

APT Committee

From: Shay Chan Hodges <shay.chanhodges@gmail.com>
Sent: Monday, February 1, 2021 9:56 AM
To: APT Committee
Cc: Kasie M. Takayama; Gina M. Young
Subject: Please see attached
Attachments: Maui ESG Project - Community Owned Water Companies-6.pdf

Please find attached the powerpoint that we will be presenting at tomorrow's APT committee meeting.

Please confirm receipt.

—shay

Shay Chan Hodges

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February 2021



RESPONSIBLE
Markets LLC

PUBLIC-PRIVATE ESG WATER SYSTEM SOLUTIONS FOR ALL STAKEHOLDERS

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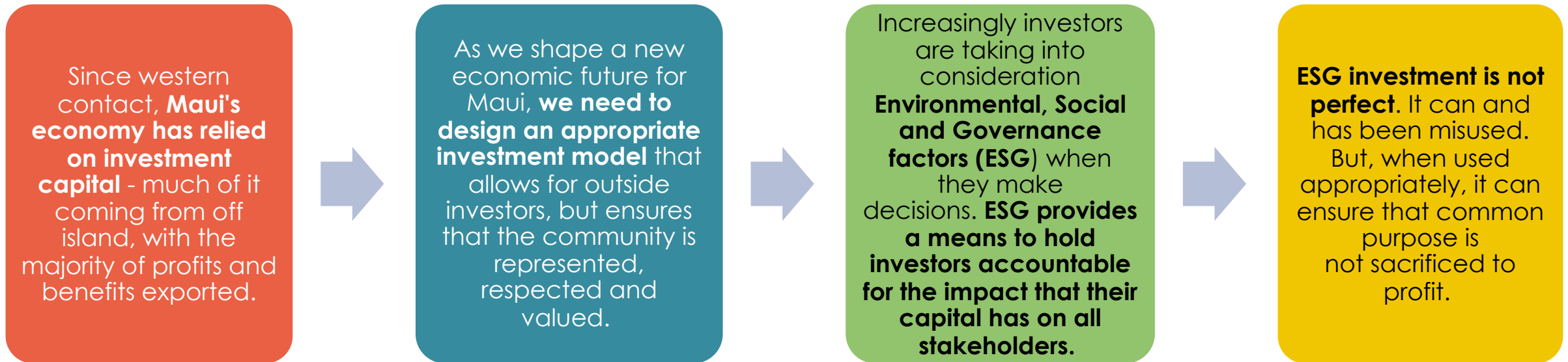
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ESG can be effective **when the community exercises its rights, and responsibility, to insist that investors remain true to the ESG principles** they lay claim too.
For that to happen, the community must be respected as a true partner.

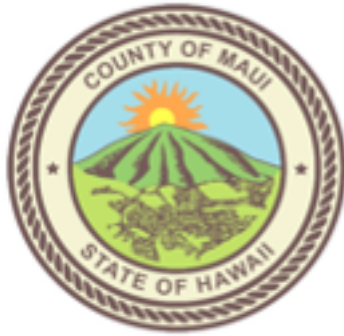


But ESG investing can work only if **the underlying business model is robust and profitable.**



The goal of the Maui ESG Investment Project is to identify purpose driven investors, bring them into the community and - with input from the community - identify potential investments.

IN 2019, MAUI COUNTY PROVIDED FUNDING FOR THE MAUI ESG PROJECT



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MAUI COLLEGE

Goals of the project included:

- Increased community understanding of Environmental, Social, Corporate Governance principles, institutional investment, & private equity
- Preliminary understanding by ESG practitioners of local issues and needs, and Maui's potential to be a model for community-driven ESG investment
- Relationship building between community members, policy makers, & ESG practitioners

On Jan 31 & Feb 1, 2020, the Maui ESG Project presented the Ahupua`a Investment Summit at the University of Hawaii Maui College

- A Water Governance & Finance Working Group Panel included community members and investors
- Panelists discussed community-controlled water systems, including models for impact financing, governance structures, and transparent stakeholder driven accountability models
- Community members provided feedback following the discussion and in subsequent surveys

WORK AT THE SUMMIT LED TO COMPLETION OF A STRATEGIC ASSESSMENT & ROADMAP FOR EAST-MAUI WATER-LAND ECOSYSTEM & WATERSHED FUNDED BY THE LINCOLN INSTITUTE OF LAND POLICY

Water is a Public Trust with dual objectives of protection and maximum reasonable beneficial use – that are not currently being met.

