



# west kaua'i energy project

*restore*  *renew*  *revitalize* 

Agribusiness Development Corporation Board of Directors

January 2022

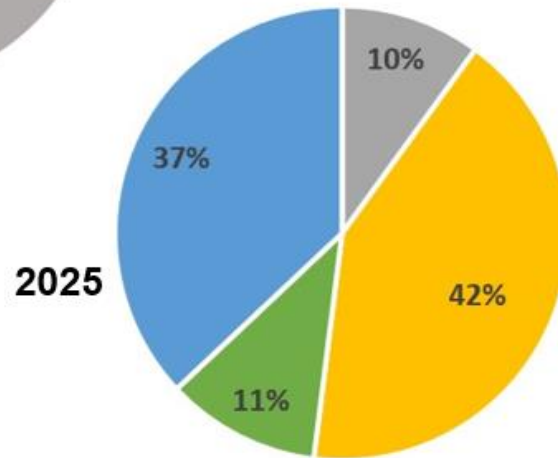
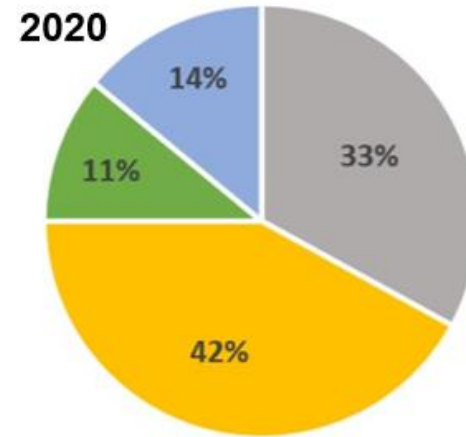
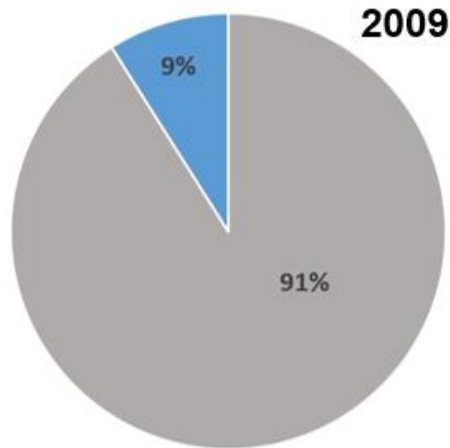
# Kaua'i's 100% Renewable Challenge

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- 100% of Kaua'i's daytime demand for electricity routinely met by renewables
- Solar and battery limitations
  - Sun dependent
  - Short duration storage
- Long-duration storage needed to achieve 100% renewable at night and during prolonged periods without solar



