Summary: The $3.0 Billion Efficiency Prize

- Kyle Datta

Hawaii's $3.5 billion annual energy bill represent a massive, regressive tax to Hawaii, equal in magnitude to nearly the entire general fund taxes. Hawaii can reduce its energy bill by 17%, save $230 MM/yr or $3.0 billion in energy costs over a 20 year period, eliminate 7-8 million barrels of oil per year by 2023, reduce CO2 emissions by 23 million tons (achieving a Kyoto-compliant economy by 2023), and add 2,800 new skilled jobs. The savings are equally split between transportation and electrical efficiency. These initiatives will return $500/capita to Hawaii's taxpayers by 2023. Energy efficiency is clearly the lowest cost alternative to providing real energy security and improving environmental quality.

The purpose of Rocky Mountain Institute's study on Hawaii's transportation and electrical efficiency options is to provide policy makers with a clearly defined set of options to capture the energy efficiency prize. Neoclassical prescriptions for implementation of energy policies using prices, taxes, regulation, and deregulation are well known but politically fraught, though authentic competition in the context of a least-cost strategy can be effective. Yet unknown to many analysts and policymakers is a powerful new portfolio of other ways to accelerate energy efficiency and renewable options, giving Hawaii the opportunity to back out entire barrels of oil and improve its energy security.

Capturing the efficiency prize is remarkably straightforward. The total cost for the recommendations below, including foregone gasoline taxes and the costs of the efficiency measures is less than 30% of the value created. Our recommendations:

What the Legislature can do:

- Enact feebates for hybrid vehicles that sunset when market penetration reaches 10%

- Enact a mandatory tire labeling program
- Enact Appliance standards for minimum efficiency
- Authorize public financing of energy efficiency and renewables

What the Regulators can do:

- Eliminate the two year payback rule
- Make the IRP process an enforceable guide for future utility actions
- Eliminate utility disincentives for conservation through revenue decoupling and create positive shareholder incentives
- Require all source bidding for megawatts and negawatts

What the State and County Government can do:

- Fully fund and resource the DCA and PUC
- Provide leadership by making state facilities and fleets energy efficient , financing state building initiatives and mandating efficiency for government and school vehicles

What the Hawaii's energy companies can do:

- Implement new set of DSM programs based on national best practices
- Correctly define full costs and risks in upcoming IRP process
- Prepare for shift in petroleum product demand