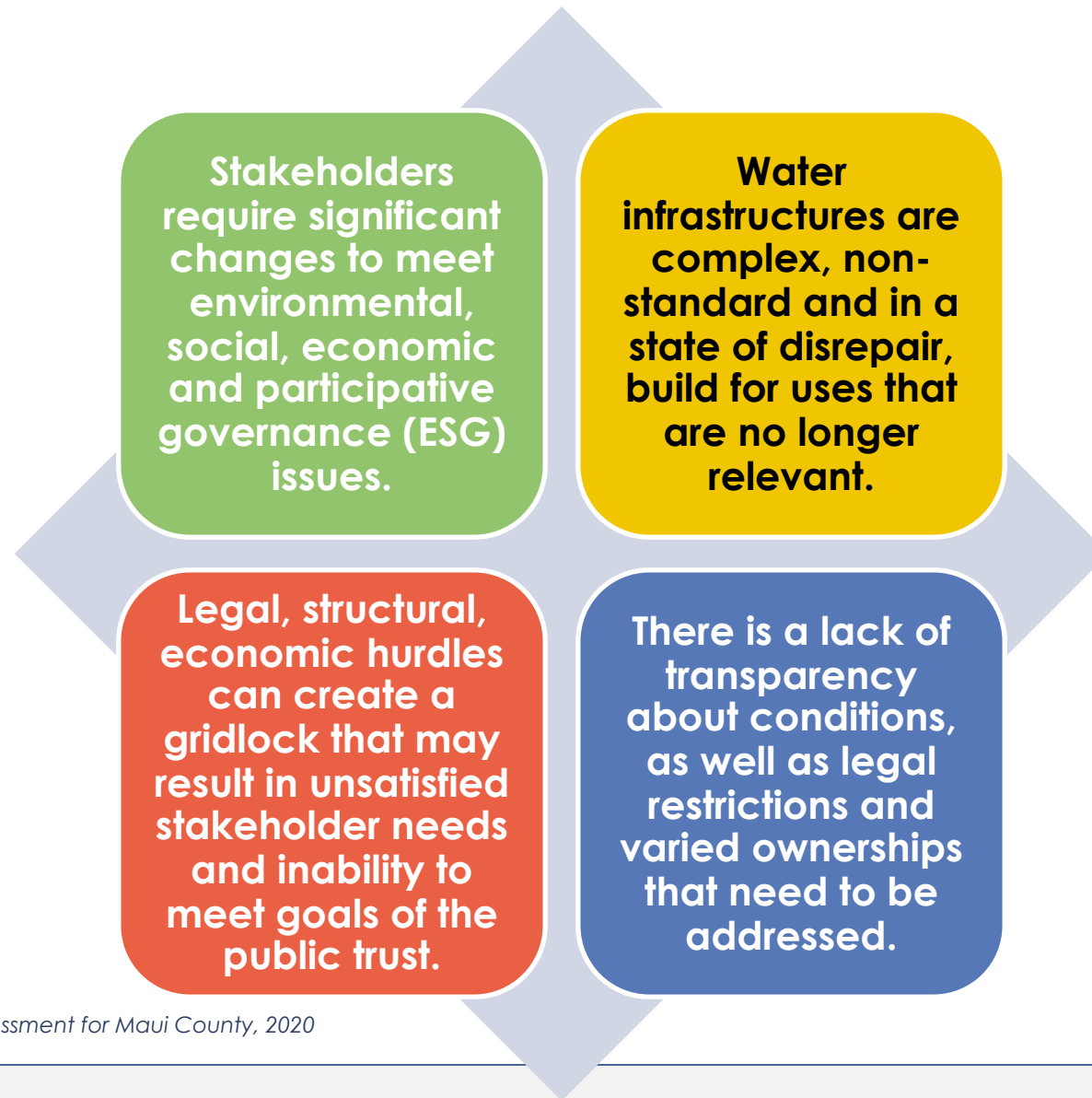
Developed in partnership with IoTAsk and presented to the Maui County EACP Committee in August 2020, the report identified several key issues that should be addressed in any water system plan.



Water Working Group Panelists, February 1, 2020

Source: Photo courtesy of Brandon Maka`awa`awa, Ahupua`a Investment Summit

EXAMPLES OF CURRENT WATER SYSTEM CHALLENGES IN MAUI COUNTY



Source: IoTAsk & Responsible Markets, Strategic Assessment for Maui County, 2020

THE COUNTY & COMMUNITY HAVE A UNIQUE OPPORTUNITY TODAY TO ENVISION A NEW FUTURE FOR ITS PRIVATE PLANTATION WATER SYSTEMS

With so many residents dependent upon stream water and shifting weather patterns, it's time to use traditional knowledge, new technology, and new economic models to create a just and common-sense restructuring to manage the Maui watershed lands for Maui's long-term vision.

COVID-19 stimulus and other federal funding will be available this year.

Maui needs to begin work immediately on better plans for Maui's water systems in order to access funding that may be available to start transitioning to a new plan.



Source: IoTTask & Responsible Markets, Strategic Assessment for Maui County, 2020, Photocourtesy of Maui Nui Marine Resources Council and Na Moku Aupuni O Ko`olau Hui

THE COUNTY & COMMUNITY HAVE A UNIQUE OPPORTUNITY TODAY TO ENVISION A NEW FUTURE FOR ITS PRIVATE PLANTATION WATER SYSTEMS

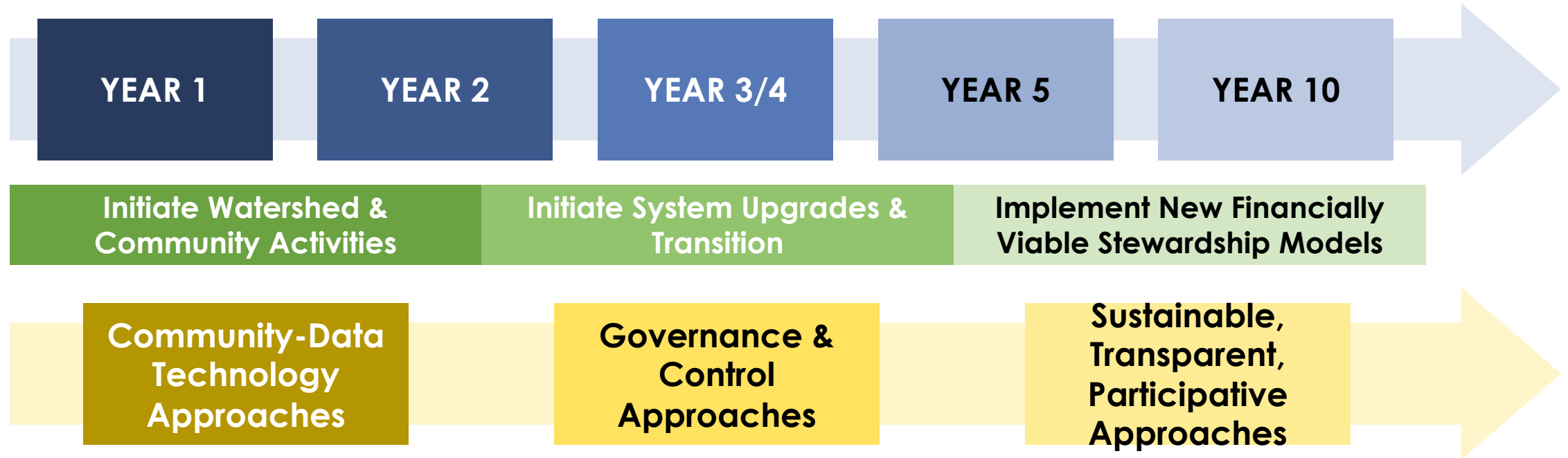
Technology, Generational Knowledge, Infrastructure, Legal Governance and Economics are all needed to achieve a new vision for Maui water over the next 1 to 10 years.