# KIUC Fuel Mix

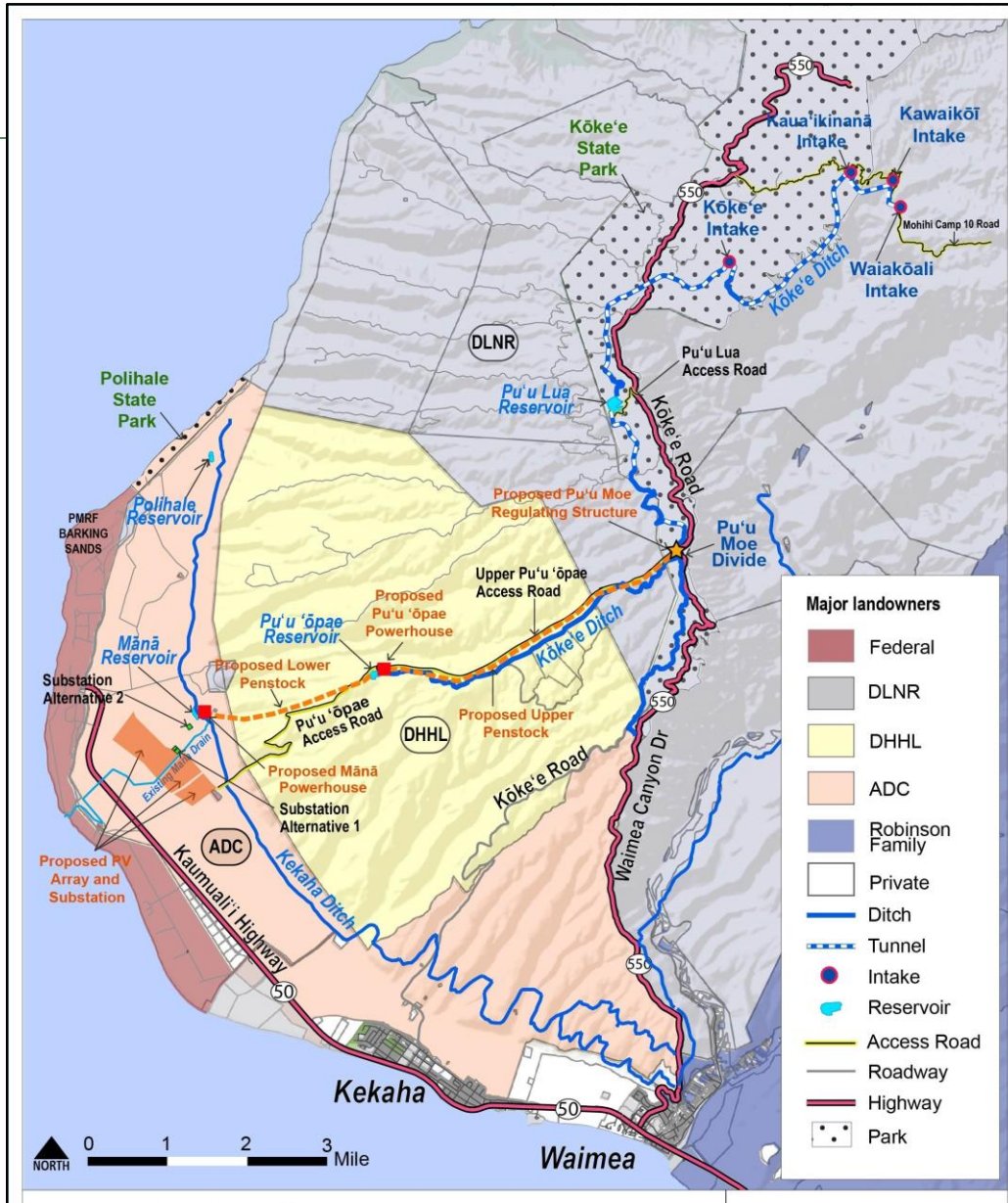


■ Fossil Fuel ■ Solar ■ Biomass ■ Hydro

# Integrated Energy Project Proposal

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- Renewable energy resource for island of Kaua‘i
  - 24 MW of pumped storage hydro
    - Solar used as power source for pumping
  - Store and release hydro
  
- Irrigation water delivered through ditch and project pipeline to DHHL lands and ADC/KAA
  
- Primary project components
  - Koke‘e ditch repairs and upgrades
  - Rehabilitation, operation and maintenance of Pu‘u Lua, Pu‘u ‘Ōpae, and Mānā reservoirs
  - Two new sections of buried pipeline
  - Two new powerhouses





# Benefits to KIUC Members

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- Partnership with DLNR, DHHL, and ADC to reduce the impact of climate change by eliminating usage of more than 8 million gallons of fossil fuel per year with an estimated annual reduction of 80,000 tons of CO<sub>2</sub>e
- Supports DHHL plans to develop agriculture homestead lots and other diversified agriculture
- Member-owned legacy project that provides long-duration storage, improved reliability and rate stability
- Capable of meeting up to 25% of island power needs
- Generates when solar isn't available
- Increased number of jobs available during the construction phase

# ADC Benefits

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- ✓ Rehabilitation and maintenance of Koke‘e Ditch system
  - ✓ 4 diversions
  - ✓ Koke‘e ditch
  - ✓ Pu‘u Lua, Mānā and Pu‘u ‘Ōpae reservoirs
  
- ✓ Lease payment revenue stream
  - ✓ Mānā Reservoir
  - ✓ Mānā Powerhouse
  - ✓ Mānā solar field
  
- ✓ Delivery of irrigation water

# ADC Benefits

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- Compatible Agriculture Options with Solar Array
  - Discussions in process with KAA and local farmers regarding potential options
  - Potential compatible options identified, more due diligence needed
  - Land Use Commission approval required



# WKEP Project History

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- ✓ ROE's for due diligence on the project dating from 2014
- ✓ November 16, 2016 – ADC Board approved (1) withdrawal of portions of Kōke'e Ditch and Mānā Reservoir from KAA License, and (2) Issuance of 5 year land license with an option to convert to 65 year lease
- ✓ January 27, 2016 – Executed Letter of Intent that broadly set forth terms and conditions of WKEP to serve as a guideline for continued discussions and negotiations
- ✓ Presentations to ADC Board
  - ✓ Feb and August 2014
  - ✓ May and December 2015
  - ✓ November 2016
- ✓ April 2017: Waimea River Mediation Settlement

# WKEP Project Status

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- Development agreement signed with AES in December 2020
- Chapter 343 environmental compliance in process
- PUC approval of PPA with AES received December 2021
- Various lease/license agreements pending with ADC
  - License renewals – Mānā Reservoir and Kōke‘e Ditch (expire October 2022)
  - Solar land license/lease
  - AES subleases – Mānā Reservoir, Kōke‘e Ditch and solar land

# Role of AES

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- Development/Construction/Operation
- AES is proven partner of KIUC
  - Presence in Hawai‘i for more than 25 years
- AES is a world leader in renewables; experience with similar projects
  - 6,379 MW of hydro capacity in Central and South America
- Financial risk shifted from cooperative to development partner
- AES can utilize federal and state tax credits; maintaining the cost of the project which translates into rate savings for KIUC members at similar level as projected for KIUC developed project

# Mahalo and Questions

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