

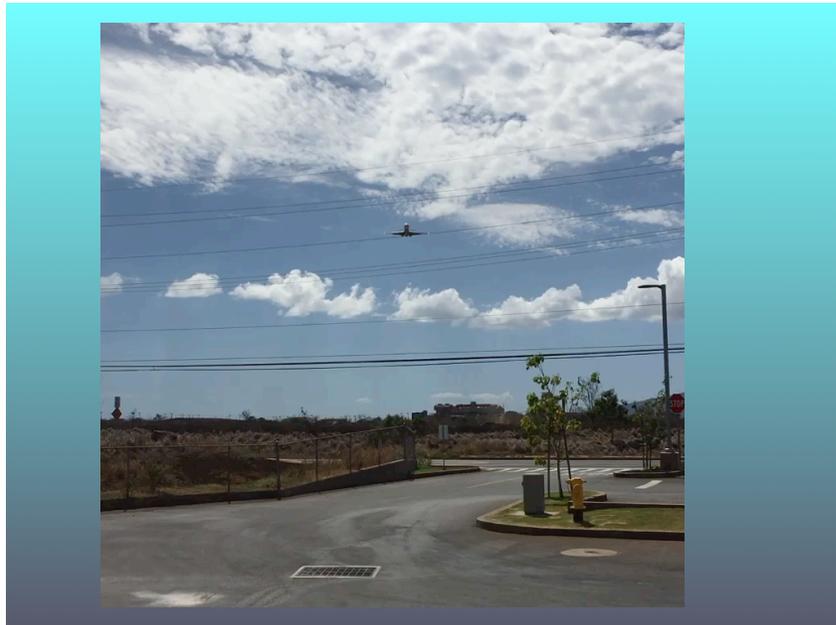
EACP Committee

From: Gerry <lavaboy458@gmail.com>
Sent: Monday, October 05, 2020 3:21 PM
To: EACP Committee
Subject: October 6 compost presentation
Attachments: EACP10-6sm.pdf



Compost and Food Security: A Recipe for Success

Gerry Ross, Kupa'a Farms



Tourism based economy

90% imported food

What percentage is wasted?



- Aloha + Challenge seeks to double food production for local consumption by 2030
- How will this be achieved? There is a need for land, labor, water, and fertilizer.
- Missing from the conversation is compost.
- Making use of the waste stream to culture our soils for productivity, resilience, and decreased production cost to farmers and ranchers.

Compost:
managed aerobic
decomposition of
organic matter to
produce a stable
material that may
be added to soil
as a source of
humus, nutrients,
and biologic
diversity.



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**“I love seeing a farm with a serious compost pile at its core. Rot on!”
Mainland farmer via Instagram**

“Forget about sex, drugs, and rock and roll....it’s all about the nitrogen” Greg Hopkins, farm intern

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Draft Report



Waste Composition Analysis
Central Maui Landfill

County of Maui, Hawai'i
Department of Environmental Management

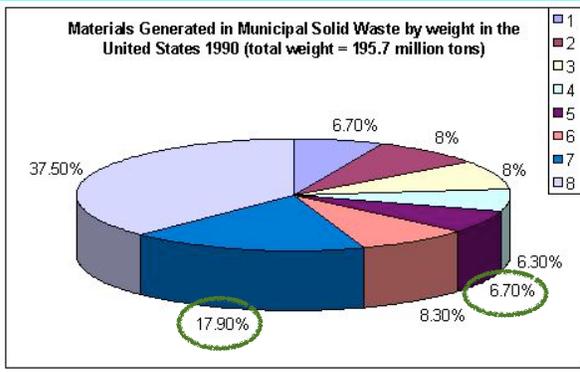


March 2012

SAIC

The takeaway:
27,000 tons a year of
foodwaste
54 million pounds
75 tons a day
(unsure if it includes
waste from fish or meat
processing)
Perspective: Kupa'a Farms
intercepts 50 tons a year
(we feed 40-60 families a week)
Landfilled foodwaste is a
liability that generates
methane due to anaerobic
decomposition