This vision should be considered a starting point to focus the communities' collaborative discussions on how to develop an ESG investment plan that supports the future they wish for their communities and the county.

Maui is uniquely qualified to roll out many traditionally urban technologies in a rural setting due to its size, closed-grids, geographic characteristics and progressive and cultural lifestyle and temperament.

STRATEGIC ASSESSMENT & ROADMAP FOR EAST-MAUI WATER-LAND ECOSYSTEM & WATERSHED: TEN YEAR PLAN

The report included a one to ten-year plan including technology, legal & governance, infrastructure, and economic workstreams.



The report was also transmitted to Ahupua`a Summit participants and other community members and ESG investors.

SOME OF THE WORK HAS ALREADY BEGUN IN EAST MAUI AS OUTLINED IN THE ROADMAP'S YEAR ONE PRIORITIES

TECHNOLOGY WORKSTREAM



- Community crowd-hydrology – basic measurement and livelihood for 20% streams
- Extension of community-based stream measurements and maintenance
- Simple prototype with 50-100 persons linked to Covid-19 recovery job creation
- Develop Smart-app for data collection and collation
- Collaborate with existing monitoring programs
- Establish additional monitoring programs from the mountains to the sea
- Survey existing local sustainable agricultural and food security innovation initiatives

LEGAL AND GOVERNANCE WORKSTREAM



- Establish community-engagement model and process
- Acknowledge historic land-water claims and mechanisms for achieving equitable, practical resolution
- Develop mechanisms for valuing and rewarding community contributions to intellectual property development
- Put EMI water contracts leases in abeyance pending data-driven re-negotiation
- Apply for state leases
- Full analysis of the county's power and functions under current legal and regulatory framework

INFRASTRUCTURE WORKSTREAM



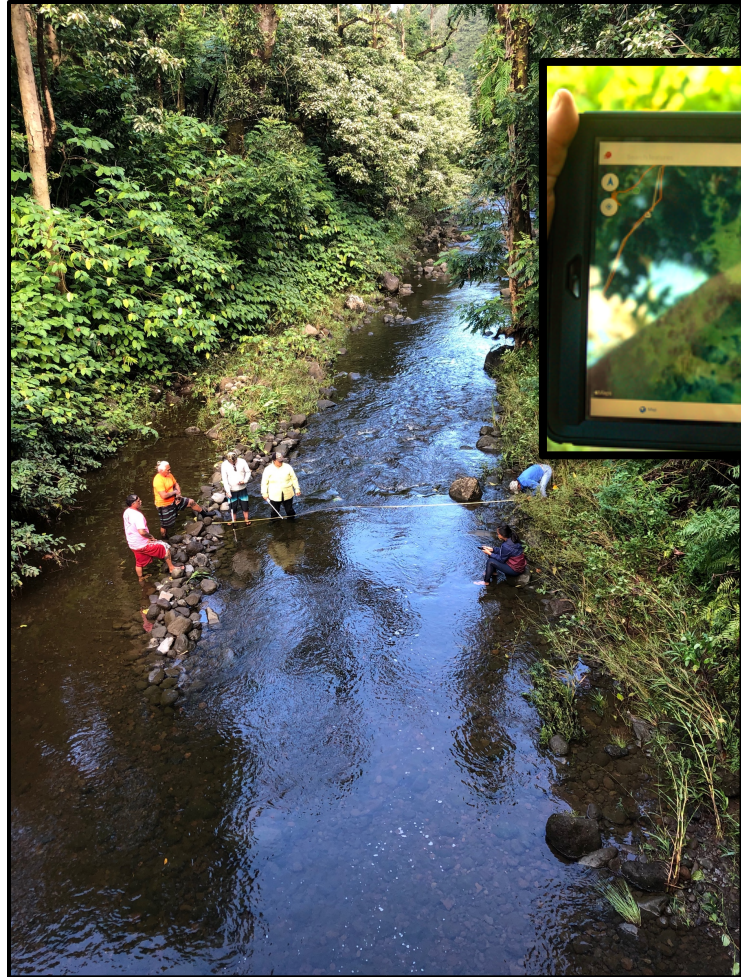
- Engage with infrastructure advocacy groups
- Engineering assessment of EMI to identify hazards
- Support digital communications infrastructure.
- Engage with federal programs for broadband
- Support 90% coverage but no last mile
- Explore last mile solutions
- Design community tech education programs

ECONOMIC WORKSTREAM



- Develop the capital and partner community
- Kickoff county vehicles for funding
- Initiate land-adjustment process
- Research and socialization land-water readjustment process
- Investigate sources of demand and supply of land - Low income housing

Source: Current Assessment, Stakeholder Assessment, Technology Assessment, Responsible Markets, IoTTask Analysis 2020



MEASURING, MONITORING, AND COMPILING DATA ABOUT THE STREAMS

In the fall of 2020, CARES Act Funding supported Na Moku Aupuni O Ko'olau Hui in mapping out roads and intakes/diversions, gates, and infrastructure; cleaning and maintaining stream access, and data collection about streams in East Maui. Providing local jobs, along with training and skills building, Na Moku networked with technology and hydrology experts, including staff from the Commission on Water Resource Management and the US Geological Survey. Funding supported water measuring devices and a mobile app that is enabling the community to compile data through a smart watershed dashboard.

