

# Integrated Resource Planning (IRP-4)

## Public Information Meeting

Kapalama Elementary School Cafeteria  
June 26, 2008

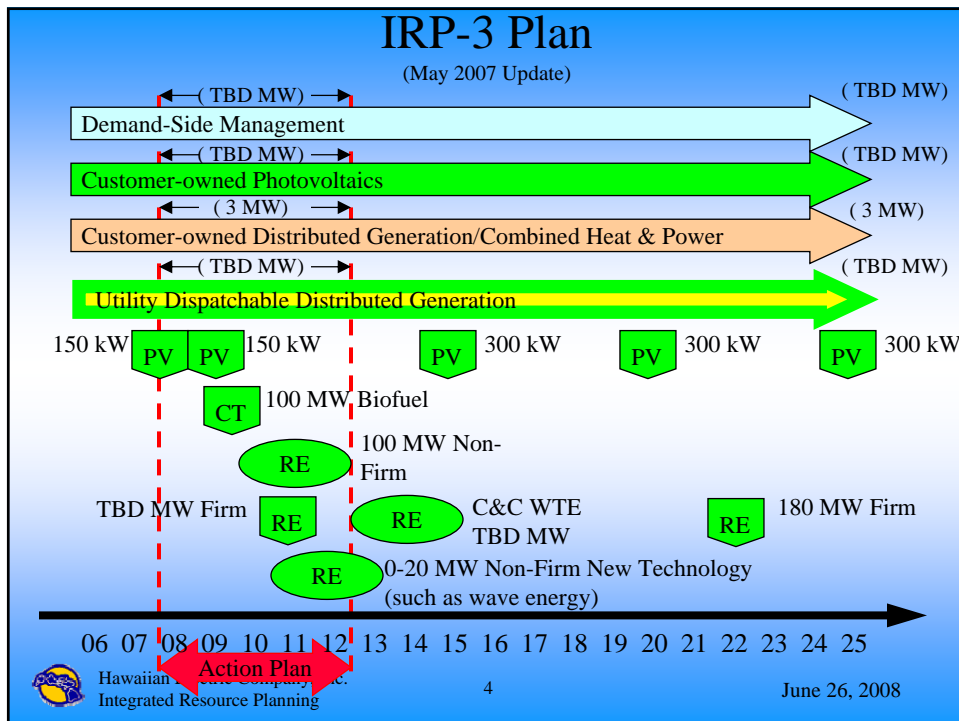


# Agenda

1. Background and Key Assumptions
2. Potential Future Resources
3. Discussion on Key Questions



# Background Information



## The Economic Parameters of Climate Change Regulation are Expensive and Far Reaching

- We cannot have environmental protection without paying for it directly and/or by changing our lifestyles.
- The intention of climate change legislation is to reduce energy demand for carbon fuels by increasing prices.
- This goal is the same for State, federal and international greenhouse gas initiatives.



## Act 234 Necessitated Assessing the Impact of GHG Regulation in IRP Process

- ACT 234 Specifies:
  - Compliance Target: Reduce emissions to 1990 levels
  - Compliance Date: We need to meet target by Jan 1, 2020.
  - The mechanics of implementation will be based on recommendations made by the Greenhouse Gas Emission Reduction Task Force by 2010.



## GHG Uncertainties and Goals for the IRP Process

- Major Uncertainties
  - State and Federal regulation mechanisms not yet established.
  - Fuel sources and prices.
  - Infrastructure and local impacts.
- Far Reaching Strategic Impacts
  - Will affect every aspect of HECO planning including Demand, Equipment (new Renewable projects and retirement of existing plants), Fuels, DSM, Rates & Bills
- IRP4 Approach
  - Address major aspects of greenhouse gas issue
  - Increase transparency
  - Make conservative assumptions
  - Evaluate multiple scenarios
  - Identify major impacts but recognize that precision or definitive conclusions are not possible at this stage
  - Explore new analytical tools

