

Biofuel Project Permitting in Hawaii

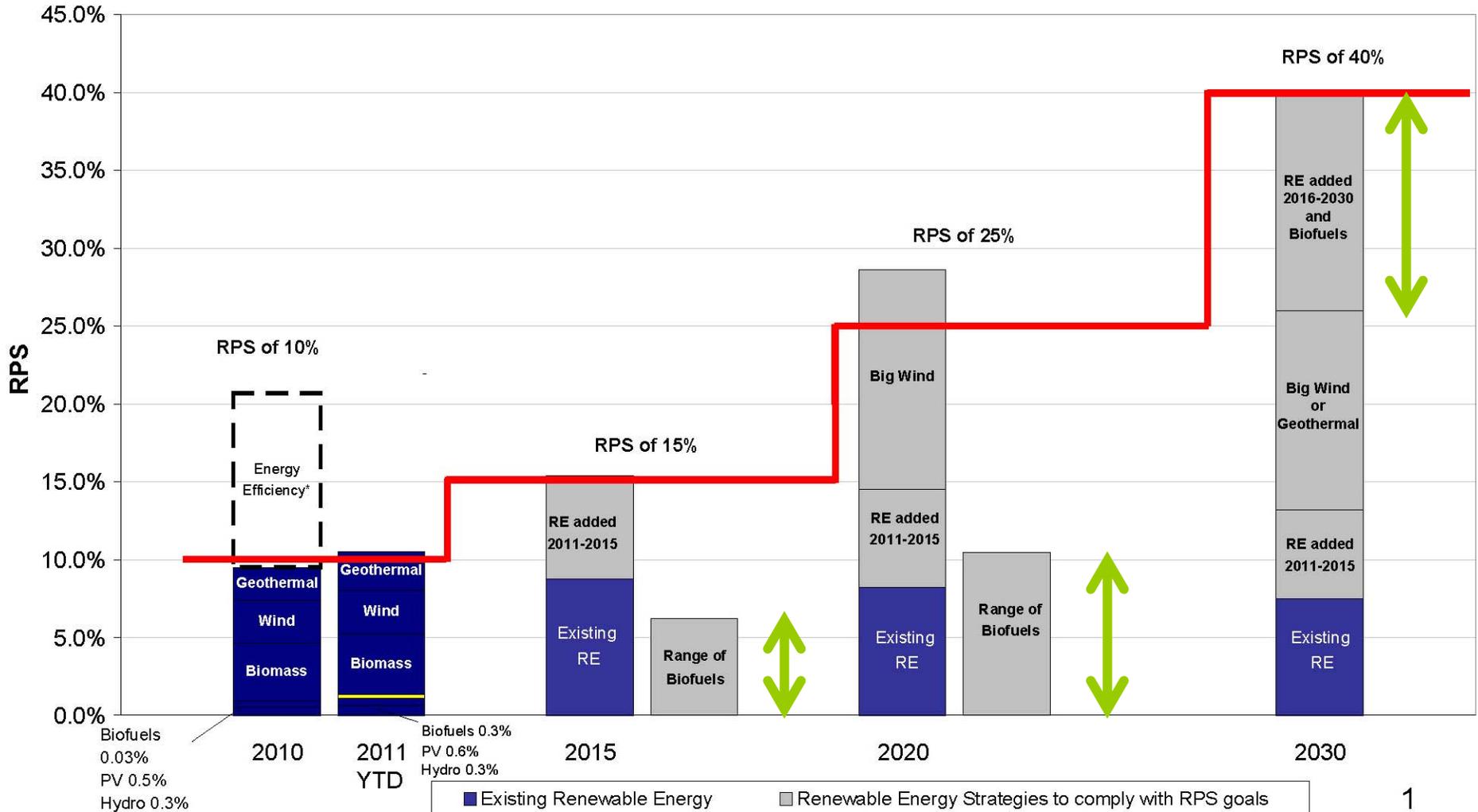
Jeff Overton, Group 70 International

Asia Pacific Clean Energy Summit and Expo
September 14, 2011

The 10-minute Primer

- **Biofuels in Hawaii: Reaching for 40%**
- **Crops, Target Fuels & Processing**
- **Impacts of Biofuels Projects**
- **Permitting Biofuels Projects**

Seeking 40% with Biofuels



Source: HECO

* Counts towards RPS through 2014

Biofuels Market & Potential Partners

US Military



Electric Utilities



Hawaiian Electric Company
Maui Electric Company
Hawaii Electric Light Company



Kaua'i Island
Utility Cooperative
Your Touchstone Energy® Cooperative

Fuel Companies



Growing Interest in Serving Hawaii Biofuels Demand

Honeywell



Phycal



Logos Energy



Biofuels: The New Plantation?