MAUI COUNTY CAN EXERCISE ITS KULEANA TO SUPPORT AN ISLAND-WIDE VISION FOR THE FUTURE

MODEL OF SMART WATERSHED

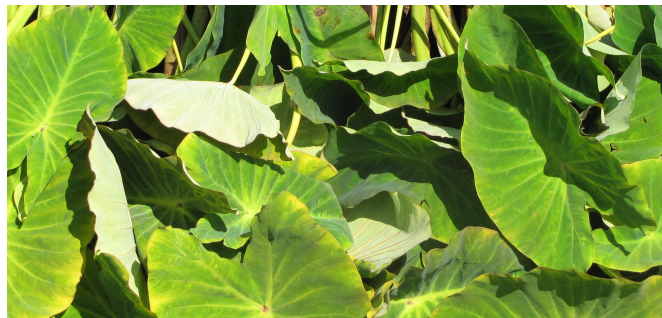


DEFINITIONS:

- **Crowdsourcing** refers to the practice of obtaining information or input into a task or project by employing the services of a large number of people, typically via the Internet.
- **Crowd2Cloud** directly aggregates crowd-sourced data in the network cloud.
- **IoT (Internet of Things)** is about extending the power of the internet beyond computers and smartphones to a whole range of other things, processes, and environments. IoT systems are sensor-enabled software-defined systems that are a combination of product, application, analytics and the Internet/networking. They are scalable, upgradable, automated and future ready and are often also referred to as "Smart" technology.
- **ESG** stands for Environmental, Social and Governance, a commonly used term to refer to public good impact other than monetary.

Source: IoTTask led visioning 2020

NEXT STEPS: DEPLOYING CAPITAL TO MEET COMMUNITY NEED



01

Build on knowledge and relationships nurtured over the last year to develop actionable ESG business models.

02

Emphasize the “S” in ESG — social care — including addressing the impacts of COVID-19.

03

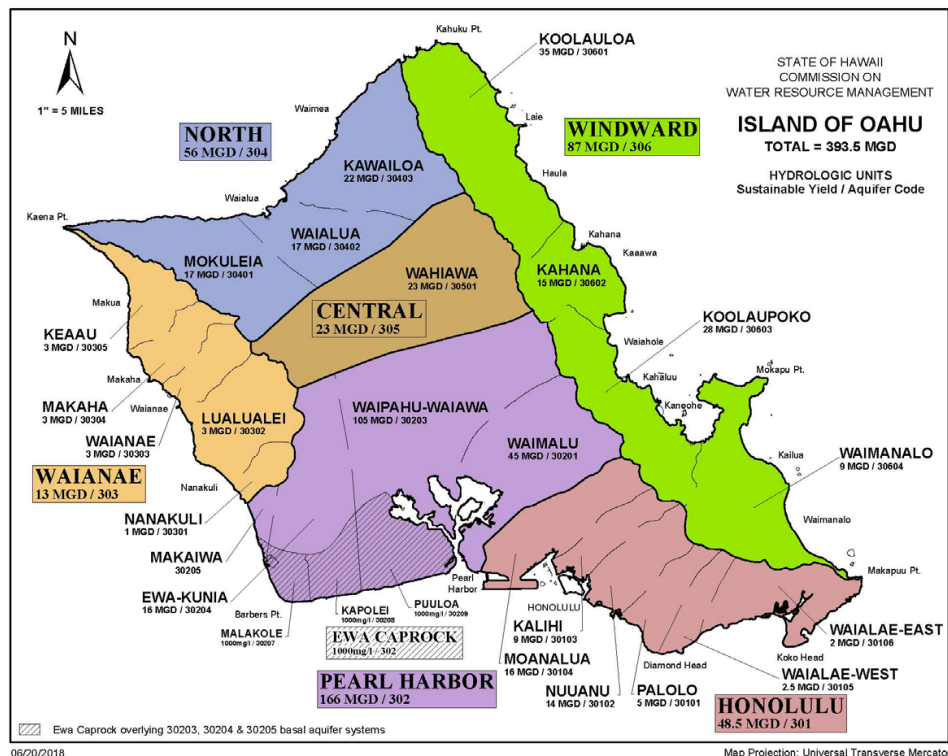
Develop opportunities for local control over or direct benefit from productive assets that build generational wealth.

04

Develop opportunities for creating jobs that are not reliant on outside discretionary spending such as tourism.

