Status Report—DBEDT’s Energy Program

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Clean Energy Must Remain a Priority for the State

• Energy Security
• Energy Costs at $100/bbl oil
• Implications of Carbon Regulation
• Continue Investment in Energy Efficiency
• Achieving Full Potential of Renewable Energy
• Sending Right Signals to Markets
Strong, Robust Energy Program Needed

• State Policies Require Proper Execution
• Need Appropriate Organizational Structure
• Need Reliable Source of Funding
• Necessary Authority for Success
• Ability to Attract and Retain Qualified Personnel
Expectations are Increasing

• Execution of Energy for Tomorrow
• Lead by Example
• Interagency Wheeling Docket/PUC intervention
• Senior Staff on NGA Task Force
• Consultations with Renewable Energy Developers
• Biofuels Program Coordination
• Greenhouse Gas Policies
Success Story: Lead by Example

• Energy Star Bldgs—5 certified
• LEED Bldgs—3 completed, many under design, architect/engr trained
• DAGS developing statewide performance contract RFP using DBEDT info
• DOT/FTZ issued a RFP for solar PV, as much as 34 MW
• State Capitol assessment
• Institutional Commitment by agencies
Status Report: Biofuels

• Act 240, 2006—Biofuels Assessment Proj.
  – Contractor: Black and Veatch, UH, Stillwater Assoc.
  – Feedstock assessment by Jan 2008
  – Technology and crop assessment by Jul 2008
  – Stakeholder engagement, integration, overall completion through Jul 2009

• Act 253, 2007—Bioenergy Master Plan
  – Funding released
  – RFP drafted, to be issued early 2008

• Act 130, 2007—Non-Ethanol Gasoline
  – Formal Report Submitted to Legislature
  – Non-blended gasoline available on all islands except Maui
Status Report: GHG Task Force

• Task Force Appointed (Act 234)
• Staffed jointly by DBEDT and DOH
• 3 Meetings of the TF to date
• Assessment Stage—Testimony of Experts
• Seeking Release of Funds
• Preliminary work plan developed
• Will seek contract support for inventory, policy analysis, and program management
Current Challenges for DBEDT’s Energy Program

• Personnel

• Finances

• Keeping Up with Expectations

• Institutionalizing and Sustaining Program
Personnel Issues

- Level of existing staffing inadequate to address workload, assignments and expectations—see Table 1 staff analysis, new starts

- Expect staffing issues to be exacerbated by staff retirements

- Historically energy staff have been cutback, with positions recently frozen and reallocated to other functions within DBEDT
Table 1 Staff Analysis—New Starts

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<th>Legis Session</th>
<th>Fiscal Year</th>
<th>Fiscal Year - New Requirement</th>
<th>FTE Estimate/Request</th>
<th>FTE Authorized</th>
<th>Additional FTE Needed</th>
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Finances

• Rapidly diminishing PVE (“oil overcharge”) funds—see Figure 1
  – 4 years remaining at current expenditure rate
  – Of SID’s FY08 budget, 66.6% and 14 filled Energy Program positions out of 20 total are supported by PVE funds.

• Just to maintain current services would require converting $1.94mm of MOF to general funds within 4 years

• Impacts besides $--e.g. state ethanol/biofuels, energy emergency preparedness, utility policy, renewable hydrogen programs implemented using PVE funded staff
Figure 1 Federal PVE Depletion Chart

Petroleum Violation Escrow Fund Balances

Beginning Balance
Total Revenues
Personal Services
Other Operations
Total Expenditures

Fiscal Year
2004 2005 2006 2007 2008 2009 2010 2011
SID Strategic Objective—Supplemental Funding through Grants

- “Stretch” PVE dollars
- Leverage appropriated federal funds from formula grants
- High early success rate of competitive awards
- Support from Congressional delegation
- Federal special project award now gone
- Increased competition among states
Trend Comparisons of Annual (FY) Funding Levels from Awards of Competitive Federal Grant Funds to Hawaii State Energy Program

Note: Both five-year and three-year moving averages are based on the grant funding awards over the 13 fiscal years, 1995 through 2007.
DBEDT SID Annual Operating Budget – Federal (USDOE), and State GF Funds – Budgeted, and "Non-Budgeted"* Appropriations

Fiscal Years 2001 through 2008

New Requirements
New Funding

2007 – *Energy for Tomorrow*
- Biofuels Study
- Renewable Hydrogen
- LBE Efficiency

2008
- Greenhouse Gas Limits
- Biofuels Master Plan
- 1-Stop Renewables Permitting ($0 - Unfunded Mandate)
- Certify Sustainable Palm Oils ($0 - Unfunded Mandate)
- Report No Ethanol Gas ($0 - Unfunded Mandate)

Staff Resources: Net **loss** 1 position...

*Non-Budgeted GF*: i.e., Legislative appropriations via separate bills; e.g., Act 234, SLH 2007 – Greenhouse Gas Reduction Bill, etc.
Additional FTE Are Essential To Implement Priority Energy Initiatives -- Restoration of Previously Authorized Levels Minimum to Meet New Requirements

*Non-Budgeted GF; i.e., Legislative appropriations via separate bills; e.g., Act 234, SLH 2007 – Greenhouse Gas Reduction Bill, etc.
What Do We Need?

- Personnel—6 additional FTEs
  - Biofuels Program Manager
  - Renewable Hydrogen Prog. Mgr.
  - Energy Economist/PUC lead
  - Energy Research Statistician
  - Greenhouse Gas TF Program Manager
  - Project Assistant/Researcher
What is in DBEDT’s Budget Request (MOF)

- Biofuels Program Manager (U)
- Renewable Hydrogen Prog Mgr (B)
- Energy Economist/PUC Lead (U)
- Energy Research Statistician (U)

- Energy Permit Facilitator (U)
  - Ref: Report on SCR 164, Streamlining Permitting
What Do We Need?

• Funding
  – $1.2 MM to complete Biofuels Master Plan
  – $ 0.7 MM to complete GHG program effort
  – $ 0.3 MM for contract support, PUC dockets
  – $ 0.3 MM for technical contractor for LBE—Perf. Contracts, Commissioning, LEED studies
  – $0.1 MM for technical support for sustainable bio-oils
Funds in DBEDT Budget Request

- $0.7 MM for Bioenergy (U)
- $0.3 MM for PUC Docket support (U)
- $0.2 MM for LBE (U)

Note: (1) U funds represent transfer from Environmental Response Revolving Fund. (2) Positions and funding for GHG not in admin budget.
Conclusions

• SID energy staff has been “stretched” for several years
• Need to address staffing, or
  – Division performance expectations will not be met
  – Quality and timeliness of outputs will deteriorate
• Must address near-term depletion of PVE funds
• Timely to address appropriate organizational questions as well
• Transition being given the support and attention it needs