Our journey to develop a community-informed bioenergy project for Oahu's West Side

Naomi Kukac and Joelle Simonpietri

Simonpietri Enterprises LLC 28 February 2023

# Our community engagement process

- 1. Case studies 5 Local projects & 5 mainland bioenergy projects
- 2. Formal introductory presentations to Honolulu Neighborhood Boards
  - Makakilo/Kapolei JAN 2022
  - Nanakuli/Ma'ili FEB 2022
- 3. Online community survey round 1
- 4. Stakeholder interviews with community organizations and leaders
- 5. Online community survey round 2
- 6. Listened at neighborhood board meetings >1 year
  - Makakilo/Kapolei
  - Nanakuli/Ma'ili
  - Waianae
  - `Ewa

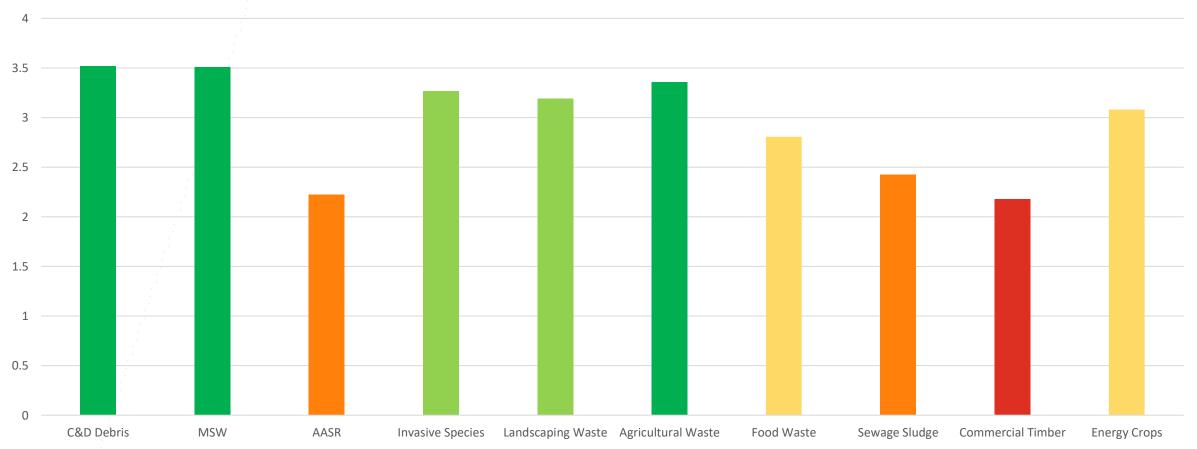
# Responses from Aloha Carbon Intro Presentation

•"Just want to say WOW!... I welcome your project to the community. It's marvelous. Thank you!" – Kioni Dudley, Kapolei Neighborhood Board Member January 2022

•"Just want to mahalo [thank] you... for trying to make things better. I'm 100% with you that your project would make a huge difference to the way we handle waste on island." — Makana Paris, Kapolei Neighborhood Board Chair January 2022