Source: Responsible Markets

MAUI DOES NOT HAVE THE GEOLOGICAL WATER STORAGE CAPACITY OF OAHU



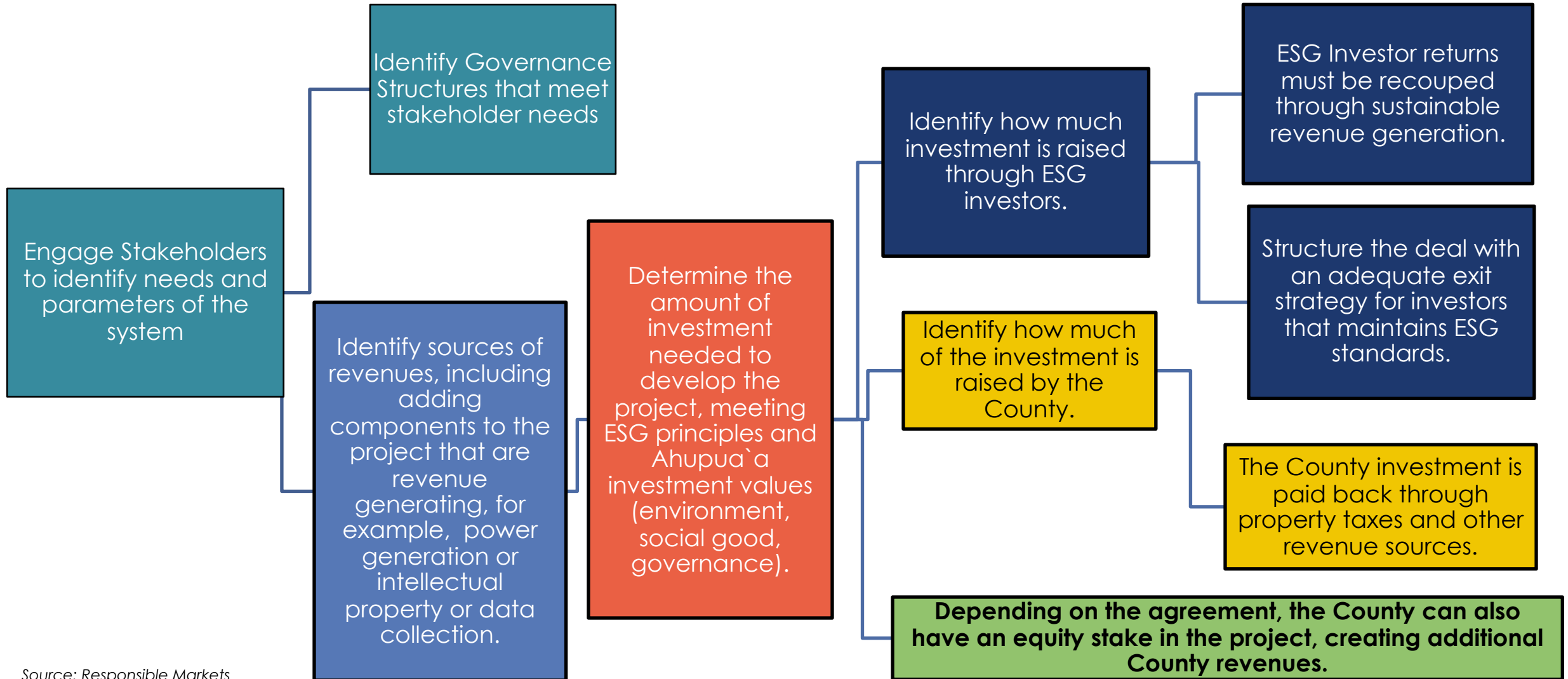
06/20/2018

DUE TO THE LIMITED RESEARCH REGARDING MAUI'S WATER RESOURCES, WATER MANAGEMENT IS PARTICULARLY IMPORTANT

- **Oahu** principal source of fresh water in **Southern Oahu**, is the **most intensely studied area of the Hawaiian islands**. Honolulu and Pearl Harbor areas have received detailed attention since **the early 1900s**.
- Aquifer capacity is a function of geological ‘storage’. The **older islands tend to have a geology developed to store more water**.
- Northern and southern ground-water systems in central Oahu **contain large quantities of basal ground water**, in which a body of ground water floats on a body of salt water.
- Oahu also has **free-flowing artesian wells** near the coast and from springs near the basalt-caprock contact, which have **trapped water surrounded by layers of impermeable rock or clay**.
- **Pearl Harbor** (165 mgd Sustainable Yield) and **Waipahu Aquifers** (100 mgd SY) have this “**capstone**” layer, which **boosts storage capacity**.
- On Maui, **only the Iao and Waihee aquifers** of Wailuku sector (36 mgd SY) **have been extensively studied**.
- **Though Maui’s other two aquifer regions:** Koolau (152 mgd) and Hana (79 Mgd) have **possible large water capacity, but they are unverified**.
- **Koolau Aquifer** may be mostly discharged into streams and therefore, may **not be available as ground water**.

Source: Water Resources Projected Plan, 2019 Update, Lucienne de Naie

EMPLOYING ESG INVESTMENT STRATEGIES TO DEVELOP WATER SYSTEMS THAT MEET COMMUNITY NEEDS IN A SUSTAINABLE MANNER



Source: Responsible Markets

A COMMUNITY ENGAGEMENT PROCESS THAT ASKS & ADDRESSES VITAL QUESTIONS IS CRUCIAL TO CREATING A COMMUNITY-DRIVEN SOLUTION

WHAT IS "THE" COMMUNITY?

- Only those who live along the system?
- Only those who are dependent upon it?
- Other areas of Maui?
- How are community shareholders defined?

HOW SHOULD THE WATER SYSTEM BEST SERVE "THE COMMUNITY"?

- For a well-managed water system, what would "meeting the cultural, environmental, agricultural, and other needs of your community" look like?

HOW SHOULD THE WATER SYSTEM BE IMPROVED?

- Once an engineering study is completed and the condition of a specific system is known, would the community like to see investments in the system? If so, what kind?

WHAT IS NEEDED FOR PRO-ACTIVE MANAGEMENT AND RESTORATION OF THE WATERSHEDS?

- What is the community's vision of engagement in the watershed regarding access, stewardship, and data collection?

