

ASSEMBLY BILL NO. 385—ASSEMBLYWOMAN GIUNCHIGLIANI

MARCH 24, 2005

Referred to Committee on Government Affairs

SUMMARY—Revises provisions governing building and zoning and creates incentives and standards for green buildings. (BDR 22-730)

FISCAL NOTE: Effect on Local Government: May have Fiscal Impact.
Effect on the State: Yes.

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EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted-material~~ is material to be omitted.

AN ACT relating to building standards; making various changes to encourage energy efficiency in construction; providing for a partial abatement of certain taxes for certain energy efficient buildings and green buildings; requiring the University and Community College System of Nevada to provide instruction in certain areas related to green building; requiring the State to reduce its grid-based purchases; exempting from the Universal Energy Charge energy consumed in certain energy-efficient buildings; and providing other matters properly relating thereto.

1 WHEREAS, The construction and operation of the buildings in
2 which we live, work and play require enormous amounts of energy,
3 water and materials and create large amounts of waste, and the
4 location of and how these buildings are built not only affect the
5 ecosystem around us, but the buildings themselves create new
6 indoor environments that present new environmental problems and
7 challenges; and
8 WHEREAS, With the threat of rising energy costs, increases in
9 population and numerous environmental concerns, the State of
10 Nevada is already developing and encouraging the use of alternative
11 energy from geothermal, wind and solar resources, and the State
12 should also consider the possibility of encouraging “greener”
13 building requirements; and




1 WHEREAS, Green building is a field that uses environmentally
2 sustainable materials to construct buildings that conserve resources
3 and provide a healthy living and working space; and

4 WHEREAS, The many elements of green building include energy
5 efficiency and the use of renewable energy, water efficiency, the use
6 of building materials that have a minimal effect on the environment,
7 reduction of waste, and the design and operation of buildings that
8 are healthy for the occupants of such buildings; and

9 WHEREAS, The Nevada Legislature encourages the construction,
10 rehabilitation and maintenance of buildings in this State in such a
11 manner as to promote better environmental standards, improve
12 energy efficiency and increase generation of energy through
13 renewable and clean-energy technologies, and to improve the health
14 and productivity of building occupants by meeting advanced criteria
15 for indoor environmental quality; now, therefore,

16
17 THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
18 SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:
19

20 **Section 1.** NRS 278.020 is hereby amended to read as follows:

21 278.020 1. For the purpose of promoting health, safety,
22 morals  or the general welfare of the community, the governing
23 bodies of cities and counties are authorized and empowered to
24 regulate and restrict the improvement of land and to control the
25 location and soundness of structures.

26 2. Any such regulation, restriction and control must take into
27 account:

28 (a) The potential impairment of natural resources and the total
29 population which the available natural resources will support
30 without unreasonable impairment; and

31 (b) The availability of and need for affordable housing in the
32 community, including affordable housing that is accessible to
33 persons with disabilities.

34 *3. The governing bodies of cities and counties shall establish*
35 *an expedited approval process for the issuance of building permits*
36 *for the construction, reconstruction or alteration of any building*
37 *or other structure which is designed to meet the certification*
38 *requirements for at least the silver level of the Leadership in*
39 *Energy and Environmental Design Green Building Rating System*
40 *as adopted by the Labor Commissioner pursuant to NRS 338.012.*

41 **Sec. 2.** Chapter 278A of NRS is hereby amended by adding
42 thereto a new section to read as follows:

43 *1. The city council of the most populous city in each county*
44 *whose population is 100,000 or more shall create a commission on*



1 *sustainable energy and prescribe the powers and duties of the*
2 *commission.*

3 *2. The commission on sustainable energy consists of seven*
4 *members appointed by the mayor of the city. Each member must*
5 *represent one of the following interests:*

- 6 *(a) The field of architecture;*
7 *(b) Environmental studies;*
8 *(c) Engineering; or*
9 *(d) The general population of the city,*

10 *↪ except that not more than two members may represent the same*
11 *area of interest and not more than four members may be of the*
12 *same political party.*