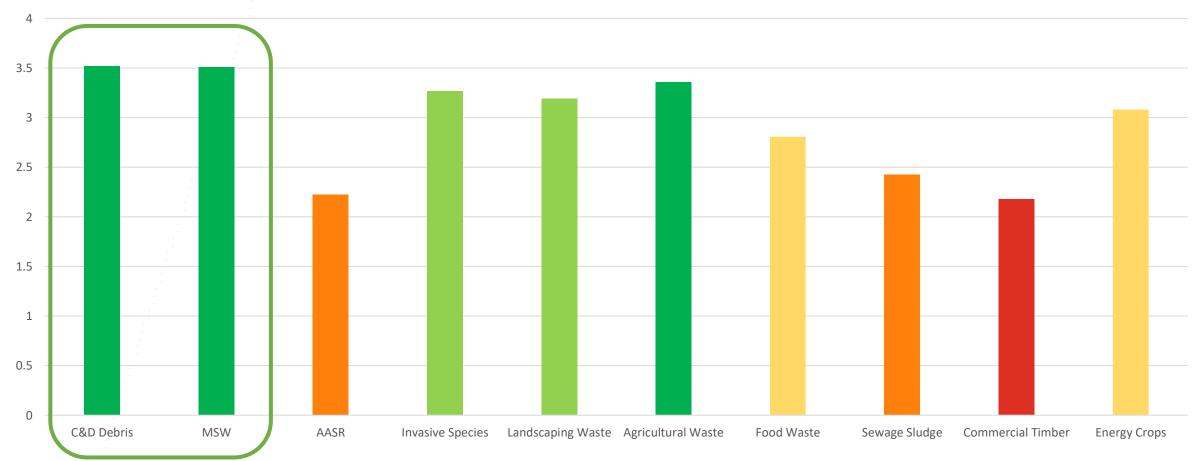
# **Feedstock Preferences**

# Of these feedstocks we could convert to fuel, which do you prefer?

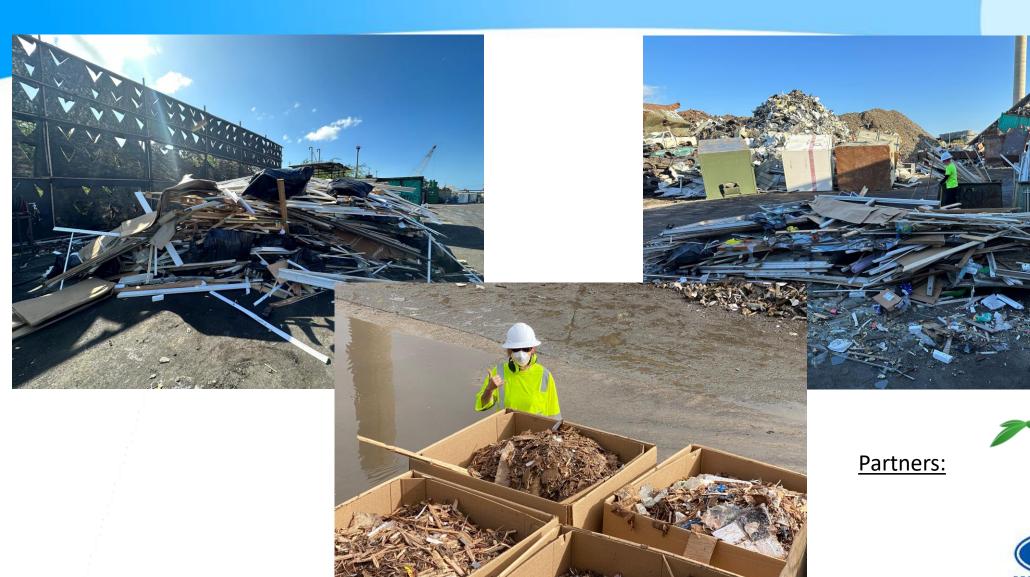


## **Feedstock Preferences**

# Of these feedstocks we could convert to fuel, which do you prefer?



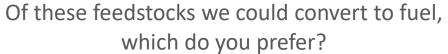
# Confirmation of C&D Debris as a Community Preferred Feedstock







# **Feedstock Preferences**





<sup>\*\*</sup>AASR = Automobile and Appliance Shredder Residue

# Technical Assessment of Invasive Species

Invasive species sampling







Papahana Kuaola



Greenwaste drying trial



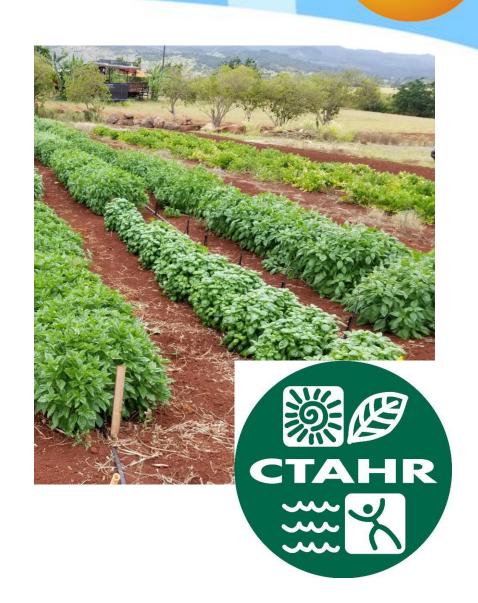
# Which led us to the opportunity to make Fertilizer