- **Land Committed to grow Feedstock**
 - Will require large contiguous farmlands
- **Biofuels Processor = yesterday's Sugar Mill**
 - Try permitting a new Sugar Mill today!
 - Not just a Farm...it's an Energy Facility
- **Permitting and Approvals:**
 - Site Footprint, Facilities, Process Inputs/Outputs
 - Water, Wastes, Co-Products, Cogeneration
 - Product Storage, Transport (land and sea)

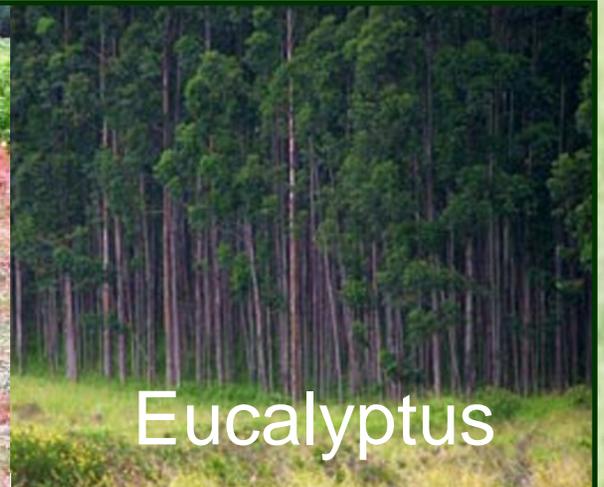
Biomass Crops & Fuel Targets



Energy Cane



Jatropha



Eucalyptus



Sweet Sorghum

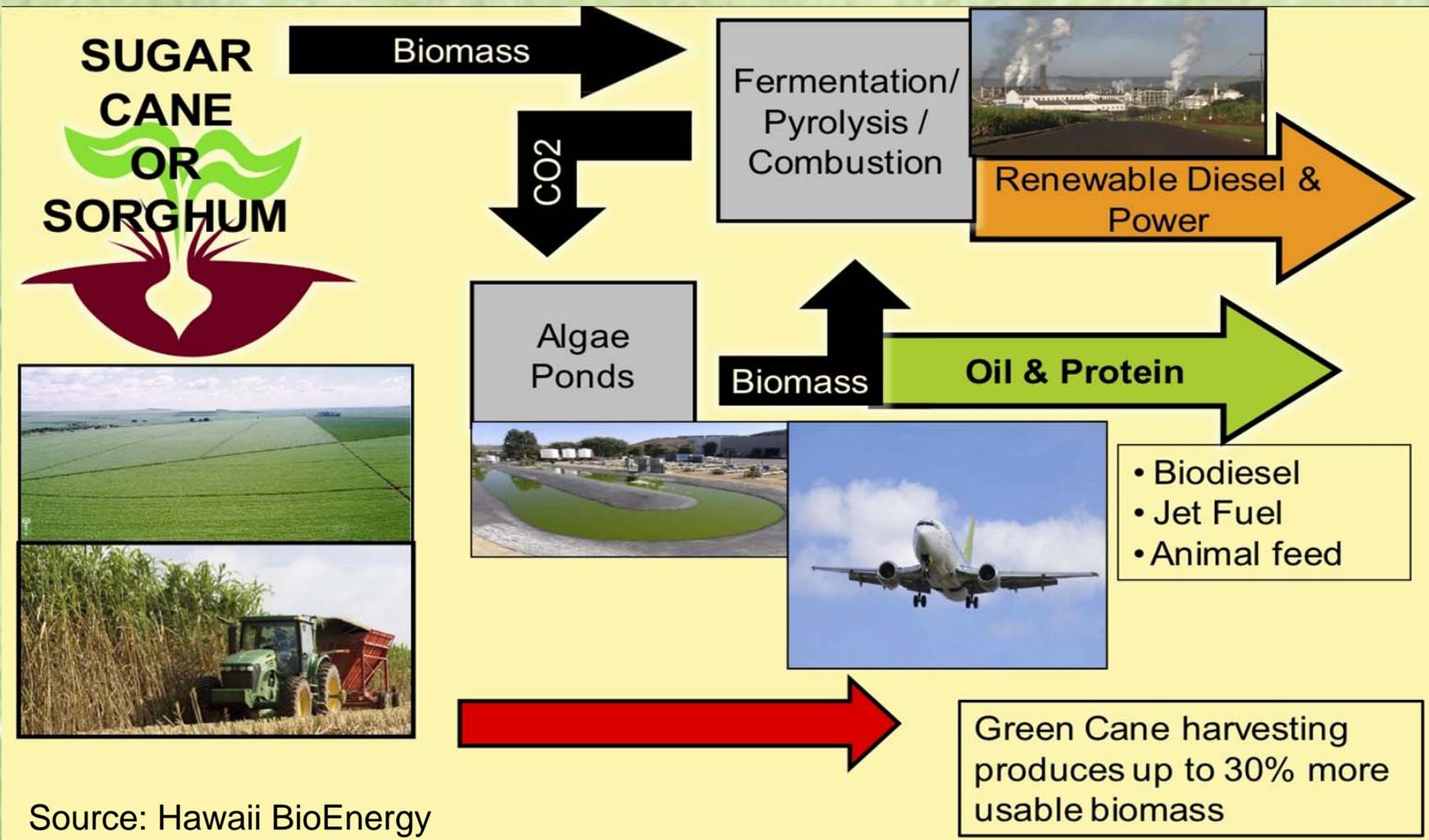


Algae



Cassava

Integrated BioRefinery



Farm, Facilities & Impacts

- **Water Use & Water Resources (groundwater)**
- **Wastewater, Air Emissions, Noise, Visual**
- **Cultural Resources (physical, spiritual)**
- **Agricultural Land Use (food crop exclusion)**
- **Endangered Species, Importation, GMO**
- **Infrastructure (water, roads, power)**
- **Hazardous Materials**
- **Product Transport (truck, pipeline, barge)**

Location + Potential Impacts = Permit Pathway

Select sites best suited for Processing & quasi-Industrial Functions:

- **Former Plantation Mill Sites**
- **Industrial-zoned Districts**
- **Distance from Sensitive Resources**
- **Distance from Community**

Locating Biofuels Processing Facilities



- **Urban Industrial sites**
- **Redevelop Former Sugar Mill sites**
- **Greenfield Locations - more Complicated**
- **Proximity to Crops & Infrastructure**