13 *3. A commission on sustainable energy shall establish:*

- 14 *(a) Standards for the efficient use of water;*
15 *(b) Standards for the efficient use of energy, including the use*
16 *of sources of renewable energy;*
17 *(c) Performance guidelines for new, remodeled and renovated*
18 *buildings; and*
19 *(d) Performance guidelines for retrofit projects,*
20 *↪ including, without limitation, energy consumption, use of*
21 *potable water, use of water for landscaping purposes and solid*
22 *waste disposal.*

23 **Sec. 3.** Chapter 338 of NRS is hereby amended by adding
24 thereto a new section to read as follows:

25 *1. Each public building constructed, reconstructed,*
26 *remodeled, renovated, sponsored or financed by this State must be*
27 *certified at the silver level or higher in accordance with the*
28 *Leadership in Energy and Environmental Design Green Building*
29 *Rating System as adopted by the Labor Commissioner pursuant to*
30 *NRS 338.012.*

31 *2. Each public building constructed, reconstructed,*
32 *remodeled, renovated, sponsored or financed by a local*
33 *government may be certified at the silver level or higher in*
34 *accordance with the Leadership in Energy and Environmental*
35 *Design Green Building Rating System as adopted by the Labor*
36 *Commissioner pursuant to NRS 338.012.*

37 **Sec. 4.** NRS 338.012 is hereby amended to read as follows:

38 *338.012 1. The Labor Commissioner may adopt such*
39 *regulations as are necessary to enable him to carry out his duties*
40 *pursuant to the provisions of this chapter.*

41 *2. The Labor Commissioner shall adopt regulations which*
42 *incorporate by reference the Leadership in Energy and*
43 *Environmental Design Green Building Rating System as adopted*
44 *by the U.S. Green Building Council and which establish a process*
45 *for certification.*



Sec. 5. NRS 338.190 is hereby amended to read as follows:

338.190 1. Before it begins to construct or renovate any public building , ~~[which is larger than 20,000 square feet,]~~ each agency of the State or a political subdivision, district, authority, board or public corporation of the State shall obtain a detailed analysis of the cost of operating and maintaining the building for its expected useful life.

2. The analysis must ~~[identify]~~ :

(a) *Estimate the cost to construct, operate and maintain the public building; and*

(b) *Identify the measures for* ~~[~~

~~—(a)] :~~

(1) Conservation of energy; and

~~[(b)]~~ (2) Use of types of energy which are alternatives to fossil fuels, such as active and passive applications of solar energy, wind and geothermal energy,

↳ which can be included in the building in its construction or renovation.

3. The agency of government which proposes to build or renovate a building must consider the results of the analysis required by this section in deciding upon the type of construction and the components and systems which will be included in the building. *The agency shall incorporate the use of types of energy which are alternatives to fossil fuels and any other energy conservation measures identified in the analysis into the design of the public building if it is determined to be in the best interest of the State.*

4. This section applies to any public building or renovation of a public building, the designing of which begins on or after July 1, 1981.

Sec. 6. Chapter 361 of NRS is hereby amended by adding thereto a new section to read as follows:

1. The Commission on Economic Development shall grant a partial abatement from the tax imposed on real property by this chapter for property which has a building or other structure that is certified at the silver level or higher by a person authorized to grant such certification in accordance with the Leadership in Energy and Environmental Design Green Building Rating System as adopted by the Labor Commissioner pursuant to NRS 338.012.

2. The partial abatement must be for a duration of 10 years and must not exceed 50 percent of the taxes on real property payable each year pursuant to this chapter.

3. The Commission on Economic Development shall immediately forward a certificate of eligibility for the abatement to:



- 1 (a) *The Department of Taxation;*
- 2 (b) *The Nevada Tax Commission;*
- 3 (c) *The county treasurer; and*
- 4 (d) *The county assessor.*

5 **Sec. 7.** NRS 374.307 is hereby amended to read as follows:

6 374.307 1. There are exempted from the taxes imposed by
7 this chapter the gross receipts from the sale of, and the storage, use
8 or other consumption in this State of, any:

9 (a) Product or system designed or adapted to use renewable
10 energy to generate electricity and all of its integral components.