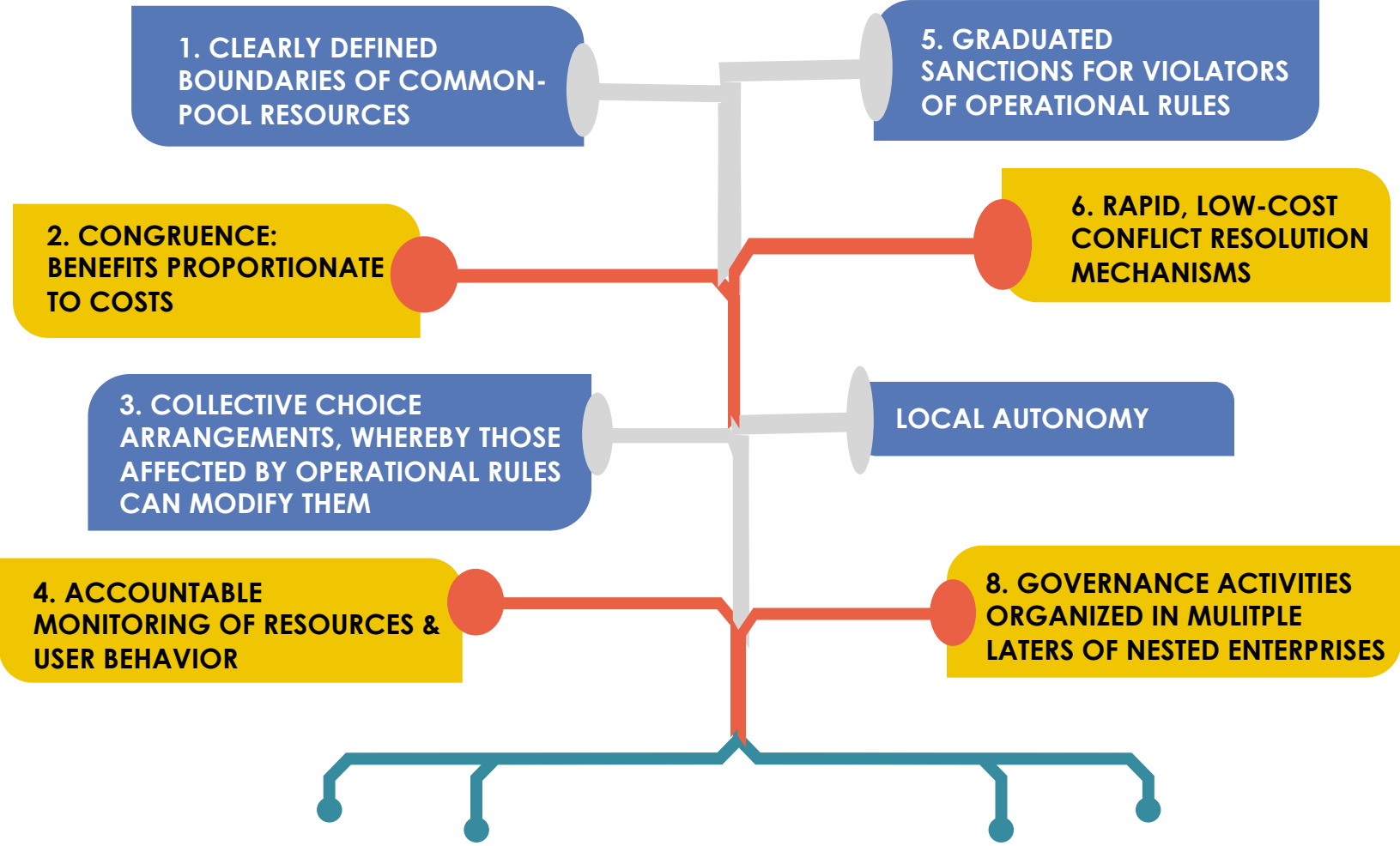
HOW SHOULD A COMMUNITY OWNED GOVERNANCE STRUCTURE INTERACT WITH GOVERNMENT AGENCIES?

- Commission on Water Resources
- Dept of Land & Natural Resources
- Dept of Hawaiian Home Lands
- US Geological Survey

IF A COMMUNITY OWNED CORPORATE STRUCTURE WERE DEVELOPED, WHAT SHOULD BE INCLUDED IN A CORPORATE CHARTER?

- What key requirements need to be included to ensure accountability and protect the public trust while supporting efficient and effective management?

