H.R. NO. 134

## HOUSE RESOLUTION

REQUESTING THE DEPARTMENT OF TRANSPORTATION TO DETERMINE THE FEASIBILITY OF ESTABLISHING AND USING A SOLAR POWERED HIGHWAY LIGHTING SYSTEM ALONG HAWAII'S HIGHWAYS.

1	WHEREAS, Hawaii currently relies on imported oil for over
2	90 percent of its electrical generating power; and
3	
4	WHEREAS, Hawaii's unique global position makes its
5	environment one of the most diverse and fragile environments in
6	the world; and
7	
8	WHEREAS, this same global positioning provides Hawaii with
9	a diverse array of natural resources including continuous trade
10	winds, vast ocean swells, brilliant sunshine, and intense heat
11	from geothermal vents, which if properly harnessed, can supply
12	our state with a large portion of its energy needs; and
13	
14	WHEREAS, solar panels (arrays of photovoltaic cells) make
15	use of renewable energy from the sun, and are a clean and
16	environmentally sound means of converting the sun's light energy
17	into electrical energy; and
18	
19	WHEREAS, the placement of solar panels along state highways
20	is an excellent means to provide electrical power for highway
21	lighting systems or nearby residential neighborhoods, and will
22	help promote the widespread use of solar energy; and
23	
24	WHEREAS, the concept of generating solar power along
25	roadsides for use to power highway lighting systems, as well as
26	supply additional energy to an area's electrical grid, is not
27	new with such systems existing in Europe for almost 20 years and
28	the first solar highway project in the nation being launched in
29	2008 by the Oregon Department of Transportation (ODOT); and



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1 2 3 4 5 6	WHEREAS, the initial success of Oregon's solar highway demonstration project, which supplied about 128,000 kWh per year, has stimulated ODOT to investigate other opportunities to increase solar highway project development, with many of these projects being considered in collaboration with Oregon's investor owned utilities; and
7 8 9 10 11 12	WHEREAS, solar highway projects offer transportation agencies a means of supplying clean energy for the powering of highway lighting systems, and may offer the benefits of reduced electrical costs; and
12 13 14 15 16	WHEREAS, Hawaii's year-round sunshine makes it an ideal location to attempt to establish a solar highway project on our state's highways; now, therefore,
17 18 19 20 21 22 23	BE IT RESOLVED by the House of Representatives of the Twenty-fifth Legislature of the State of Hawaii, Regular Session of 2010, that the Department of Transportation (DOT) is requested to determine the feasibility of establishing and using a solar powered highway lighting system along Hawaii's highways; and
24 25 26 27 28 29	BE IT FURTHER RESOLVED DOT is also requested to submit a report of its findings and recommendations, including a cost- benefit analysis of the establishment and use of a solar powered highway lighting system in Hawaii and any necessary legislation, to the Legislature no later than 20 days prior to the convening of the Regular Session of 2012; and
30 31 32 33 34	BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to the Director of the Department of Transportation.
35 36	Henry OFFERED BY: Janen Claran Tom Brun - Company
	HR HMS 2010-2009



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