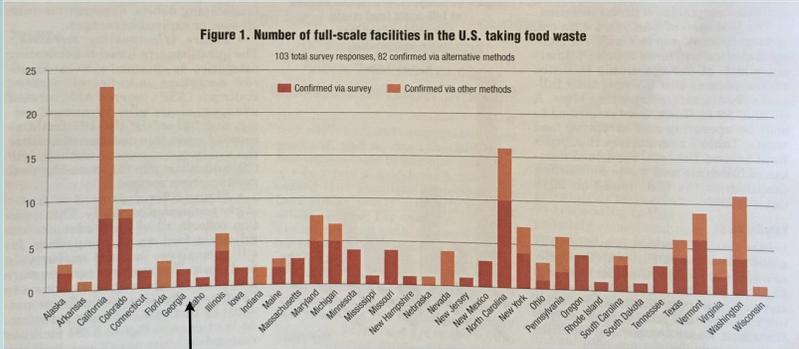
As a municipality you have a choice: you can bury the organic material (and pay the price later) or you can compost it and reap the benefits now in food security.



| | | |
|----------------------|-------------------|---|
| Glass | 13.2 million tons | |
| Metals | 16.2 million tons | |
| Plastics | 16.2 million tons | |
| Wood | 12.3 million tons | |
| Food | 13.2 million tons | ← |
| Other | 16.3 million tons | |
| Yard Trimmings | 35.0 million tons | ← |
| Paper and Paperboard | 73.3 million tons | |

Source: EPA - Summary of Markets for Compost

January 2019 BioCycle magazine



- Hawaii: one of 13 states that aren't even on the food waste radar
- State of Hawaii and Maui County solid waste disposal websites make no mention of food waste composting
- currently composting is not a permitted use of agricultural land; requires special management/use permit

"Composting facilities set near areas zoned for either agriculture or industrial purposes are the best locations for siting a composting operation" *State of Michigan compost operators manual*

Industrial/commercial scale compost opportunities

Currently 1 facility that composts exclusively green waste (Kihei Compost) and one that composts biosolids and greenwaste (EKO Compost)



What would it take to extend these to include food waste or construct a food waste only facility?

- DoH regulations (HB 2407)
- Infrastructure costs (EDA, Maui County, Mahi Pono, Ulupono Initiative, private sector)
- Municipal intention

Dream Big

- food waste combined with carbon sources
- Separate “farmed” carbon source (fast growing N-fixing trees for example)
- food collection via biodiesel powered trucks
- separation equipment to remove plastic and other contaminants
- high quality compost available to farmer, ranchers, landscapers, golf courses, and home gardeners
- Job creation



Potential volume of compost that could be produced from food waste on Maui is roughly in the neighborhood of 105,000 yd³ per year which is enough to cover 3500 acres a year 1” thick with compost



1,580 acres of diversified crops on Maui and 1,150 of that in Upcountry (DoA)

COUNTY OF MAUI COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

CEDS

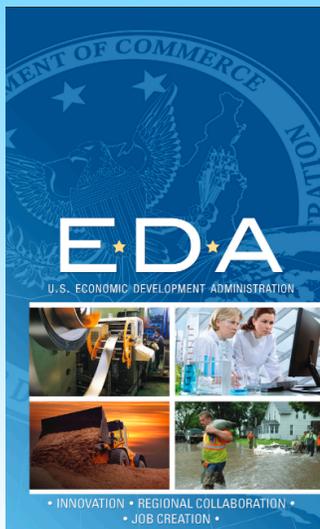


Released December 2016

Goal 1: Develop and improve agriculture infrastructure
Objective: Increase agriculture opportunities

Strategies:

- o Develop an Agriculture Value-Added processing facility that meets all government regulations
- o Assure reliable, adequate and affordable water sources for all ag ventures
- o Support a modern, state-of-the-art slaughterhouse
- o **Support a commercial composting facility to generate locally produced amendments and reduce waste**



U.S. Economic Development Administration

- Provides funding for capital investment
- EDA provides grant-based investments to units of state and local government
- Priorities: Environmentally Sustainable Development
- Aligns with CEDS
- grants up to \$3M

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