

Energy Transition with the Initiatives of Communities

Mark Glick

Hawaii State Energy Administrator

Renewable Energy Institute Symposium

Tokyo, Japan

September 9, 2016



HAWAII STATE
Energy Office



HAWAII STATE
Energy Office



Hawai'i Clean Energy Initiative

Energy independence ... it's up to us.



The LAND ...



The SEA ...



The WIND ...



The SUN ...

www.hawaii-clean-energy-initiative.org



U.S. DEPARTMENT OF
ENERGY



STATE OF
HAWAII



HAWAII STATE
Energy Office



2045



THE WALL STREET JOURNAL.

“there’s no better place
to look than Hawaii”



\$329 billion



HAWAII STATE
Energy Office

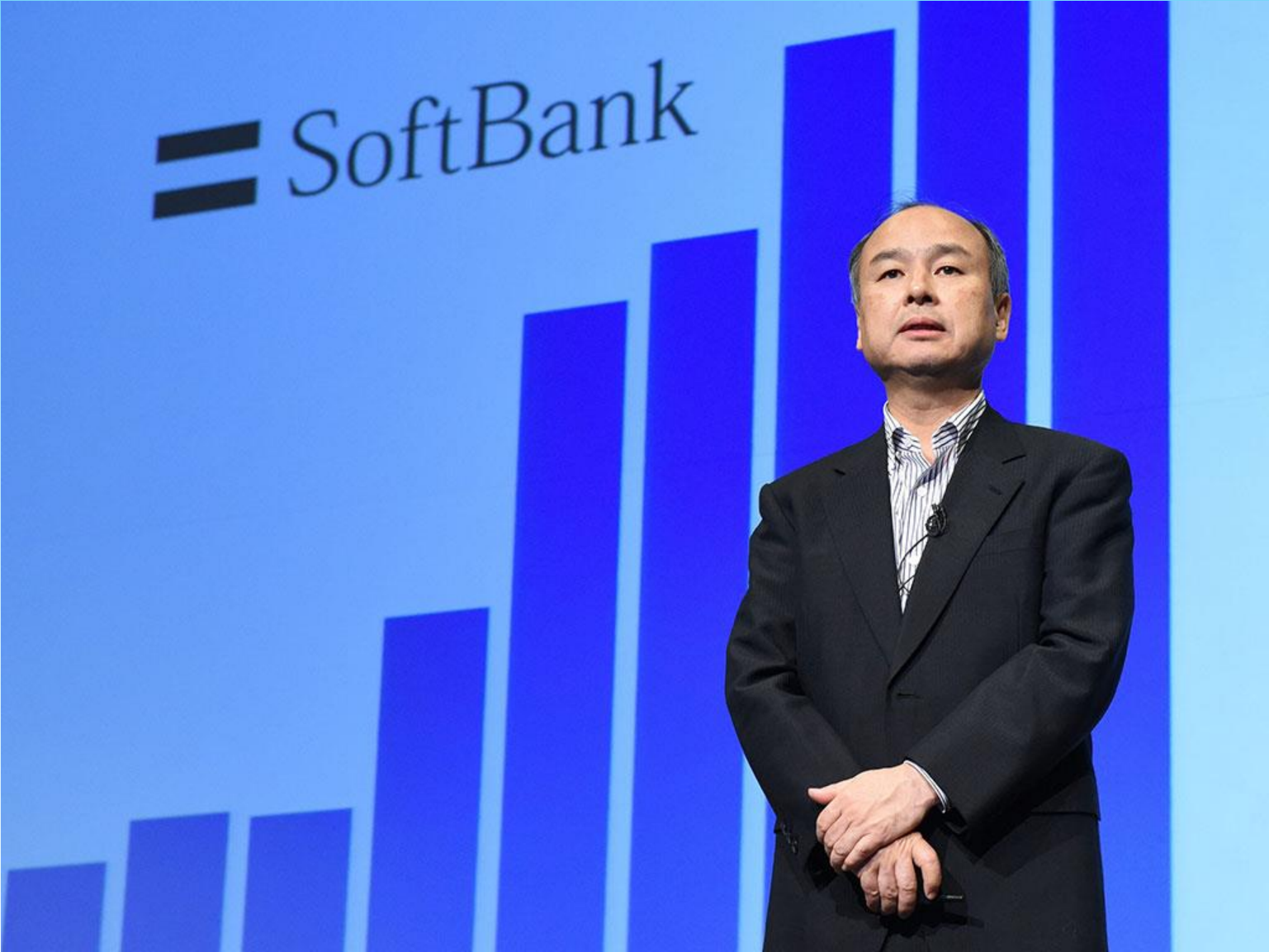


WORLD CLIMATE SUMMIT

PARIS, FRANCE, 2015



HAWAII STATE
Energy Office

The image shows a man in a dark suit standing on a stage. Behind him is a large blue screen displaying the SoftBank logo (two horizontal bars) and the word "SoftBank" in a serif font. To the right of the text is a bar chart with seven vertical bars of increasing height from left to right. The man is looking slightly upwards and to the right.

SoftBank



HAWAII STATE
Energy Office



The Secretary of Energy
Washington, DC 20585

May 10, 2016

The Honorable Brian Schatz
United States Senate
Washington, DC 20510

Dear Senator Schatz:

Thank you for your letter demonstrating the value of your leadership to Hawaii and your support for Hawaii's sustainable energy goals. As you know, the Department of Energy (DOE) is pleased to support Hawaii as it undertakes the most ambitious energy transition in the United States. The progress Hawaii has made to date is impressive, and is inspiring others to emulate your achievements.