Processing Facilities



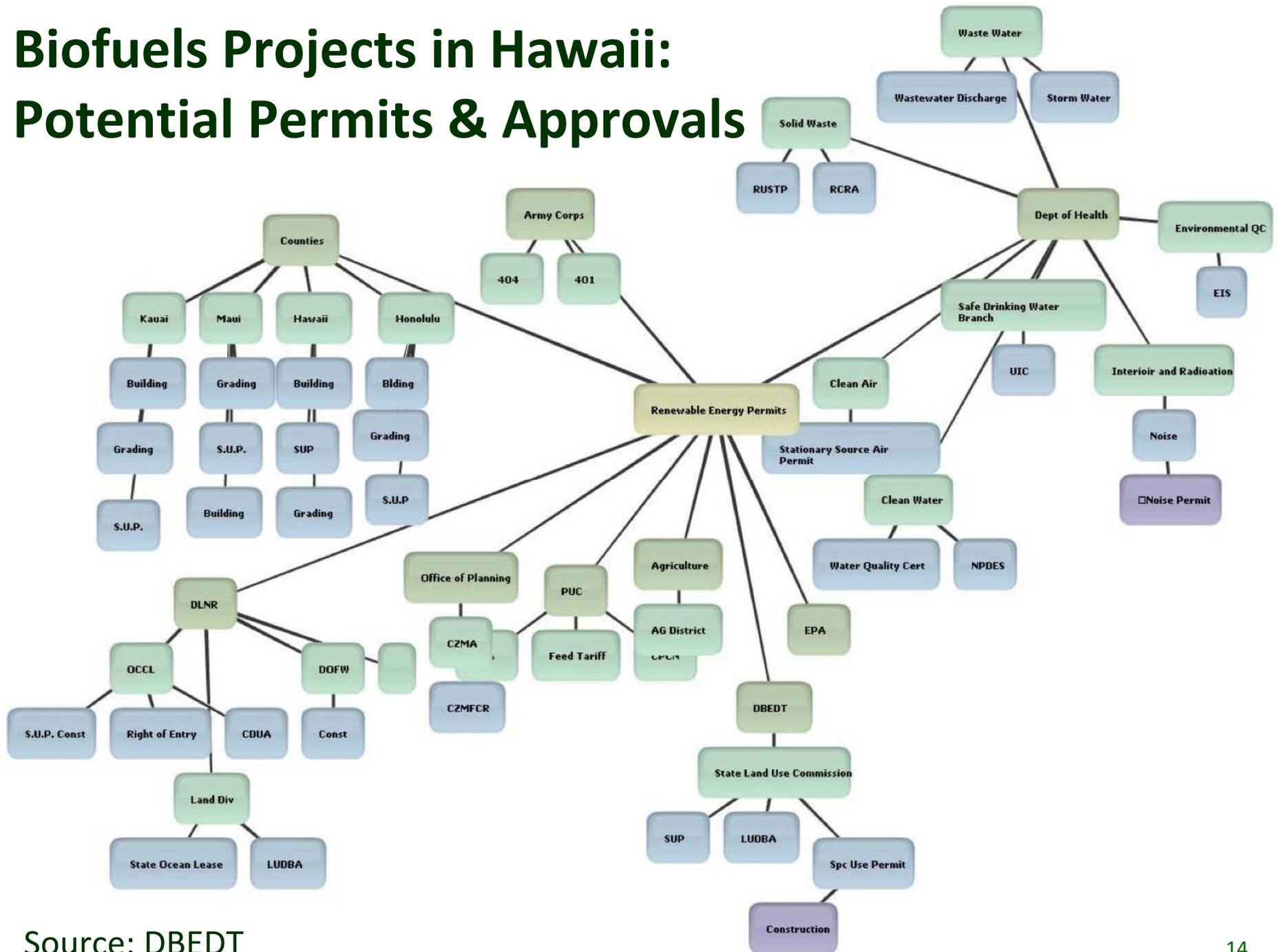
Transport & Storage



Regulatory Process Levels

- **Federal Approvals - Site or Funding**
 - NEPA, Sec. 106, Sec. 7, Environmental Justice, Others
 - Agency: DOE/NREL, EPA, NRCS, FWS, USACE, NOAA/CZM
- **State of Hawaii Approvals**
 - Land Use: HRS 343, LUC, OP, DLNR, SHPD, CWRM
 - Ministerial: DOH, DOT, DOA
- **County Approvals**
 - Land Use: Planning Dept, Planning Commission, Council
 - Ministerial: Public Works, Water Supply, Building
- **Community (Advisory) Involvement**
 - Neighborhood Board, Community Association, Advisory Group/Task Force, Environmental Groups & Individuals

Biofuels Projects in Hawaii: Potential Permits & Approvals



Source: DBEDT

Actual Project Permit Roster (50+)

Land Use Permit and Regulatory Compliance

Coastal Zone Management Program, Federal Consistency
Conditional Use Permit (CUP) County
Environmental Impact Statement (EIS) State & NEPA
Endangered Species Act, Section 7 Consultation/Permit
Historical Site Review
Historical Preservation Act, Section 106 Consultation
Use Permit (County)
Plan Review (County Land Use Regulations)
Special Management Area Use Permit
State Incidental Take License
State Special Use Permit
Zoning Compliance, Zoning Permit
Zoning Waivers, Public Uses and Public Utilities

