Hawaii has made great strides in achieving its renewable energy goals, and now finds itself in a new energy ecosystem, which requires an update to existing methods, including implementing grid modernization and interconnection plans, as well as bridging the gap between conventional and renewable energy sources with transitional fuels, according to a new state report.

The 2014 annual report, spearheaded by the Hawaii Department of Business, Economic Development and Tourism's state Energy Office, said that this year the state surpassed its interim goal for renewable energy generation two years ahead of schedule.

"As a result of this progress, we are now committed to going beyond the original target of 40 percent renewable energy by 2030 as outlined in the Hawaii Clean Energy Initiative," Richard Lim, former director of DBEDT, said in the report. "2014 also marked the launch of the DBEDT-initiated Green Energy Market Securitization program and the establishment of the Green Infrastructure Authority. The creation of innovative programs like this will help raise the capital needed for Hawaii to pursue its clean energy goals."

As of Dec. 31, 2013, the state had achieved about 18 percent renewable energy, surpassing the 2015 interim goal of 15 percent.

Combined with a 15.7 percent reduction in energy use through conservation and efficiency, the state is nearly halfway towards its 2030 goal of 70 percent clean energy, and there is no longer any doubt that renewable energy in Hawaii can compete favorably on price with the avoided cost of generating electricity from oil, the report said.

Looking ahead, the state is now embarking on a second phase of the HCEI, called HCEI 2.0, which includes taking a new look at strategies to reduce petroleum use in the transportation sector.

This sector is a key part of the effort because it accounts for about two-thirds of the state's oil consumption.

HCEI 2.0 also will continue to emphasize building an energy innovation cluster and modernizing the grid.

To see the entire report, click on this link.

It should be worth noting that Hawaiian Electric Co., which is being bought by Florida-based NextEra Energy Inc., has laid out a new energy plan to be approved by the Hawaii Public Utilities Commission that hopes to increase renewable energy resources to 65 percent, tripling solar and lowering customer bills 20