A GOVERNANCE STRUCTURE THAT INCLUDES THE FOLLOWING DESIGN PRINCIPLES ENSURES EFFECTIVE COMMUNITY CONTROL

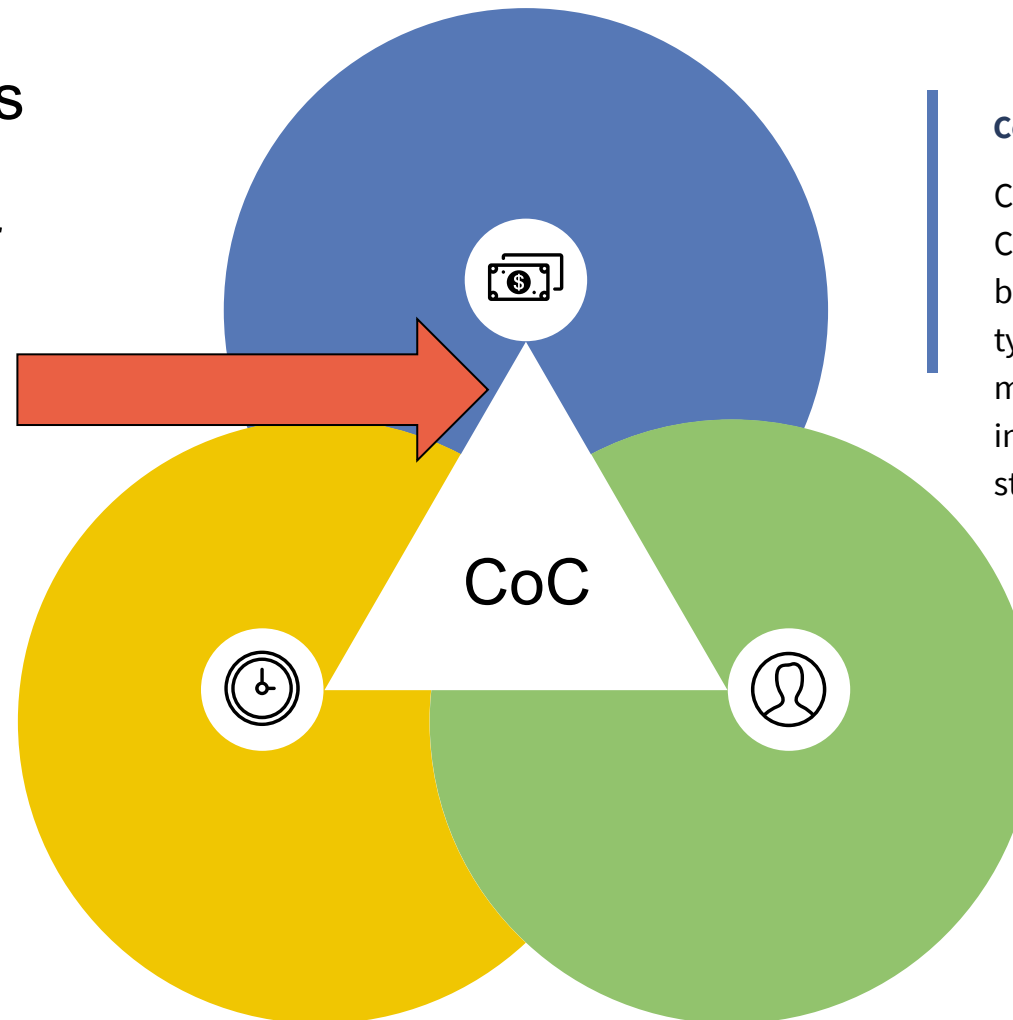


Source: Elinor Ostrom 2020

WE ARE PROPOSING INNOVATING AND CUSTOMIZING FOR THE MAUI CONTEXT BUT IN FAMILIAR WELL ESTABLISHED STRUCTURE WITH PRECEDENT

Community-owned entity is at the intersection of common practice approaches

INNOVATING



Corporations

Corporations both C-corps and Public-benefit corps are typical management and investment structures

E.g.

- Most capital investment in business is done via corporations

E.g.

- Indiana Toll Road
- Rapid Bridge Replacement Project
- Laguardia Airport

P3s

Public-private Partnerships are quite common in Europe & the US Mainland

Community Owned

Community owned structures are common worldwide.

E.g.

- Maori Miraka Dairy Farms
- Commons-based forest
- Water cooperatives

A COMMUNITY OWNED COMPANY (COC) IS ONE OF THE FEW WAYS TO PROVIDE THE COMMUNITY THE ABILITY TO SHAPE ALL OF THE DESIGN PRINCIPLES

A Community Owned Company is a public-private structure that aligns all stakeholders by including community, investors, government, and management in the ownership structure.



In a community owned company, the community is the founder.



The COC builds equity and value in Maui for all the stakeholders including the Community.



COC ensures ESG objectives through corporate charter – e.g. renewing and maintaining public trust for water.



There are less conflicts and contention due to purposeful structural alignment in COC

Water Cooperatives, US:

- Close to 3,300 water cooperatives in the U.S. are consumer-owned utilities.
- 89% of the population that is served by public water systems is served by either a publicly owned, municipal water system or a cooperative utility.
- Each water system customer is a member-owner of the cooperative.
- Water cooperatives are democratically controlled enterprises either on a one-meter/one-vote or a one-member/one-vote basis.

Māori-Owned Miraka Dairy, NZ:

- Over 140 employees, turnover more than \$250 million.
- Business decisions guided by cultural values.
- Ownership: Wairarapa Moana Incorporation, Tuaropaki Trust, Waipapa 9 Trust, Hauhungaroa Partnership, Tauhara Moana Trust & Huiarau Farms.
- Strategic partners and investors: Te Awahohonu Forest Trust Limited, Vinamilk, Global Dairy Network bring experience & knowledge in sales and marketing.
- Milk supply comes from 104 local farms within an 85km radius of factory; farmer shareholders incentivized with strong emphasis on sustainability.

Source: University of Wisconsin, Center for Cooperatives, Research on the Economic Impact of Cooperatives, <https://reic.uwcc.wisc.edu/water/> <https://www.miraka.co.nz/miraka-is-milk.html>
<https://www.ruralnewsgroup.co.nz/dairy-news/dairy-general-news/miraka-boss-setting-off-on-a-new-adventure>

In January 2020, CIFOR studied community owned forests in Mexico, Guatemala, Nepal and Namibia, highlighting the importance of government recognition of communities' rights to manage natural resources and of promoting investment in these initiatives. Some findings:

Worldwide, more than a quarter of forests in developing nations are managed by local communities. The rights to govern and profit from these forests are often held by indigenous peoples.

Not only are community forests a proven mechanism for conserving forests and biodiversity, but their earnings are reinvested in social services and development within the communities.

Private sector investment in commons is increasing.

Commons-based investment readiness is conditional on the level of assurance stakeholders have that the obligations of each party will be met.

Community rights have fostered investment that recognizes the social character of commons ownership and delivers environmental and social returns, as well as profits.

Source: https://www.cifor.org/publications/pdf_files/infobrief/7499-infobrief.pdf, <https://www.bkconnection.com/bkblog/jeevan-sivasubramaniam/five-community-owned-businesses-that-are-thriving>, <https://news.mongabay.com/2020/05/community-forest-enterprises-provide-win-for-forests-and-people-study/>

Months One to Three

COMMUNITY DESIGN PROCESS:

Working Groups are formed to reach out to communities to identify issues that need to be addressed related to water systems

COUNTY SUPPORT OF PROCESS:

Council takes actions to support community ownership of the system, including support of community design process

Months Three to Six

GOVERNANCE STRUCTURE & BUSINESS MODELS:

Community is provided with expertise in corporate governance, ESG investment, bonding, as needed; identifies governance ownership structure and parameters of business model options

BUDGET ALLOCATIONS:

County Council approves budget items related to water system acquisition, continued community education, and seeding of Community Ownership Structure

Months Six to Twelve or later

COMMUNITY ESTABLISHES AND INCORPORATES NEW OWNERSHIP GOVERNANCE STRUCTURE PER PARAMETERS IDENTIFIED BY WORKING GROUPS:

- Deal Management Company appointed to complete design and incubate new water entity
- Continued community governance & financial education
- Incorporation and completion of business plan
- Establishment of new entity and community ownership

(These processes require County or other funding.)

