited to, solar energy, wind energy, hydroelectricity, and bio-
24 fuels provide 8% of the total renewal energy consumption in the Nation’s energy supply, as
25 stated by the U.S. Energy Information Agency, and when used together with energy efficient

1 light sources can be most effective in achieving the highest cost savings and reducing the highest
2 level of energy consumption.

3 Renewable energy provided 413 billion kilowatt-hours of electricity in 2009 out of a U.S.
4 total of 3,953 billion kilowatt-hours. The U.S. total net generation declined four (4)% while
5 renewable net generation went up eight (8)%.

6 *I Liheslatura* finds that the existing government entity charged with overseeing Guam's
7 public streetlights has yet to propose a plan that uses alternate energy units and/or energy
8 efficient light sources for powering streetlights. It is the intent of *I Liheslatura* to mandate the
9 conversion of all public streetlights to alternate energy units and/or energy efficient light sources.
10 It is also the intent of *I Liheslatura* to establish an Efficient Energy Task Force which shall
11 coordinate the research and implementation of alternate energy units and/or energy efficient
12 lights sources as authorized by this Act, with the Guam Energy Office as the lead agency. It is
13 also the intent of *I Liheslatura* to ensure that all public streetlights are converted to alternate
14 energy units and/or energy efficient light sources by 2014.

15 **Section 2: Efficient Energy Task Force.** There is hereby established an Efficient
16 Energy Task Force which shall conduct research on alternate energy units and/or energy efficient
17 light sources for all public streetlights on Guam's main and secondary roadways, village streets,
18 and other public-owned easements and roadways. The Guam Energy Office shall hereby be the
19 lead agency of this Task Force. The Department of Public Works and the Guam Power
20 Authority shall hereby be the agencies charged with carrying out the plan set forth by the Task
21 Force. The Task Force shall issue, no later than ninety (90) days from its initial meeting, a
22 written report to *I Maga'lahaen Guahan* and the Speaker of *I Liheslaturan Guahan*, which shall
23 include but not limited to:

24 a) An assessment of the current streetlight system to include a projection for additional
25 streetlights based on the growing needs of the community over a 10-year period.

1 b) A cost-benefit analysis of the available options for alternate energy units and/or energy
2 efficient light sources for streetlights to include a comparison between alternate and
3 existing streetlights.

4 c) An assessment of possible funding sources for the installation, replacement and
5 maintenance of alternate energy units and/or energy efficient streetlights to include
6 federal grants and loans.

7 d) An implementation action plan and proposed budget for the conversion of public
8 streetlights to reduce energy consumption based on the findings of this report. This
9 action plan shall include a detailed plan for executing the conversion of streetlights
10 according to the timeline set forth in Section 6.

11 f) A plan to install meters on all public streetlights to monitor energy consumption for
12 future research needs.

13 The Guam Energy Office shall invite government, private-sector, and community entities and
14 individuals to submit reports, testimony, data, and other information that may help it perform its
15 duties and responsibilities as set forth in this act. Furthermore, the Guam Energy Office shall
16 hold at least one (1) public forum to hear testimony from interested parties and individuals from
17 the community and shall, at this public forum, provide the community with information about its
18 findings and plans to convert all public streetlights to alternate energy units and/or energy
19 efficient light sources.

20 Upon completion of the final written report and submission to *I Maga'lahi* and *I*
21 *Lihselatura*, the Task Force, with the Guam Energy Office, the Department of Public Works and
22 the Guam Power Authority, will have one hundred and eighty (180) days to begin the
23 implementation of its findings.

24 **Section 3: Composition of Efficient Energy Task Force.** The Task Force shall be
25 made up of *not less than* the following six (6) members and any additional members deemed

1 necessary by the Task Force.

- 2 a) Administrator of the Guam Energy Office;
- 3 b) General Manager of the Guam Power Authority, or his/her designee;
- 4 c) Director of Department of Public Works, or his/her designee;
- 5 d) A representative from the University of Guam's Center for Island Sustainability;
- 6 e) A representative from the Mayor's Council of Guam, to be selected by the
- 7 President of the Mayor's Council; and
- 8 f) One (1) member from the community at large, to be chosen by the Efficient Energy
- 9 Task Force.

10 The Chairperson and the Vice-Chairperson shall be elected by the Task Force at its first meeting.

11 **Section 4: Term and Vacancy on the Efficient Energy Task Force.** The Task Force
12 shall be formed and called to its first meeting by *I Maga'lahi* no later than thirty (30) days after
13 the enactment of this Act. Members of the Task Force shall serve for the duration of the
14 existence of the Task Force. Any vacancy shall be filled in the same manner as the original
15 selection, but only for the balance of the term. Task Force members shall serve without
16 compensation. The Task Force shall be terminated upon successful completion of the mandated
17 conversion of all public streetlights to energy efficient streetlights and with the consent of *I*
18 *Maga'lahan Guahan* and the Speaker of *I Liheslaturan Guahan*.

19 **Section 5: Support Services.** Government agencies and offices shall assist the Task
20 Force in the performance of its duties and provide the Task Force with appropriate studies, data,
21 or other information as requested.

22 **Section 6: Mandate the Conversion of Public Streetlights.** Upon enactment of this
23 Act, the Efficient Energy Task Force is mandated to execute its implementation action plan to
24 convert existing traditional streetlights to alternate energy units and/or energy efficient light
25 sources. The Task Force's goal is to ensure that the dependency on fossil fuels needed to power

1 streetlights is reduced and that all public streetlights use alternate energy units and/or energy
2 efficient sources according to the following timeline:

3 a) Within 1 year of the implementation of the action plan, 25% of all public streetlights
4 must be converted.

5 b) Within 2 years of the implementation of the action plan, 60% of all public streetlights
6 must be converted.

7 c) Within 3 years of the implementation of the action plan, 100% of all public
8 streetlights must be converted.

9 **Section 7: Severability.** *If any provision of this Law or its application to any person or*
10 *circumstance is found to be invalid or contrary to law, such invalidity shall not affect other*
11 *provisions or applications of this Law which can be given effect without the invalid provisions or*
12 *applications, and to this end the provisions of this Law are severable.*