#### Recap of how we got here:

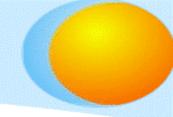
- "Can you do something about invasive species?"
- Need to stop Coconut Rhinoceros Beetle (CRB) spread
- Fertilizer is one of the highest input costs for farmers in Hawaii (10-100% over the U.S. average!)
- Need for better waste management for local poultry farms

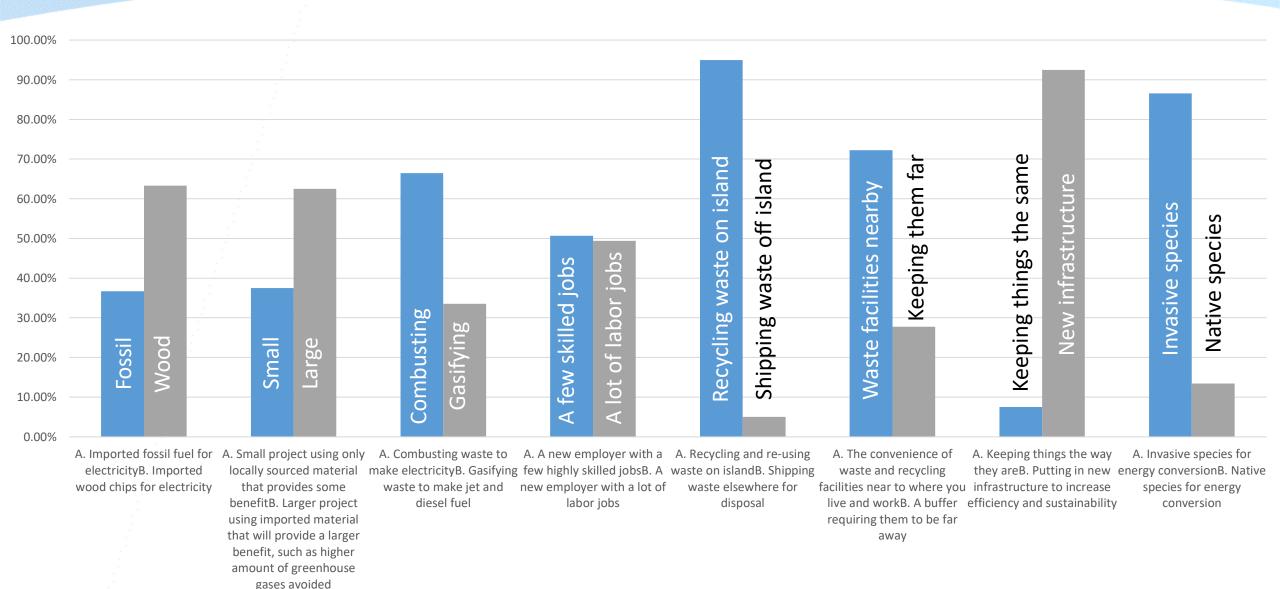
#### What we did about it:

- Developed a business & manufacturing plan to make organic slow release fertilizer with local partners
- Partnered with UH College of Tropical Agriculture
- Applied for \$\$ for a crop trial on our new fertilizer

