
HOUSE RESOLUTION

ENCOURAGING THE PUBLIC UTILITIES COMMISSION AND THE DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, AND TOURISM TO CONTINUE ENERGY ADAPTATION EFFORTS TO ADDRESS PLANNING AND EFFICIENCY AS WIRELESS COMMUNICATIONS AND MOBILE ELECTRONIC DEVICES ALTER ENERGY CONSUMPTION AND DEMAND.

1 WHEREAS, analysts have estimated that current electricity
2 consumption in the global information and communications
3 technologies ecosystem ranges from 1,100 to 1,800 terawatt-hours
4 per year; and

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6 WHEREAS, global electricity consumption by information and
7 communications technologies today is the same as that used by
8 lighting in 1985; and

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10 WHEREAS, per bit, data transmitted over a wireless network
11 consumes more energy than when transported over a fiber optics
12 network; and

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14 WHEREAS, migration from wired internet to the wireless
15 internet through digital devices is happening fastest in
16 emerging markets and worldwide, mobile data traffic has doubled
17 in the past year and is forecasted to increase tenfold in the
18 next five years; and

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20 WHEREAS, current estimates of global electricity used by
21 digital devices in the global residential and commercial sector
22 ranges from 460 to 550 terawatt-hours annually and is comparable
23 to global electricity consumption by residential lighting or
24 refrigeration; and

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26 WHEREAS, data created, used, and transported annually,
27 known as the digital universe, is growing at a faster pace than
28 at any time in history and in the near future, hourly internet
29 traffic is expected to exceed the internet's annual traffic of
30 the year 2000; and

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32 WHEREAS, energy consumption in Hawaii is declining due to
33 conservation efforts and adherence to the State's energy



1 efficiency portfolio standard which was established by Act 155,
2 Session Laws of Hawaii 2009, and set a goal of reducing
3 electricity consumption by 4,300 gigawatt-hours by 2030; and
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5 WHEREAS, Hawaii will face an upward pressure on energy
6 demand due to the rapid expansion of consumer oriented
7 electronic technologies and the mass storage and dissemination
8 of data; and
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10 WHEREAS, the Research and Economic Analysis Division of the
11 Department of Business, Economic Development, and Tourism
12 specializes in energy analysis and is capable of forecasting
13 energy demand in Hawaii; and
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15 WHEREAS, population and economic growth are the driving
16 forces in the world's need for energy and even with substantial
17 gains in efficiency, global energy demand by 2030 will increase
18 by an amount equivalent to adding two United States' worth of
19 consumption; now, therefore,
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21 BE IT RESOLVED by the House of Representatives of the
22 Twenty-seventh Legislature of the State of Hawaii, Regular
23 Session of 2014, that the Public Utilities Commission and the
24 Department of Business, Economic Development, and Tourism are
25 encouraged to continue energy adaptation efforts to address
26 planning and efficiency as wireless communications and mobile
27 electronic devices alter energy consumption and demand; and
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29 BE IT FURTHER RESOLVED that certified copies of this
30 Resolution be transmitted to the Governor; Chairperson of the
31 Public Utilities Commission; Director of Business, Economic
32 Development, and Tourism; and head of the Research and Economic
33 Analysis Division of the Department of Business, Economic
34 Development, and Tourism.

