Hawaii Energy Policy Forum:
10 Point Plan for a Sustainable Energy Future

Kyle Datta, Senior Director
Our Challenge

- Energy prices have nearly doubled and increasing fuel prices cost the state more than $750 million dollars (not including jet fuel)

- Energy costs have risen by $1,850 / household in the past three years. Currently, energy costs each household in Hawaii $7,300/year, more than three times what we pay for state income tax

- We want to continue economic growth, but our power infrastructure in Oahu and Hawaii County are reaching the limits of existing capacity

- Our profligate energy use is contributing to global and local environmental decline

Source: DBEDT, The Data Book 2004
Slow Progress in Reducing Hawaii’s Strategic Dependence on Oil

- We are becoming less energy efficient (since 2001)
  - Absolute Energy Demand increasing: + 2.6 %/yr, +1- 2 MM bbls oil/yr
  - Energy intensity/capita increasing : + 1.5%/yr,
  - Energy intensity/GSP flat/decreasing: - 0.4%/yr
  - IOU DSM programs flat: - 0.3%/yr, half the national average

- Our energy mix stubbornly remains 89% dependent on imported fossil fuels

- We are making very slow progress towards independence
  - Recent renewable initiatives will increase our renewable power to 11%
  - If sugar companies fully utilize ethanol production credits, we could add 1 MM bbls
  - In total, by 2010, our renewable energy mix would be 6%
Hawaii is the nation’s most oil dependent state which leads to obvious consequences: our security, economic welfare, and environment.
Hawaii’s Current Energy System – 2003
(in Millions of Crude Oil Equivalent)

- 90% Oil Dependent
- Vulnerable to price and supply disruption

Oil = 48.6
Renewable
Biofuels = 1.07
Renewable
Power = 1.17
Coal = 3.11

Refining

Terminals

Power = 14.6
Planes = 17.8
Trucks = 7.71
Cars = 9.26
Commercial Industrial
Process = 4.16
Residential = 1.74
Waste
= 0.79

Source:
• 90% Oil Dependent
• Vulnerable to price and supply disruption
Hawaii’s Future Energy System

- 30-40% More Efficient
- 20-30% From Renewables
- 50% Less Oil Dependent

- Oil
- Refining
- Renewables
- Biofuels
- Renewable Power
- Coal
- H₂
- Power
- Waste
- Terminals
- Planes
- Next Gen Trucks
- Mass Transit
- Hybrid/Plug-In Cars
- Commercial Industrial Process
- Buildings DG/PV

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Ten Point Plan

1. Expand Renewable Opportunities
2. Energy Efficiency in Public Buildings
3. Increase Solar Water/Energy Efficient Appliances
4. Policies and Regulations to Encourage Efficiency and Renewables
5. Preserve Regulatory Protections
6. Invest in Planning for Sustainable Communities
7. Improve Transportation Energy Efficiency and Options
8. Support Research and Development of Alternative Fuels
9. Encourage Development, Production and Use of Biofuels
10. Ensure Secure System for Fuel and Electricity Grid
Hawaii’s Legislature has provided the foundation

### Alternative Fuel
- Support for Hydrogen fuel cell development

### Biofuel
- 10% Ethanol Blend

### Regulatory Policies

### RPS
- Act 95

### REITC

### Act 77
- Energy efficiency objective for state facilities
HEPF Proposed Legislation fill in many of the gaps

**Alternative Fuel**
- Support for Hydrogen fuel cell development

**Feebate**
- Fee for inefficient cards, rebate for efficient cars

**Biofuel**
- 10% Ethanol Blend

**Efficiency**

**Sustainable Communities**

**RFS**

**Grid Security**

**Regulatory Policies**
- Recommendations to amend policy and regulation

**State Efficiency**
- LEED Silver standard for state buildings

**RPS**
- Act 95 amended

**REITC**
- Remove sunset
- Increase caps

**Act 77**
- Energy efficiency objective for state facilities
Sustainable 21st Century Leadership Will Take All of Us Working Together
Why should you care enough to act?