11 (b) Solar thermal energy system that reduces the consumption of
12 electricity or any fossil fuel, and all of its integral components.

13 (c) Solar lighting system that reduces the consumption of
14 electricity or any fossil fuel, and all of its integral components.

15 (d) *Products or materials used in the construction, remodel or*
16 *maintenance of a building if the building is certified or will, when*
17 *complete, meet the requirements to be certified at the silver level or*
18 *higher in accordance with the Leadership in Energy and*
19 *Environmental Design Green Building Rating System.*

20 2. As used in this section:

21 (a) "Biomass" means any organic matter that is available on a
22 renewable basis, including, without limitation:

23 (1) Agricultural crops and agricultural wastes and residues;

24 (2) Wood and wood wastes and residues;

25 (3) Animal wastes;

26 (4) Municipal wastes; and

27 (5) Aquatic plants.

28 (b) "Fuel cell" means a device or contrivance that, through the
29 chemical process of combining ions of hydrogen and oxygen,
30 produces electricity and water.

31 (c) *"Leadership in Energy and Environmental Design Green*
32 *Building Rating System" means the system of rating buildings*
33 *adopted pursuant to NRS 338.012.*

34 (d) "Renewable energy" means a source of energy that occurs
35 naturally or is regenerated naturally, including, without limitation:

36 (1) Biomass;

37 (2) Fuel cells;

38 (3) Geothermal energy;

39 (4) Solar energy;

40 (5) Waterpower; and

41 (6) Wind.

42 ➡ The term does not include coal, natural gas, oil, propane or any
43 other fossil fuel, or nuclear energy.



~~[(d)]~~ (e) “Solar lighting system” means a system of related components that:

- (1) Uses solar energy to provide indoor lighting; and
- (2) Is designed to work as an integral package such that the system is not complete without one of its related components.

~~[(e)]~~ (f) “Solar thermal energy system” means a system of related components that:

- (1) Uses solar radiation to heat water; and
- (2) Is designed to work as an integral package such that the system is not complete without one of its related components.

~~[(f)]~~ (g) “System designed or adapted to use renewable energy to generate electricity” means a system of related components:

- (1) From which at least 75 percent of the electricity generated is produced from one or more sources of renewable energy; and

- (2) That is designed to work as an integral package such that the system is not complete without one of its related components.

Sec. 8. Chapter 396 of NRS is hereby amended by adding thereto a new section to read as follows:

Instruction within the System must be given in the essentials of green building construction and design to assist students in preparing for the Leadership in Energy and Environmental Design Professional Accreditation Exam offered by the U.S. Green Building Council.

Sec. 9. Chapter 701 of NRS is hereby amended by adding thereto the provisions set forth as sections 10, 11 and 12 of this act.

Sec. 10. 1. *The Director shall adopt regulations that provide energy efficiency standards for all new appliances sold for use in this State on or after October 1, 2005.*

2. As used in this section, “appliance” means a device or instrument, which uses electric or fossil fuel energy, designed to perform a specific household or commercial function. The term includes, without limitation, a refrigerator, freezer, illuminated exit sign, clothes dryer, clothes washer, ceiling fan, television and computer.

Sec. 11. 1. *The Director, in cooperation with representatives of the building and development industry, shall adopt guidelines establishing Green Building Standards for all new and remodeled building projects.*

2. Guidelines adopted pursuant to subsection 1 must include suggested:

(a) Requirements for the use of resource-efficient materials for the building and maintenance of the structure;

(b) Standards for indoor environmental quality;



(c) *Standards for the efficient use of water, including the efficient use of water for landscaping purposes;*

(d) *Standards for the efficient use of energy; and*

(e) *Requirements for the design and preparation of building lots.*

3. *The Director or any other person may apply for and accept grants from the Federal Government to further the purposes of this section. Any property received by the Director must be deposited in the Trust Fund for Renewable Energy and Energy Conservation created pursuant to NRS 701.370.*

