

Playbook Lesson Learned

Phase 2: Assessing Opportunity Pathways

Assessing Pathways in the U.S. Virgin Islands and Hawai'i

Challenge

When setting energy goals, a common challenge is measuring success toward meeting those goals. Establishing an energy baseline enables more informed energy decision-making and provides a way to measure progress toward meeting goals. A key step in developing a road map to meet clean energy goals is determining which energy efficiency and renewable energy technologies the market will support and best use available resources.

Hawai'i Clean Energy Initiative Scenario Analysis Timeline

Quarter	2008				2009				2010			
	1	2	3	4	1	2	3	4	1	2	3	4
HCEI Wedge Analysis												
HCEI Cost Analysis												
30% Energy Efficiency Analysis												
Biofuels Analysis												
Transportation Analysis												

Solution

Scenario analyses in the U.S. Virgin Islands (USVI) examined factors such as comparing business as usual versus deploying an aggressive mix of energy efficiency and renewable energy to achieve the territory's goal of 60% clean energy by 2025. In Hawai'i, the U.S. Department of Energy (DOE) assisted with various scenarios to achieve the state's goal of 70% clean energy by 2030. In both instances, the work:

- Facilitated discussion among key stakeholders
- Identified potential policy options and evaluated their impacts on reaching the goal
- Presented possible pathways to attain the goal based on available technologies
- Evaluated capital costs
- Provided technology and market information to help key stakeholders make more informed decisions about next steps

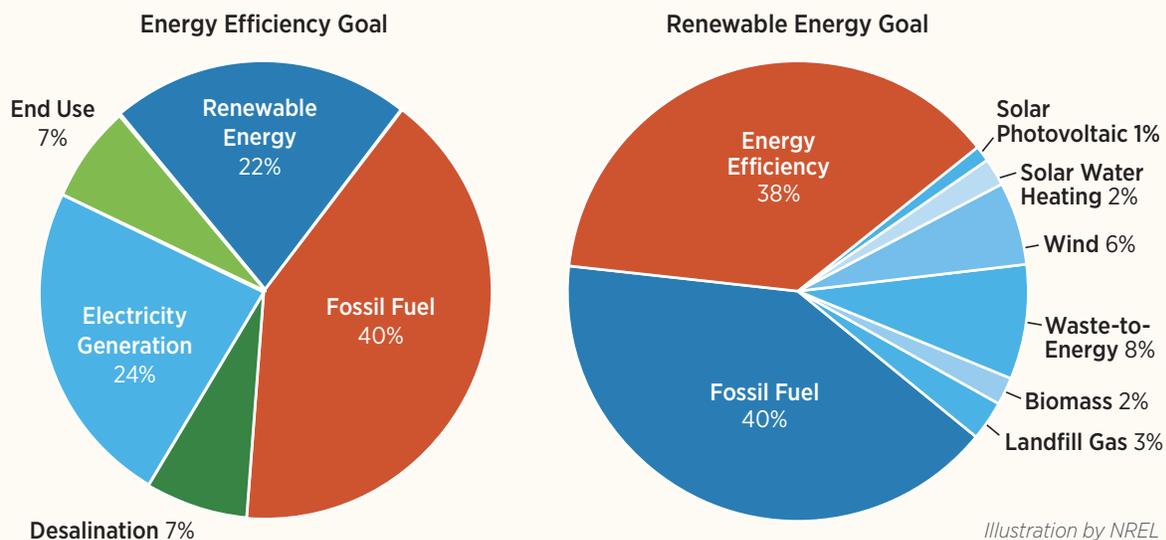
- Conducted feasibility studies to determine which energy efficiency and renewable energy technologies to deploy to meet the goals
- As part of the USVI Energy Road Map, DOE evaluated the cost and energy savings that would be achieved through end-use, residential, and government and business energy efficiency actions. Various renewable energy resources and costs, including solar, wind, biomass, landfill gas, and waste-to-energy were also assessed.

Additional factors that were included in the scenario analysis for the USVI included:

- Grid integration
- Land constraints
- Policy considerations (regulatory processes and building codes)
- Financing issues (up-front versus long-term project development costs)
- Cultural sensitivities (aesthetic concerns and resistance to change).

As in the USVI and Hawai‘i, the data and analyses in Phase 2 are key to charting realistic pathways to transition from the current energy system.

The Energy Mix Needed to Meet USVI's 60% Clean Energy By 2025 Goal



This lesson learned is one of many provided in the Energy Transition Initiative Islands Playbook—an action-oriented guide to help island communities successfully initiate, plan, and complete a transition to a clean energy system and eliminate dependence on imported fuels. See the full Islands Playbook at www.eere.energy.gov/islandsplaybook.

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