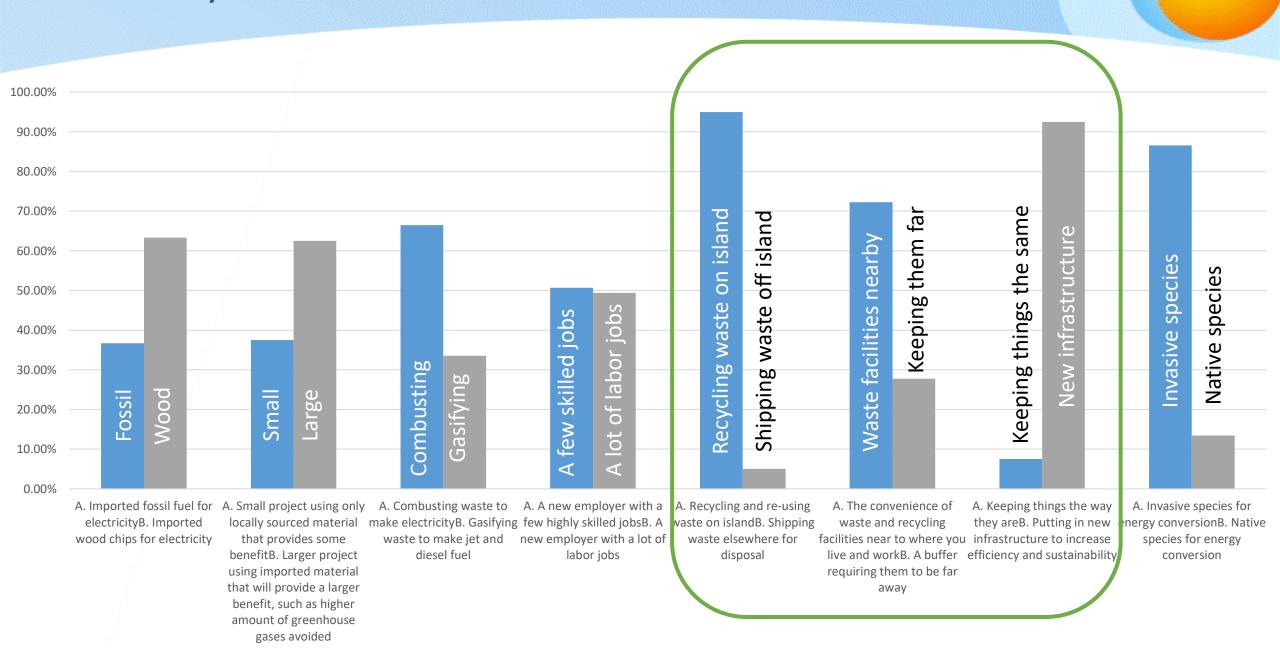


## Community Preference when we have to make choices

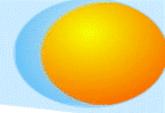


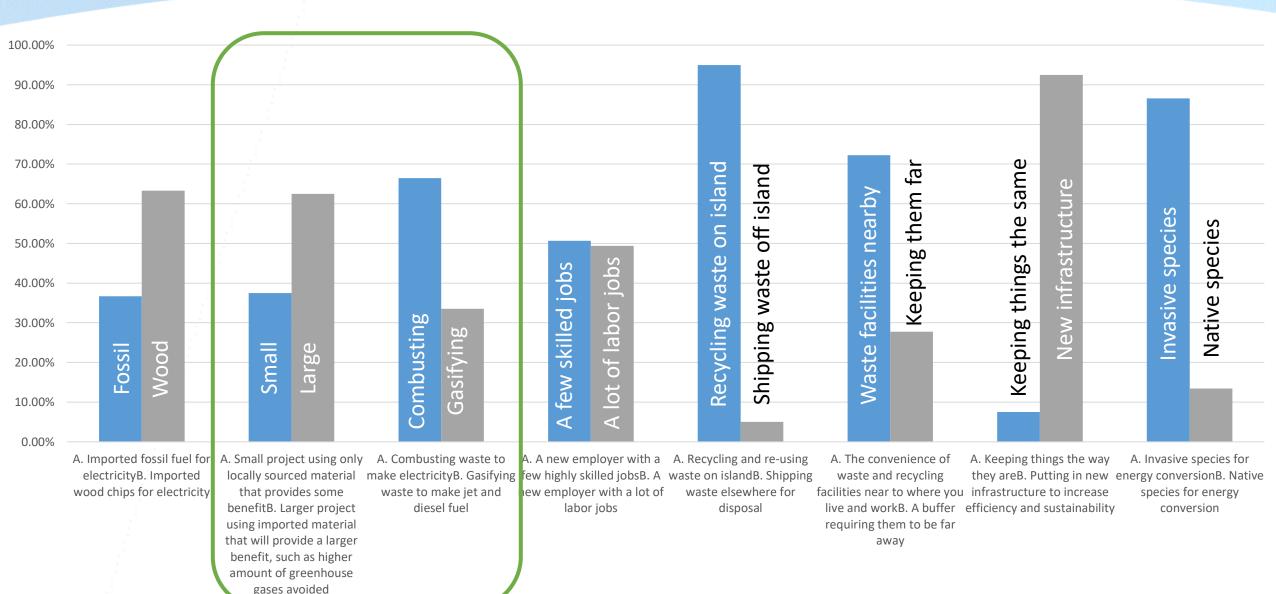


# Community Preference when we have to make choices



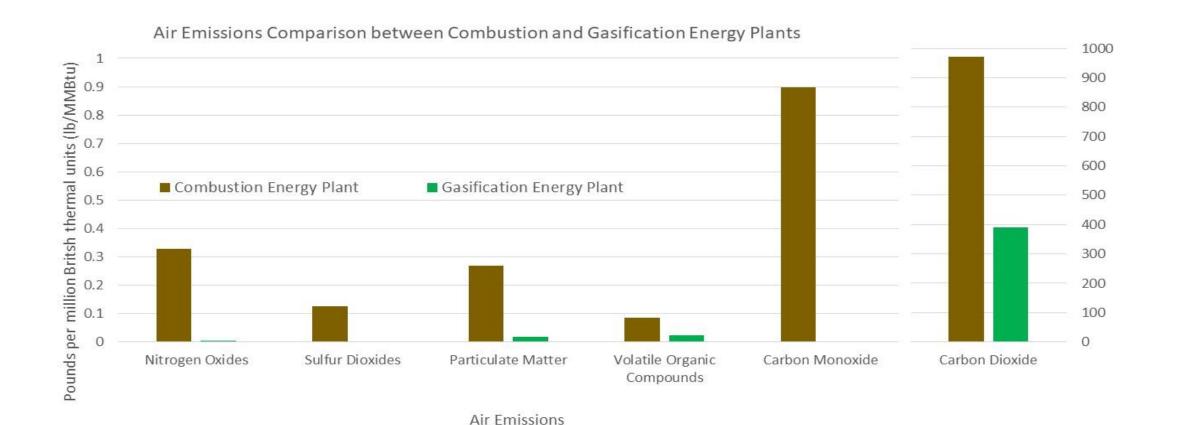
### Community Preference when we have to make choices





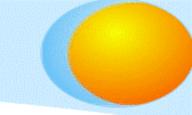
# Comparison of air emissions between gasification and combustion





# Neighborhood Board Key Takeaways

What we heard from the community concerns raised over the past year...



What We Heard Are Common Concerns	What We Are Doing to Address Common Concerns
<ul> <li>Topics that got a lot of discussion:</li> <li>Illegal dumping</li> <li>Red Hill water contamination</li> <li>New landfill siting to replace Waimanalo Gulch</li> </ul>	Do what we can to prevent dumping, landfilling, and impact to freshwater aquifer
Have open and honest communication at all times	Say what we are going to do and do what we say
Need for local workforce development of quality jobs and living wages	100% local hires + paid UH internships
Problem of traffic and transportation issues – difficult to get in and out during peak hours.	Measure success by each truck diverted from Nanakuli
Need to be protective of the land resources and maintenance of community assets	Focus on waste streams going to be landfilled or thrown away anyway

# Mahalo!



# **Questions?**

Naomi Kukac naomi@alohacarbon.com 808-388-1085

Joelle Simonpietri
Joelle@simonpietri.com
808-341-7984

Simonpietri Enterprises LLC www.simonpietri.com