Construction/Operation Permits and Regulations

Aboveground Storage Tank (AST) Permit
Boiler (pressure vessel) Permit
Building Permit
Burn Permit (agricultural burning)
Covered Source Permit
Major Construction Permit
Minor Source Operating Permit
Combustible and Flammable Liquids Tank Installation
Community Noise Permit
Construction Noise Permit

Construction/Operation Permits and Regulations

Construction Dewatering Permit
County Roadway Right-of-Way Permit (Street Usage)
Discharge Effluent Permit
Driveway Permits
Electrical Permit
Energy Corridor Permit
FAA Notice of Construction (Navigable Airspace)
Grading Permit
Grubbing and Stockpiling
Hazardous Waste; Storage, Treatment and Disposal
Industrial Wastewater Discharge Permit
General NPDES permits
Maritime Transportation Security Act (MTSA)
Oversize and Overweight Vehicle Permit, County & State
Pesticides and Chemigation; Storage, Transport, Application
Plumbing Permits
Renewable Fuel Standard Program
Sewer System, Connection to County Sewer System
Sewer Connection, Modification and Expansion
Sign Permit
Solid Waste Management Permit
State Highway Work Permit, State Highways Right-of-Entry
Surface Water Use Permit
Trenching Permit
Utility Service
Wastewater Treatment System Permit

HRS 201N

Renewable Energy Facility Siting Process

Complete EA/EIS Process...Receive Permits in 18 months

- Project Plan: Scope Elements and Define Impacts
- Technical Studies and EA/EIS Process
- County Planning Department & Public Works
- Community Engagement
- Planning Commission Use Permit (Major Project)
- Ministerial Permit Applications & Agency Reviews

Permit Process = People Process



Bring Biofuel...



“Fast-Track” Permitting

- **Strategic Plan & Execute with Local Team**
 - Planners, Engineers, Environ. Consults. & Advisors
- **Engage the Community**
 - Local and Regional scales, Seek Benefits
- **Streamline Your Project**
 - DBEDT Team, Tools, 201N (as applicable)
- **State and County Agencies**
 - Build Relationships, Key Process Facilitators
- **Start Early & Expect Complications**

One Day at a Time

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR - HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 - FAX: (808) 768-8041
DEPT. WEB SITE: www.honolulu.gov - CITY WEB SITE: www.honolulu.gov

PETER B. CARLISLE
MAYOR



JAN 24 2011

DAVID K. TANOUÉ
DIRECTOR
ROBERT M. SUMITOMO
DEPUTY DIRECTOR

(WA)

January 20, 2011

Mr. Jeffrey H. Overton
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813

Dear Mr. Overton:

Subject: Conditional Use Permit No. 2010/CUP-61
Phycal Hawaii R & D, LLC
71-045 Kamehameha Highway - Wahiawa
Tax Map Key 7-1-1: 11, 30, and 31

The above application for a Conditional Use Permit (Major) to allow a biofuels processing facility has been **APPROVED**, subject to conditions contained in the attached "Findings of Fact, Conclusions of Law, and Recommendation."

Any party (to the case) wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision (ZBA Rules Relating to Procedure for Appeals, Rule

Mr. Jeffrey H. Overton
January 20, 2011
Page 2

If you have any further questions, please contact William Ammons of our staff at 768-8025.

Very truly yours,

David K. Tanoue, Director
Department of Planning and Permitting

DKT:nw

Encl.

cc: Phycal Hawaii R & D, LLC

2010/Conditional Use Permits Major/2010 CUP-61

The above application for a Conditional Use Permit (Major) to allow a biofuels processing facility has been **APPROVED**, subject to conditions contained in the attached "Findings of Fact, Conclusions of Law, and Recommendation."

Zoning Board of Appeals
c/o Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Group 70 International, Inc.

925 Bethel Street, Fifth Floor, Honolulu, HI 96813

www.Group70int.com

**Land Planning and Environmental Consulting
Project Planning, Design, EIS & Permitting
Community Involvement
Civil Engineering**

Jeffrey H. Overton, AICP, LEED-AP

Jho@group70int.com 808-441-2104