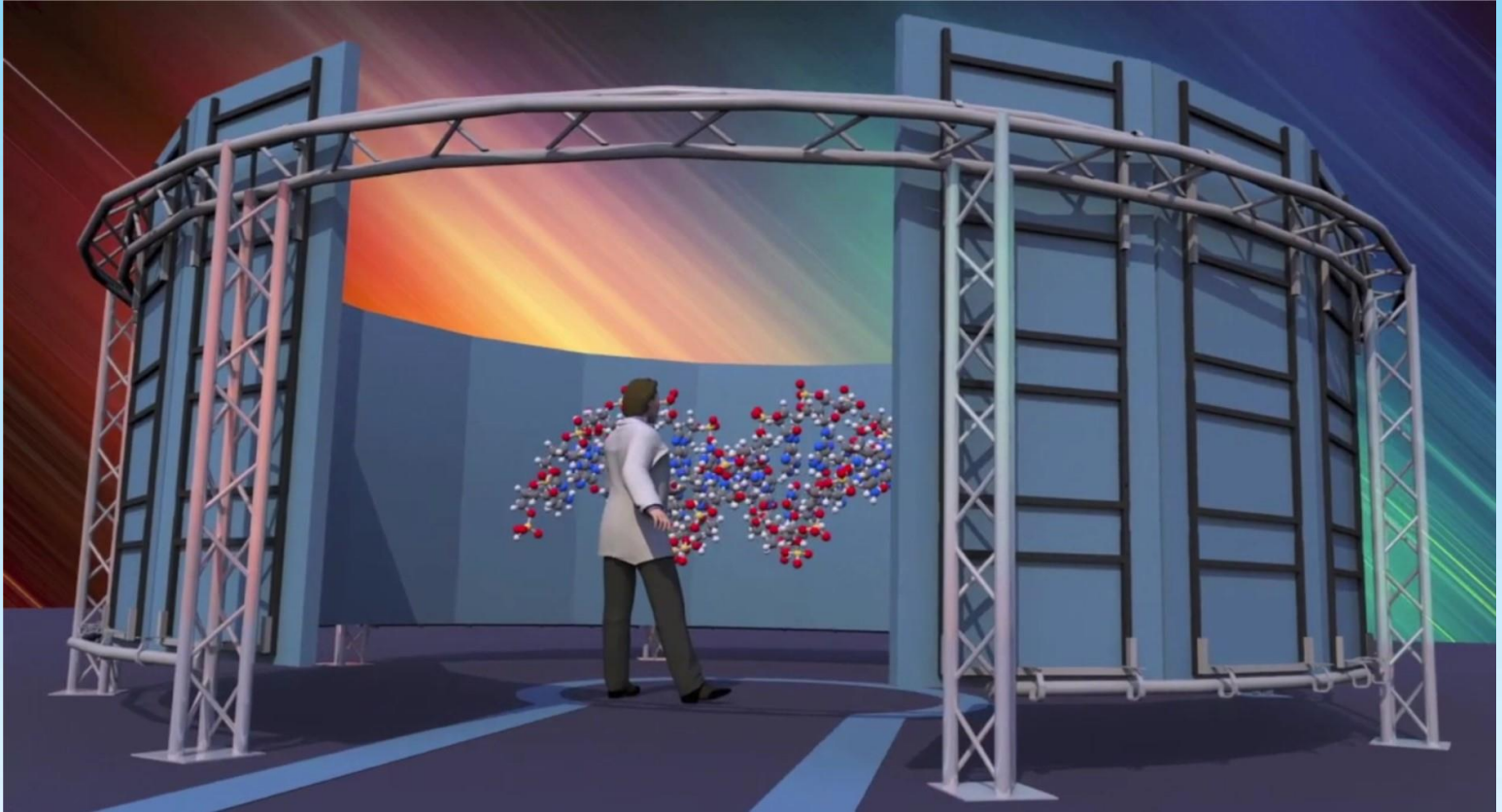
The renewed Memorandum of Understanding (MOU) between Hawaii and the Department has the flexibility to assist with the wide variety of tasks and issues identified in your letter. To that end, DOE intends to continue to provide information and technical assistance, whether funded through the Office of Energy Efficiency and Renewable Energy (EERE) or the Office of Electricity Delivery and Energy Reliability (OE), and executed by the National Renewable Energy Laboratory (NREL), or any other National Laboratory, as it has since the beginning of our collaborative efforts in 2008. This MOU also provides for the relationship to evolve as Hawaii's needs change, and will allow many different programs within DOE and the national lab system to support Hawaii's energy goals.

For example, I am encouraged that one of the recent Grid Modernization Laboratory Consortium projects will directly benefit Hawaii through a research partnership that includes Sandia National Laboratories, the Hawaiian Electric Companies, and the Energy Excelsior. Research like this, determining how well inverters can enable distributed generation to support grid frequency, perfectly illustrates the potential for Hawaii's leadership to benefit its sister states, as well as other locations around the world.

I am also encouraged to know that DOE staff have already begun collaborating with Hawaii's State Energy Office on how to support the inclusive and iterative planning process identified in your letter. The visualization capabilities of the Center for Advanced Energy Studies at Idaho National Laboratory and the Insight Center at NREL's Energy Systems Integration Facility, provide an exciting opportunity to broaden the reach of complex energy modelling to involve more stakeholders throughout Hawaii. When successful, this approach of making the results of energy models highly impactful and readily understood stands to benefit policymakers, utilities,



HAWAII STATE
Energy Office



HAWAII STATE
Energy Office

Maha I o

Mark Glick

energy.hawaii.gov



HAWAII STATE
Energy Office

energy.hawaii.gov



HAWAII STATE
Energy Office