Define Sustainability, Reach a Common Understanding:

**Sustainability** is the capacity to endure.

For humans, sustainability is the long-term maintenance of well-being, which has environmental, economic, cultural and social dimensions.

Ecologically, sustainability requires biological diversity, which is the pre-requisite for human survival.
How we are to address island wide sustainability:

- Curriculum across all disciplines
- Partnerships
- Research & Projects
Scope - regarding what we are to address:

Areas of special focus include sustainable living practices in:

- Producing food
- Energy – both Demand Side Management & Renewables
- Affordable housing and
- Waste elimination.
Doing it - Now! Curriculum, Partnerships and Projects

Curriculum Impact, examples:

- Faculty already implemented recycling of Culinary's cooking oil
- Aquaponics - fish production, with the fish waste effluent providing nutrients for garden growth
- Just completed, GE Mapping Method, mapping out Today (what sustainability concepts already included), Tomorrow (further sustainability concepts to embed) and Action Plan
The Present

✅ Aquaponics
The Present

✓ Aquaponics
The Present

✔ Aquaponics
The Present

- KCC Water Re-fill Station, 2013

Boost energy levels, aid weight loss, reducing headaches, eliminate toxins, improve complexion and reduce risk of heart attacks and colon cancer. Drink water, save money... and annually 24 billion plastic bottles with Flo Water (only 17% recycled)
The Present ✓ Apiary
The Present  ✔  Kalo
The Present

✓ Breadfruit

Partnership with Breadfruit Institute, National Tropical Botanical Garden

✓ Cognition

Renovation, Cognition building following ideals for LEED certification
The Present

✓ Affordable Housing

Carpentry Class Prototype, On-Campus
The Present  ✔ Affordable Housing

Carpentry Class Prototype, On-Campus
The Future

Ho’ouluwehi at Ka’apuni
The Future

Impact Now! Ho‘oulwehi Center at Kaʻapuni

✧ Affordable / sustainable living housing
✧ Progressive food production on-site w/ aquaponics, apiary combined with
✧ Carbon neutral solutions integrating renewable energy and
✧ Catchment and gray water usage - which involves the use of roof and sink water etc for ag production
Finding Harmony Within Discord
...a structured view (“CEE”)

Culture

Environment

Economics

Bearable

Equitable

Sustainability

Viable
the problem

1) Relationships
   how we deal with lows – determines happiness

2) Country & World
   how we deal with lows – determines sustainability

burdening future generations by:

1) Economically: wealth w/o dips? = debt
2) Environmentally: weeds? = DDT
3) Culturally: foreign culture? = slash & burn
Heart of Hawaiian Values: “Mālama ʻĀina”
“Nurture the land – which feeds us”
take action now

today
unsustainable

the way
CEE
WEALF

tomorrow
Mālama ‘Āina

Hoʻouluwehi
The Sustainable Living Institute of Kauaʻi
DSM
Demand Side Management

800kW of PV

WEALF

Reduced Carbon Footprint @ KCC

Ho'ouluwehi Center at Ka'apuni
Carbon Footprint Reduction – Kauai Community College

Creating WEALF for Kauai?

1) Demand Side Management (DSM) - $250k grant applied for in February from DOD, and awarded with liquidity available July. Controllers etc to be installed, theme - Micro Grid Mgt, as KCC is in the midst of installing

2) 800 kW of PV. With 18% efficiency, peak load on par with the 800 kW, evening and morning usage needs to be addressed - hence the DSM above

3) Reduction of Carbon Footprint at KCC, furthered by use of food production on campus with Aquaponics, PV with Aquaponics ($30k grant), Raised Bed Ag production, prototype affordable home recycled container ($72k fully funded) as well as extrapolated over to

4) Ho‘ouluwehi Center at Ka‘apuni, creating WEALF for Kaua‘i

Carbon Footprint Reduction – Kauai Community College
Summary: Collectively, how are we to realize the ambitions outlined for:

Ho`ouluwehi, The Sustainability Institute of Kauai?

1) Curriculum
2) Partnerships
3) Projects

All three, with any luck - to positively affect all on Kaua`i, with a more sustainable life, going forward...
Appreciation:

To all of you!

...as WE can make a difference!

Thank you!