HEPF Energy Informational Briefing:
REPORT FROM THE HAWAI'I PETROLEUM INDUSTRY

Lance Tanaka
Tesoro Hawaii Corporation
Co-Chair, Hydrocarbon Future Working Group
January 22, 2009
New Leadership Opens Doors

Tuesday, Jan. 20, 2009 – In a message to employees:

“At noon Eastern Time today our nation will inaugurate a new leader. The inauguration is a momentous occasion for our country, for the world, and for every individual whether or not they voted for President-elect Obama. I encourage you to watch or listen to his inaugural address.

“We live in a nation that values and cherishes change as a driving force for success. Today, more than ever, we need new leadership. I hope this change brings new opportunities and improved economic conditions.”

Bruce Smith
Chairman & CEO
Tesoro Corporation
Key Messages to Policy Makers

- The petroleum industry wants to have a valued role for years to come
- Hawaii needs all the abundant, reliable and affordable energy sources it can harness
- Policies should balance renewable energy initiatives with established energy sources
- A balanced energy mix mitigates Hawaii’s unique supply risks
Industry is Engaged

Many petroleum companies are voluntarily reducing emissions and developing new technologies

- Renewables
- Conservation and energy efficiency
- Improving efficiency of existing technology
- Hydrogen
- Promising new technologies
- Research projects
#10 of HEPF Ten-Point Plan:

*Ensure the security and reliability of energy supply and distribution*

- Cannot be achieved by swapping renewable fuels for fossil fuels
- Coordinated transition is needed
- Policies promoting efficiency, renewables and conservation should not be tied to serving electricity needs only
What Price Policy?

“The current profits of these refineries are poor, and in light of the regulatory issues noted, the question of whether or not one or both refiners will close may be a question of when, not if.”

ICF International
Consultant to the
Public Utilities Commission
(The Honolulu Advertiser, Jan. 16, 2009)
What Price Policy? (continued)

“If there’s no local market [for petroleum products], the refineries won’t survive.”

Kang Wu
Senior Fellow
East-West Center

(OPISNET.com, Jan. 13, 2009)
A plan to develop alternative energy sources reduces oil imports… [but] there are relevant energy economics issues which may not have been taken into account. Even with oil at $50 - $100/bbl it’s not clear that petroleum isn’t a compelling energy choice.

The most likely energy outcome for Hawaii is that petroleum will provide a base source of power for a large portion of the economy, Brewbaker said, but alternatives will supplement that…

Paul Brewbaker  
SVP & Chief Economist  
Bank of Hawaii  
OPISNET.com, Jan. 13, 2009)
Strategic Value of Petroleum Industry

Petroleum powers the air, water and highway transportation systems that drive the state’s economy

- Jet fuel
- Gasoline
- Diesel
- Fuel Oil
- Asphalt
- Bunker fuel
Industry Seeks Stable Relationship

Mature, established industry with a lot to offer is looking for a collaborative relationship with the state and other energy producers.

- Delivery infrastructure
- Storage facilities
- Sourcing, optimization best-practices
- Globally connected
- Wants to participate in diversifying energy sources
Advantages of Enhanced Relationship

- Allows continuation of strategic fueling facilities
- Provides assets to achieve long-term, comprehensive energy policy
  - Coordinated transition to renewable fuels relative to Hawaii Clean Energy Initiative
- Energy security vis-à-vis reduced risk of dependency on imported finished products
## Future Energy Demand in Perspective

<table>
<thead>
<tr>
<th>Consumption</th>
<th>2006</th>
<th></th>
<th>2030</th>
<th></th>
<th>% Change</th>
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<tbody>
<tr>
<td></td>
<td>Quads</td>
<td>% Share</td>
<td>Quads</td>
<td>% Share</td>
<td></td>
</tr>
<tr>
<td>Oil*</td>
<td>39.55</td>
<td>39.7%</td>
<td>41.22</td>
<td>34.9%</td>
<td>4.2%</td>
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<tr>
<td>Natural Gas</td>
<td>22.30</td>
<td>22.4%</td>
<td>23.39</td>
<td>19.8%</td>
<td>4.9%</td>
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<tr>
<td>Coal</td>
<td>22.50</td>
<td>22.6%</td>
<td>29.90</td>
<td>25.3%</td>
<td>32.9%</td>
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<tr>
<td>Ethanol</td>
<td>0.47</td>
<td>0.5%</td>
<td>2.01</td>
<td>1.7%</td>
<td>327.7%</td>
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<td>Nuclear Power</td>
<td>8.21</td>
<td>8.2%</td>
<td>9.57</td>
<td>8.1%</td>
<td>16.6%</td>
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<tr>
<td>Hydropower</td>
<td>2.89</td>
<td>2.9%</td>
<td>3.00</td>
<td>2.5%</td>
<td>3.8%</td>
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<tr>
<td>Other Biomass and Renewables**</td>
<td>3.60</td>
<td>3.6%</td>
<td>8.91</td>
<td>7.6%</td>
<td>147.5%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>99.52</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>118.01</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>18.6%</strong></td>
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<td>Oil and Gas</td>
<td>61.86</td>
<td>62.2%</td>
<td>64.61</td>
<td>54.7%</td>
<td>4.4%</td>
</tr>
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<td>Oil, Gas and Coal</td>
<td>84.36</td>
<td>84.8%</td>
<td>94.51</td>
<td>80.1%</td>
<td>12.0%</td>
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<td>All Other Total</td>
<td>15.17</td>
<td>15.2%</td>
<td>23.5</td>
<td>19.9%</td>
<td>54.9%</td>
</tr>
</tbody>
</table>

*Oil equals Liquid Fuels and Other Petroleum excluding Ethanol, Biodiesel and Liquids from Biomass, AEO 2008, Table A17
**Other Biomass and Renewables includes Biodiesel and Liquids from Biomass, AEO 2008, Table A17
Source: EIA, AEO 2008

Chart compiled by Western States Petroleum Association
Future Energy Demand (continued)

- The U.S. will require 19% more energy in 2030.

Source: EIA, AEO 2008

Oil* excludes ethanol and other biofuels, they are counted in biomass and renewables

Chart compiled by Western States Petroleum Association
Help or Hinder?

Recent policies directed at the petroleum industry have led to unintended consequences

- Cap on wholesale gasoline prices: Law suspended after prices rose rather than abated
- Ethanol blending mandate: Without in-state production, refiners are forced to continue to import the costly blend stock
Petroleum Industry Monitoring, Analysis and Reporting (PIMAR) Program:

“The state’s suspension of a gasoline price cap hasn’t resulted in excessive or inexplicable increases at the pump.”

ICF International
[In a report to the PUC analyzing Hawaii petroleum pricing date]
In Closing

- Petroleum companies are engaged in developing new technologies.
- Developing reliable, abundant and affordable energy sources beyond those that apply to electricity is in the public’s best interest.
- Hawaii needs all the energy sources it can harness – including petroleum.
- Balancing existing energy sources with renewable sources is critical.