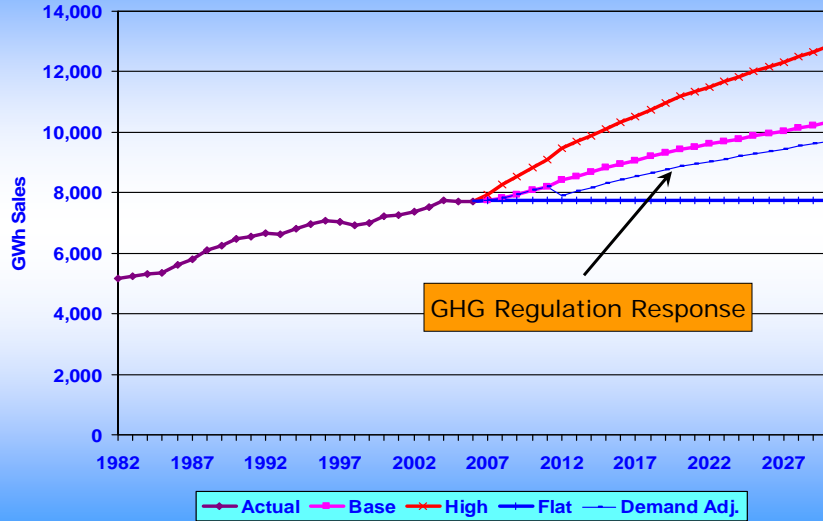


## Key Assumptions



# HECO Sales Forecast

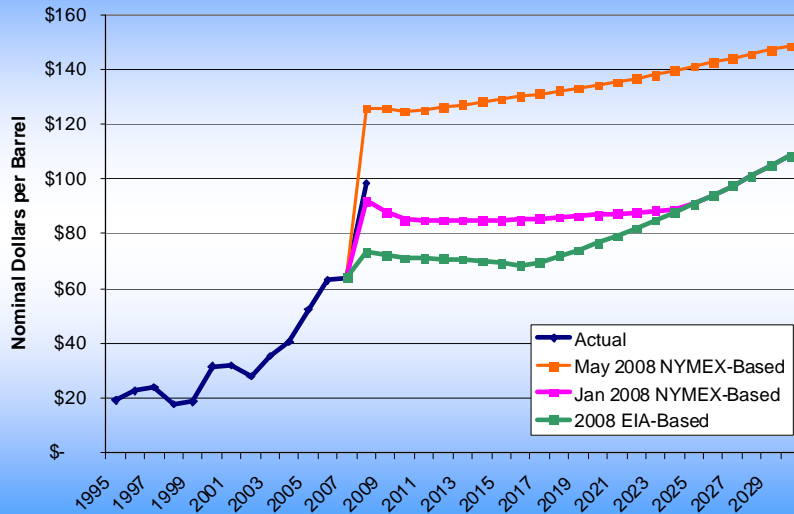
(Oahu GWh Sales without Future DSM)



