
HOUSE CONCURRENT RESOLUTION

ENCOURAGING SINGLE-FAMILY RESIDENCE BUILDERS TO CONSIDER CERTAIN FACTORS THAT WILL FACILITATE INSTALLATION OF PHOTOVOLTAIC SYSTEMS WHEN CONSTRUCTING AND DEVELOPING SINGLE-FAMILY RESIDENCES.

1 WHEREAS, the installation of photovoltaic systems on
2 existing structures can be hindered by initial construction
3 design features that limit the physical space available for
4 installation of photovoltaic systems and related equipment; and
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6 WHEREAS, Act 198, Session Laws of Hawaii 2011, established
7 a working group to study the feasibility of requiring all new
8 single-family residential construction to incorporate design
9 elements to make the structure photovoltaic-ready at the time of
10 initial construction; and
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12 WHEREAS, the working group considered strategies for
13 facilitating the widespread adoption of photovoltaic systems
14 including:
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- 16 (1) Incorporating specific design elements in new
17 residential structures to make the structures
18 photovoltaic-ready;
- 19 (2) Minimizing retrofitting and equipment installation for
20 future photovoltaic accommodation;
- 21 (3) Labeling blueprints with details of photovoltaic
22 system accommodations and connections; and
23 (4) Identifying areas in the State where the use of
24 photovoltaic systems would be impractical or where
25 other renewable energy resources are more readily
26 available; and
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1 WHEREAS, after considering strategies, discussing relevant
2 issues, and investigating alternatives, the working group
3 determined that technology advancement could ultimately render
4 obsolete a policy mandating the incorporation of design elements
5 to make structures photovoltaic-ready at the time of initial
6 construction; and
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8 WHEREAS, a policy mandating the incorporation of design
9 elements to make structures photovoltaic-ready at the time of
10 initial construction could ultimately result in relatively
11 little cost savings depending upon the choices of developers and
12 consumers; and
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14 WHEREAS, the working group recommends against a policy
15 mandating incorporation of design elements and minimal equipment
16 installation to make structures photovoltaic-ready at the time
17 of initial construction; and
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19 WHEREAS, despite the working group's recommendation,
20 certain factors should be considered during the construction of
21 single-family residences to facilitate the installation of
22 photovoltaic systems in the future; now, therefore,
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24 BE IT RESOLVED by the House of Representatives of the
25 Twenty-sixth Legislature of the State of Hawaii, Regular Session
26 of 2012, the Senate concurring, that single-family residence
27 builders are encouraged to consider certain factors to
28 facilitate installation of photovoltaic systems when
29 constructing and developing single-family residences, including
30 whether:
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- 32 (1) A structure has a south-facing roof orientation with a
33 slope of approximately twenty-two degrees for good
34 solar exposure;
- 35 (2) A structure's roof area is adequate to accommodate
36 multiple solar uses, such as solar water heating and
37 photovoltaic energy systems;
- 38 (3) The structural integrity is adequate to accommodate
39 photovoltaic panels and counteract wind loading, also
40 known as up-lift;
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- 1 (4) A structure's blueprints are labeled with photovoltaic
- 2 system components;
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- 4 (5) A structure's electrical panel capacity is sufficient
- 5 to accommodate the total power coming into the
- 6 building from all sources, including power from the
- 7 electric utility grid and photovoltaic energy;
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- 9 (6) A structure's electrical panel location is convenient
- 10 for photovoltaic system interconnections;
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- 12 (7) A structure's electrical panel contains adequate space
- 13 to house a photovoltaic circuit breaker;
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- 15 (8) A structure has an electrical conduit that connects
- 16 the most appropriate solar collection location to the
- 17 electrical panel and other relevant electrical
- 18 components; and
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- 20 (9) The combination of design and orientation of the
- 21 structure precludes production of power from a
- 22 photovoltaic energy system that will fully satisfy the
- 23 structure's electrical load requirements; and
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25 BE IT FURTHER RESOLVED that certified copies of this
 26 Concurrent Resolution be transmitted to the mayors of each
 27 county and the directors of the respective county building
 28 departments.

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 31 OFFERED BY: Denny Coffman

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