Sec. 12. *The Director shall prepare a state energy reduction plan which requires state agencies, departments and other entities in the Executive Branch to reduce grid-based energy purchases for state-owned buildings by 20 percent by 2015.*

Sec. 13. NRS 701.220 is hereby amended to read as follows:

701.220 1. The Director shall adopt regulations for the conservation of energy in buildings, including manufactured homes . ~~[, which]~~ *Such regulations must include the adoption of the most recent version of the International Energy Conservation Code, issued by the International Code Council, and must* establish the minimum standards for:

(a) The construction of floors, walls, ceilings and roofs;

(b) The equipment and systems for heating, ventilation and air-conditioning;

(c) Electrical equipment and systems;

(d) Insulation; and

(e) Other factors which affect the use of energy in a building.

↪ *The regulations must provide for the adoption of the most recent version of the International Energy Conservation Code every second year.*

2. The Director may exempt a building from a standard if he determines that application of the standard to the building would not accomplish the purpose of the regulations.

3. The regulations must authorize allowances in design and construction for sources of renewable energy used to supply all or a part of the energy required in a building.

4. The standards adopted by the Director are the minimum standards for the conservation of energy which apply only to areas in which the governing body of the local government has not adopted standards for the conservation of energy in buildings. Such governing bodies shall assist the Director in the enforcement of the regulations adopted pursuant to this section.

5. The Director shall solicit comments regarding the adoption of regulations pursuant to this section from:

(a) Persons in the business of constructing and selling homes;



- (b) Contractors;
- (c) Public utilities;
- (d) Local building officials; and
- (e) The general public,

➡ before adopting any regulations. The Director must conduct at least three hearings in different locations in the State, after giving 30 days' notice of each hearing, before he may adopt any regulations pursuant to this section.

Sec. 14. Chapter 702 of NRS is hereby amended by adding thereto a new section to read as follows:

1. The provisions of NRS 702.160 do not apply to any therm of natural gas or any kilowatt-hour of electricity that a retail customer purchases for use in a building which is certified at the silver level or higher by a person authorized to grant such a certification in accordance with the Leadership in Energy and Environmental Design Green Building Rating System adopted by the Labor Commissioner pursuant to NRS 338.012.

2. If a retail customer is exempted from paying the universal energy charge pursuant to subsection 1, the retail customer may not receive money or other assistance from:

(a) The Welfare Division pursuant to NRS 702.260 for any utility service for which the retail customer is exempted from paying the universal energy charge; or

(b) The Housing Division pursuant to NRS 702.270.

Sec. 15. NRS 702.160 is hereby amended to read as follows:

702.160 1. Except as otherwise provided in this section and NRS 702.150 ~~§~~ *and section 14 of this act*, each retail customer shall pay:

(a) A universal energy charge of 3.30 mills on each therm of natural gas that the retail customer purchases from another person for consumption in this State; and

(b) A universal energy charge of 0.39 mills on each kilowatt-hour of electricity that the retail customer purchases from another person for consumption in this State.

2. The provisions of subsection 1 do not apply to:

(a) Any therm of natural gas used as a source of energy to generate electricity.

(b) Any kilowatt-hour of electricity used in industries utilizing electrolytic-manufacturing processes.

3. If a retail customer uses the distribution services of a public utility or municipal utility to acquire natural gas or electricity that is subject to the universal energy charge, the public utility or municipal utility providing the distribution services shall:

(a) Collect the universal energy charge from each such retail customer;



(b) Ensure that the universal energy charge is set forth as a separate item or entry on the bill of each such retail customer; and

(c) Not later than 30 days after the end of each calendar quarter, remit to the Commission the total amount of money collected by the public utility or municipal utility for the universal energy charge for the immediately preceding calendar quarter.

4. If a retail customer does not use the distribution services of a public utility or municipal utility to acquire natural gas or electricity that is subject to the universal energy charge, not later than 30 days after the end of each calendar quarter, the retail customer shall remit to the Commission the total amount of money owed by the retail customer for the universal energy charge for the immediately preceding calendar quarter.