Hawaiian Electric Company, Inc.  
Integrated Resource Planning

# HECO Fossil Fuel Oil Price Forecast

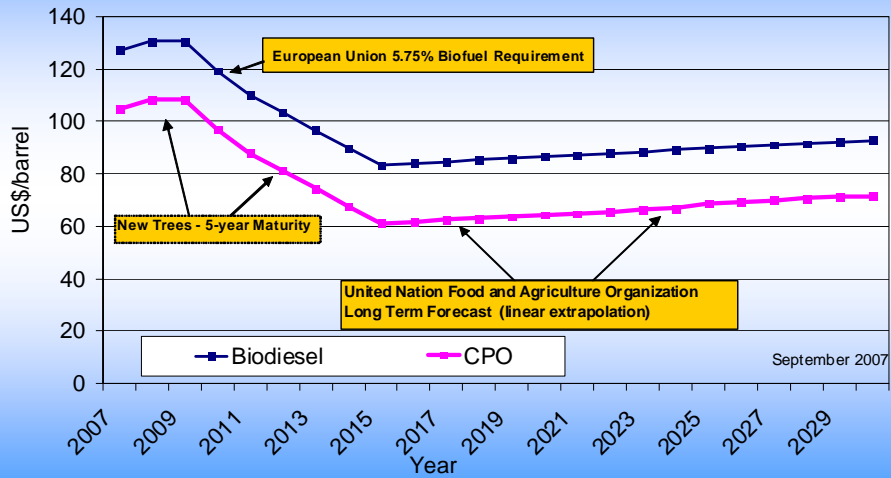
Low Sulfur Fuel Oil



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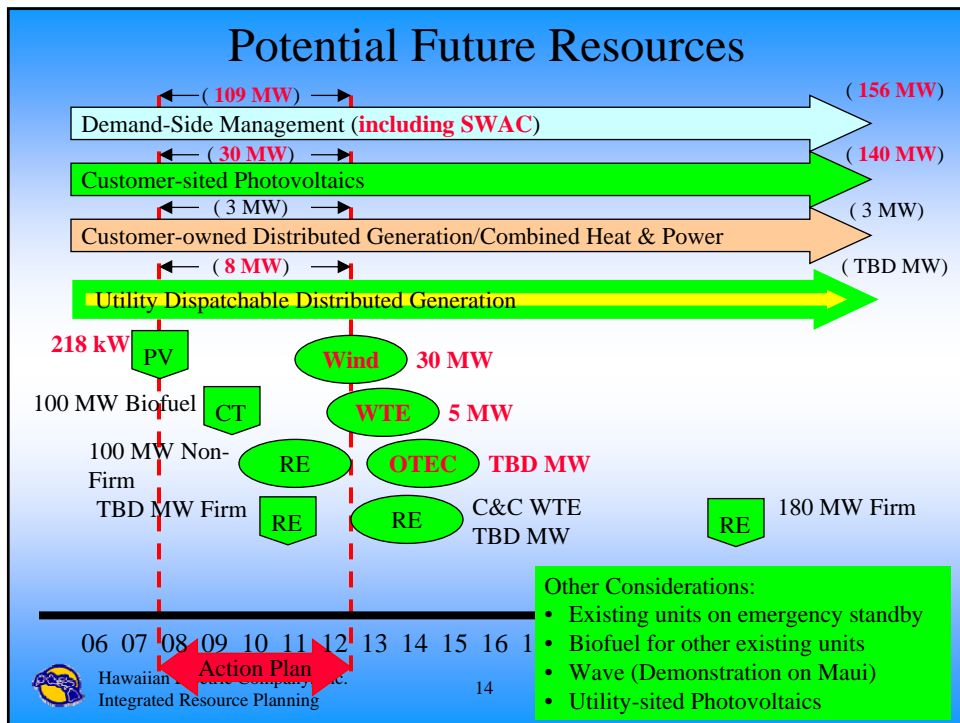
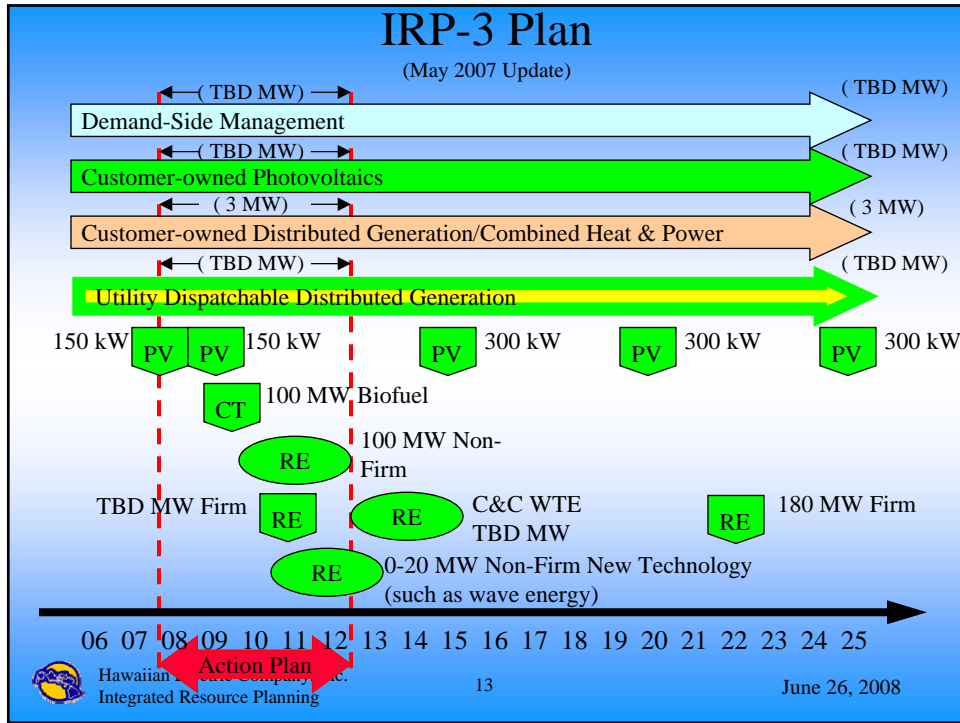
# Biofuel Price Outlook

Projection of Crude Palm Oil and Biodiesel Prices



# Potential Future Resources





# Discussion of Key Questions



## Key Questions

1. What tools should the utility provide its customers to enable them to exercise choice and help them manage their monthly bill?
2. What do you see as the most promising mix of renewable energy future technologies (in five years, ten years, and 20 years) and what kinds of R&D should we be encouraging to enable more renewable energy in our future?
3. Which emerging technologies should be pursued and how do we preserve our future options as new technologies emerge and become more economically attractive?
4. What factors should the utility be considering in addressing green house gas laws and regulations?
5. What things should be considered in transitioning existing generation from fossil fuels to biofuels?
6. Is reliability a fundamental requirement for any electric utility or is it just one of the many variables in the equation?



# Mahalo for Coming!

## Contact Information

- <http://www.hecoirp.com>
- [irp@heco.com](mailto:irp@heco.com)
- Gary Hashiro  
IRP Division  
P.O. Box 2750  
Honolulu, Hawaii 96840-0001  
Ph. 543-7767

