



# Increasing Resilience: US Army Garrison Hawaii and Hawaiian Electric Company



# B.L.U.F.

- ✓ **US Army Garrison Hawaii and Hawaiian Electric Company partnered to solve mutual resilience and renewable needs**
  - USAG-HI shifted from being a consumer to prosumer





# 50 MW Schofield Generating Station and Microgrid

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## Step 1: What do we need?

### Army

- Resilience
- Renewable Energy
- Reliable Power
- *Money*
- *Expertise*



### Utility

- Resilience
- Renewable Energy
- Reliable Power
- *Flexible Generation*
- *Permittable Land*





# 50 MW Schofield Generating Station and Microgrid

- ✓ **Executed through a 35 year + 10 year option lease**
  - First right to power in lieu of lease rent for 8 acres of land
  - 7 days of onsite fuel at all times, storage capacity for 13 days.
  - No change to rate or contract terms for energy delivery from HECO
  - Proponents and teamwork at all levels – HECO, USAG-HI and Office of Energy Initiatives
- ✓ **Station is :**
  - Utility-owned, constructed and operated
  - Resilient – Six 8.3 MW multi-fuel marine diesels (4 plus 2)
  - Renewable - utilizes 3 MGALS of biofuel annually
  - Secure – located within a military installation, not on coastline
  - Operates daily to serve all utility customers – ratepayer asset
  - Provides microgrid services to Schofield Barracks, Wheeler Army Airfield and Field Station Kunia (80% of Mission)

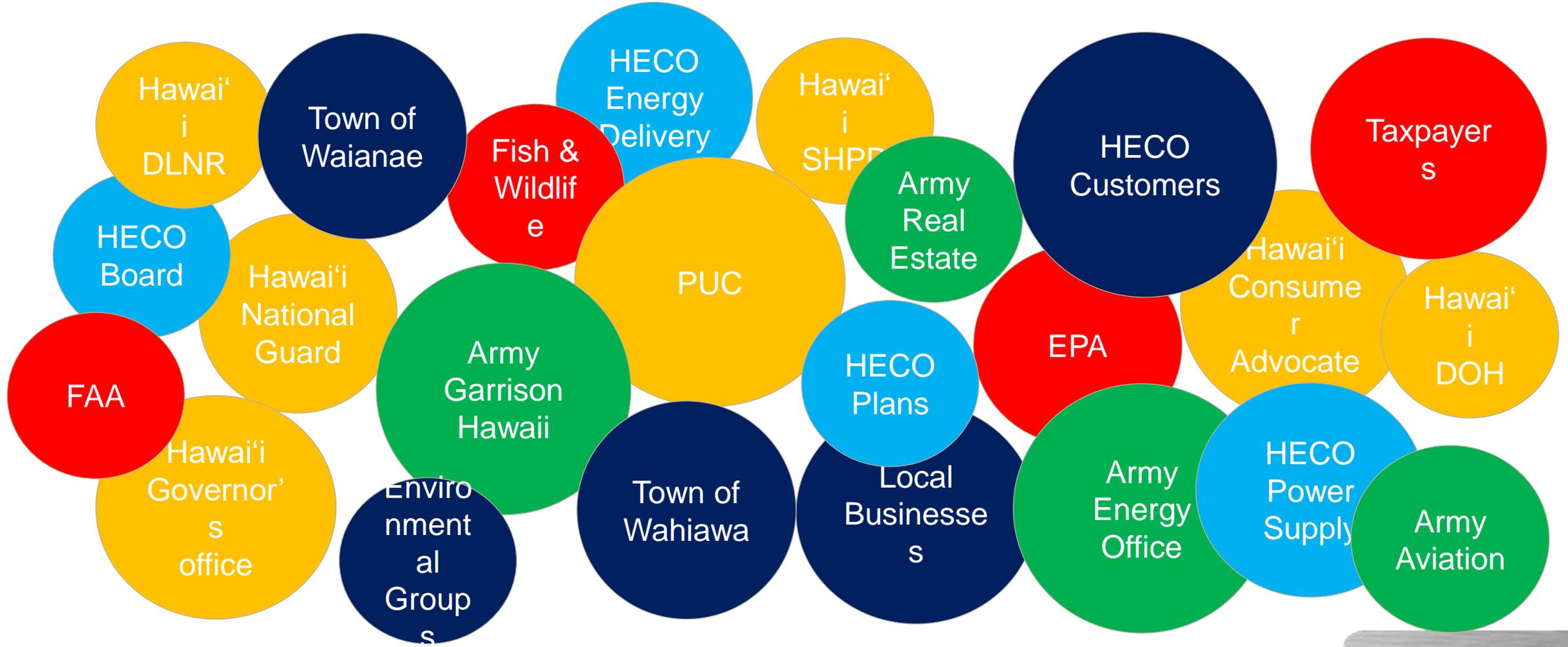




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## Stakeholders





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## Partnering to overcome challenges

### Regulatory Constraints

- Competitive framework for new generation
- HECO Army MOA enabled PUC waiver

### Mission Impact

- Exhaust Stack intruded into aircraft protection zone
- HECO Army coordination to reconfigure plant foot print and utilize 3 into one stack to meet clean air permitting requirement

### Renewable Requirement

- Aggressive Army renewable goal
- Shift biofuel from less efficient CT plant to the more efficient diesels at SGS. Adjust renewable requirement to address CA concerns.

### In Kind Benefit

- Land value fixed
- Valuation of energy security developed by Army and restoration time adjusted to lower infrastructure costs.





# UP at USAG-HI

## ✓ Future with UP and HECO

- Redundant feeds
- Industry standard
- Initial System Deficiency Corrections (ISDCs)
- Continuity on and off the installation





# End of Slides HOOAH!