5. If, during a calendar quarter, a single retail customer or multiple retail customers under common ownership and control pay, in the aggregate, a universal energy charge of more than \$25,000 for all consumption of natural gas and electricity during the calendar quarter, such retail customers are entitled to a refund, for that calendar quarter, of the amount of the universal energy charge that exceeds \$25,000. To receive a refund pursuant to this section, not later than 90 days after the end of the calendar quarter for which the refund is requested, such retail customers must file with the Commission a request for a refund. If a request for a refund is filed with the Commission:

(a) The Commission shall determine and certify the amount of the refund; and

(b) The refund must be paid as other claims against the State are paid from money in the Fund.

Sec. 16. NRS 702.260 is hereby amended to read as follows:

702.260 1. Seventy-five percent of the money in the Fund must be distributed to the Welfare Division for programs to assist eligible households in paying for natural gas and electricity. The Welfare Division may use not more than 3 percent of the money distributed to it pursuant to this section for its administrative expenses.

2. Except as otherwise provided in NRS 702.150 ~~and~~ *section 14 of this act*, after deduction for its administrative expenses, the Welfare Division may use the money distributed to it pursuant to this section only to:

(a) Assist eligible households in paying for natural gas and electricity.

(b) Carry out activities related to consumer outreach.

(c) Pay for program design.

(d) Pay for the annual evaluations conducted pursuant to NRS 702.280.



1 3. Except as otherwise provided in subsection 4, to be eligible
2 to receive assistance from the Welfare Division pursuant to this
3 section, a household must have a household income that is not more
4 than 150 percent of the federally designated level signifying
5 poverty, as determined by the Welfare Division.

6 4. The Welfare Division is authorized to render emergency
7 assistance to a household if an emergency related to the cost or
8 availability of natural gas or electricity threatens the health or safety
9 of one or more of the members of the household. Such emergency
10 assistance may be rendered upon the good faith belief that the
11 household is otherwise eligible to receive assistance pursuant to this
12 section.

13 5. Before July 1, 2002, if a household is eligible to receive
14 assistance pursuant to this section, the Welfare Division shall
15 determine the amount of assistance that the household will receive
16 by using the existing formulas set forth in the state plan for low-
17 income home energy assistance.

18 6. On or after July 1, 2002, if a household is eligible to receive
19 assistance pursuant to this section, the Welfare Division:

20 (a) Shall, to the extent practicable, determine the amount of
21 assistance that the household will receive by determining the
22 amount of assistance that is sufficient to reduce the percentage of
23 the household's income that is spent on natural gas and electricity to
24 the median percentage of household income spent on natural gas
25 and electricity statewide.

26 (b) May adjust the amount of assistance that the household will
27 receive based upon such factors as:

28 (1) The income of the household;

29 (2) The size of the household;

30 (3) The type of energy that the household uses; and

31 (4) Any other factor which, in the determination of the
32 Welfare Division, may make the household particularly vulnerable
33 to increases in the cost of natural gas or electricity.

34 7. The Welfare Division shall adopt regulations to carry out
35 and enforce the provisions of this section and NRS 702.250.

36 8. In carrying out the provisions of this section, the Welfare
37 Division shall:

38 (a) Solicit advice from the Housing Division and from other
39 knowledgeable persons;

40 (b) Identify and implement appropriate delivery systems to
41 distribute money from the Fund and to provide other assistance
42 pursuant to this section;

43 (c) Coordinate with other federal, state and local agencies that
44 provide energy assistance or conservation services to low-income
45 persons and, to the extent allowed by federal law and to the extent



1 practicable, use the same simplified application forms as those other
2 agencies;

3 (d) Establish a process for evaluating the programs conducted
4 pursuant to this section;

5 (e) Develop a process for making changes to such programs; and

6 (f) Engage in annual planning and evaluation processes with the
7 Housing Division as required by NRS 702.280.