COUNTY TAKES OVER WATER SYSTEM AND PREPARES FOR TRANSFER TO COMMUNITY-GOVERNED SYSTEM

- Memorandum of Understanding between County & new entity, contingent upon acquiring assets and community development of viable business plan
- County acquires water system assets
- Interim Management company hired prior to transfer
- New entity (with support from county) negotiates contracts with current workers, whose knowledge of the system will be essential to continued operation after transfer
- Other community efforts (such as crowdsourced measurement) may be rolled up into the entity as they reach maturity.

- County grants concession for operation of system to new water entity.
- County assigns water leases to new entity.

TRANSITION OF ASSETS

- Deal Management Company presents Public Private Partnership (PPM) to investors.
- Deal Management Company procures first equity investments.
- New entity purchases system from County immediately or over time.

PROCUREMENT OF INVESTMENT

- Deal Management Company works with Working groups re: integration of community stewardship with operating team.
- Deal Management Company recruits operating team.
- New entity approves operating team and begins operations.
- Infrastructure investment deployed.

ESTABLISHING OPERATIONS TEAM

The State of Hawaii's responsibilities and involvement would not change substantially with changes in ownership structure.

There would be a presumption of serving the public interest with public entity ownership, which would increase potential access to private and federal grants.

POTENTIAL REVENUES FROM EMI WATER DELIVERY SYSTEM BASED ON ECONOMIC ANALYSIS IN THE EAST-MAUI WATER-LAND ECOSYSTEM & WATERSHED ROADMAP

Acquisition costs depend on determinations (Mahi Pono purchased 50% ownership for \$2.7 Million)

Real cost of turning system into viable ESG + Ahupua'a going concern is much higher. Includes anticipated \$160 million in required infrastructure upgrades.

Water delivery at current agricultural rates can yield \$24 million annually, while returning more than 55% of the water requested under Mahi Pono lease to the streams.

Additional recurring revenues obtainable from for example, installation of micro-hydropower plants at 6 (of 8) restored reservoirs, generating additional \$9 million per year.

Recurring revenue flows can support investment issue of \$200-250 million to finance (potentially a bond by Maui county)

- Infrastructure upgrades
- Installation of micro-hydro plants

A SIMILAR ESG REVENUE MODEL IS POSSIBLE FOR WAILUKU WATER COMPANY – THIS DOES NOT EXIST TODAY

Assessment gives us a cost of \$11 million for acquisition. Asking price is \$9.5 million.

The real cost of turning the system into a viable ESG + Ahupua'a going concern is much higher and includes \$6 million to \$77 million in infrastructure upgrades required.

Any new revenue model will require additional investment, for example: \$30-50 million in ancillary technology and ESG investment to develop a project; \$2 million in startup costs

WWC has experienced significant revenue losses in recent years and is currently operating at a loss. Revenues need to increase by approximately one third, excluding capital expenditure.

Revenue-producing projects need to be identified that meet the needs of the community (likely ruling out a rates rise.)

APPENDIX

VERY FEW FORMS PROVIDE FLEXIBILITY ON ALL COMMUNITY DESIGN PRINCIPLES WHILE ENSURING AN EFFICIENT EXECUTIVE STRUCTURE TO ENSURE ECONOMIC AND ESG SUSTAINABILITY

Governance Structure	Shareholder owned (Example, A&B)	Private Equity controlled (Example, Mahi Pono)	Co-op	Municipal Water Authority	Hybrid (private sustainable business corporation with majority government ownership)	Independent Public Water Authority	Community Owned Corporation
1. CLEARLY DEFINED BOUNDARIES	X	X	X	X	X	X	X
2. CONGRUENCE			X	X	X		X
3. COLLECTIVE CHOICE ARRANGEMENTS			X				X
4. MONITORING			X	X			X
5. GRADUATED SANCTIONS			X				X
6. CONFLICT RESOLUTION MECHANISMS				X	X	X	X
7. LOCAL AUTONOMY				X	X		X
8. NESTED ENTERPRISES							X

Building Equity and Value in the Community

1. Ownership in a Portion of the Company.
2. The Right to Transfer Ownership.
3. Right to Share in Profitability - An Entitlement to Dividends.
4. Right to Buy New Shares

Ensuring ESG and Ahupua`a Values through Corporate Charter & Other Governance Structures

1. Right to Vote - Voting Power on Major Issues.
2. Right to Influence Management – through the Board
3. Opportunity to Inspect Corporate Books and Records
4. The Right to Sue for Wrongful Acts.
5. Additional Corporate Governance - through company policy
6. Shareholder Rights Plan – protection against takeover

IN THE INCUBATION PROCESS, THE COMMUNITY MAKES DECISIONS REGARDING ITS APPROACHES TO SHAREHOLDER MANAGEMENT

1

Define Community Stakeholder

Typical practice is to either create an entity that holds all community shares in trust and handles distributions Or to distribute shares at individual level. The definition of member of community is decided a-priori and should include all participant stakeholders.



2

Acquisition Owner Shares

Typically either trust entity or individual stakeholder will acquire shares at par value. This value is a very very low (~0) threshold that is set at inception .



3

Exit/Divestation Owner Shares

Typically when a community owner leaves the community, they will exit their share back to either the company (ROFR) or an outsider moving into the community (like partnership shares). Some typical scheme is used for exit valuation (e.g. NAV).



4

Board Selection & Shareholder Meetings

Typically board selection and shareholder meetings are decided in the corporation charter. This is similar to appointing a trustee for the community trust. Shareholder meetings and process are also part of the charter and all shareholders can attend. The charter mandates minimum number of annual meetings and process for shareholders to call meeting.



5

Shareholder Rights

Typically standard shareholder rights are determined at inception using a shareholder rights agreement (SRA) and corporate charter. Shareholders may interact with the company and exercise rights according to SRA but may not interfere with day to day operations. A majority of shareholders can vote to fire/replace the board.

THANK YOU



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