8 **Sec. 17.** NRS 702.270 is hereby amended to read as follows:

9 702.270 1. Twenty-five percent of the money in the Fund
10 must be distributed to the Housing Division for programs of energy
11 conservation, weatherization and energy efficiency for eligible
12 households. The Housing Division may use not more than 6 percent
13 of the money distributed to it pursuant to this section for its
14 administrative expenses.

15 2. Except as otherwise provided in NRS 702.150 ~~and~~ *and*
16 *section 14 of this act*, after deduction for its administrative
17 expenses, the Housing Division may use the money distributed to it
18 pursuant to this section only to:

19 (a) Provide an eligible household with services of basic home
20 energy conservation and home energy efficiency or to assist an
21 eligible household to acquire such services, including, without
22 limitation, services of load management.

23 (b) Pay for appropriate improvements associated with energy
24 conservation, weatherization and energy efficiency.

25 (c) Carry out activities related to consumer outreach.

26 (d) Pay for program design.

27 (e) Pay for the annual evaluations conducted pursuant to
28 NRS 702.280.

29 3. Except as otherwise provided in subsection 4, to be eligible
30 to receive assistance from the Housing Division pursuant to this
31 section, a household must have a household income that is not more
32 than 150 percent of the federally designated level signifying
33 poverty, as determined by the Housing Division.

34 4. The Housing Division is authorized to render emergency
35 assistance to a household if the health or safety of one or more of
36 the members of the household is threatened because of the
37 structural, mechanical or other failure of:

38 (a) The unit of housing in which the household dwells; or

39 (b) A component or system of the unit of housing in which the
40 household dwells.

41 ➡ Such emergency assistance may be rendered upon the good faith
42 belief that the household is otherwise eligible to receive assistance
43 pursuant to this section.

44 5. The Housing Division shall adopt regulations to carry out
45 and enforce the provisions of this section.



6. In carrying out the provisions of this section, the Housing Division shall:

(a) Solicit advice from the Welfare Division and from other knowledgeable persons;

(b) Identify and implement appropriate delivery systems to distribute money from the Fund and to provide other assistance pursuant to this section;

(c) Coordinate with other federal, state and local agencies that provide energy assistance or conservation services to low-income persons and, to the extent allowed by federal law and to the extent practicable, use the same simplified application forms as those other agencies;

(d) Encourage other persons to provide resources and services, including, to the extent practicable, schools and programs that provide training in the building trades and apprenticeship programs;

(e) Establish a process for evaluating the programs conducted pursuant to this section;

(f) Develop a process for making changes to such programs; and

(g) Engage in annual planning and evaluation processes with the Welfare Division as required by NRS 702.280.

Sec. 18. NRS 704.771 is hereby amended to read as follows:

704.771 "Net metering system" means a facility or energy system for the generation of electricity that:

1. Uses renewable energy as its primary source of energy to generate electricity;

2. Has a generating capacity of not more than ~~300~~ 500 kilowatts;

3. Is located on the customer-generator's premises;

4. Operates in parallel with the utility's transmission and distribution facilities; and

5. Is intended primarily to offset part or all of the customer-generator's requirements for electricity.

Sec. 19. Section 3 of chapter 330, Statutes of Nevada 2001, as amended by section 2 of Chapter 511, Statutes of Nevada 2003, at page 3496, is hereby amended to read as follows:

Sec. 3. 1. This section becomes effective on July 1, 2001.

2. Sections 1 and 2 of this act become effective on July 1, 2001, for the purpose of adopting regulations and on January 1, 2002, for all other purposes.

~~[3.—This act expires by limitation on June 30, 2005.]~~

Sec. 20. 1. This section and section 19 of this act become effective upon passage and approval.

2. Sections 1 to 18, inclusive, of this act become effective:



- 1 (a) Upon passage and approval for the purpose of adopting
- 2 regulations and performing any other preparatory administrative
- 3 tasks that are necessary to carry out the provisions of this act; and
- 4 (b) On October 1, 2005, for all other purposes.



