

# QUILIBRIUM OVERVIEW

Quilibrium will become a significant player in

**reducing poverty**

**effecting responsible consumption and production**

**acting on climate change**

by providing an end-to-end **tech** , **knowhow** , **services** and **supply chain solution**

enabling farming communities in developing economies to own and operate

modernised **modular saltwater farms** for **seaweed** and other crops.

**Miki Shapiro**

FOUNDER & CEO  
*miki@quilibrium.co*

**Peter Goyen**

CO-FOUNDER, COO  
*peter@quilibrium.co*

# PROBLEM - AND OPPORTUNITY

Seaweed presents an opportunity- an **environmentally -helpful** source of **livelihood** , and, (where food security or overfishing issues exist), **protein - rich human food** . It has numerous industry markets. It also captures CO2.

Thousands of coastal farming/fishing communities - in SE Asia and around the world are looking to ***grow seaweed efficiently*** *within their means*.

Current marine farming technology is **not accessible** to smaller growers.

Smaller growers *further* lack additional inputs and relationships to achieve high growth.

# SOLUTION

Our floating infrastructure grows seaweed efficiently and will modernise farming.

*Technology is not enough.*

**Our play:**

- Customer-funded & resourced projects (**model scales out** ).
- Floating infrastructure **technology stack** at accessible price-point.
- Bundle **all essential inputs** .  
*(services, carbon credit registration, academia/buyer access).*
- 6-year, open books, 10% revenue sharing business model, aligns customer success and ours
- Develop and enable accompanying on-land higher-value processing of crop.
- **Then** layer integrated services (*realtime monitoring, field automation, SaaS*).

# HOW IT WORKS

Once our customer resources their pilot:

1. **Cable Grid** is deployed
2. Floats **produced locally** and deployed.
3. Seaweed shortlines, planters or walkway decks deployed on floats.

Infrastructure means

- More crop & **revenue options**
- Layered equipment cheaper
- Need fewer boats
- We can monetise on customer creativity



## FLEXIBLE CROP OPTIONS

- Multiple seaweed species
- Polyculture
- Above-water mangrove nurseries

## AFFORDABLE INFRA

- High-volume, low-cost float system
- Easy install, service & change
- Universal interface upwards
- Anchored cable grid below



## SHORE CAPABILITIES

- On-site fabrication
- Develop customer tech skills
- Customer experimentation encouraged
- High-value processing options on-site

## MODERN SKILLED GROWER

- Fuse traditional farming & tech
- Ready designs baseline
- Customer encouraged to alter IP and monetise on it
- Set up for future layered ecosystem



## COMMUNITY DRIVEN

- Community key stakeholder
- Improve its relationships
- Academia access
- Qualify for gov't programs

# WHERE WE ARE AT DE-RISKING THE TECH

Despite COVID challenges,  
we've been **iterating aggressively** on:

- in-house CAD & rapid prototyping
- on-water testing

Current **work in progress** :

- Commence **pilot site**
- Demonstrate **cultivation**
- Demonstrate **harvest modes** .



Designed, tested and  
demonstrated



**prototypes**

(proving **concept** )



Designed, tested and  
demonstrated



**field fabrication method**

to be used  
(how we achieve **low price** )

# \$600k

GOAL - average customer contract

# 19

GOAL - customer projects in first 4 years

## TRACTION DE-RISKING DEMAND

Following intensive business development and customer alignment, we are near securing our first customer contract, (approx. US\$600k over 6y), with Rutong, Indonesia.

The customer has assembled their local team and we are **setting up commercials**.

We have additional projects in active stakeholder development in

- Australia
- Malaysia
- Philippines
- Israel

# 85

GOAL - hectares of infrastructure deployed over 3 years

# 1000

GOAL - tons CO2/year sequestered by year 3

# >50%

GOAL - % of customer employees earning above the median income in their country thanks to a modernised job

MASTER SERVICES AGREEMENT ("MSA")

AGREEMENT Dated \_\_\_\_\_ ("Effective Date").

BETWEEN Quilbrium (ABN 60 656 000 341) of Australia ("Quilbrium")

AND Rajuno Hipipori (ABN <Address> ("Customer").

BACKGROUND:

Quilbrium is in the business of providing saltwater farming inputs to growers, sufficiency enablement, services, IP and related products.

B. Customer is a venture founded by the Rutong District BUMDES (village owned business) in Rutong, Maluku, Indonesia and was founded with the intention of starting a modernised business in Rutong.

C. Customer has chosen to collaborate with Quilbrium on building a capable floating infrastructure, and translating this floating infrastructure into revenue would sustain and modernise livelihoods, benefit the community and benefit D. Quilbrium wishes to provide the Services to the Customer as specified by

THE PARTIES AGREE.

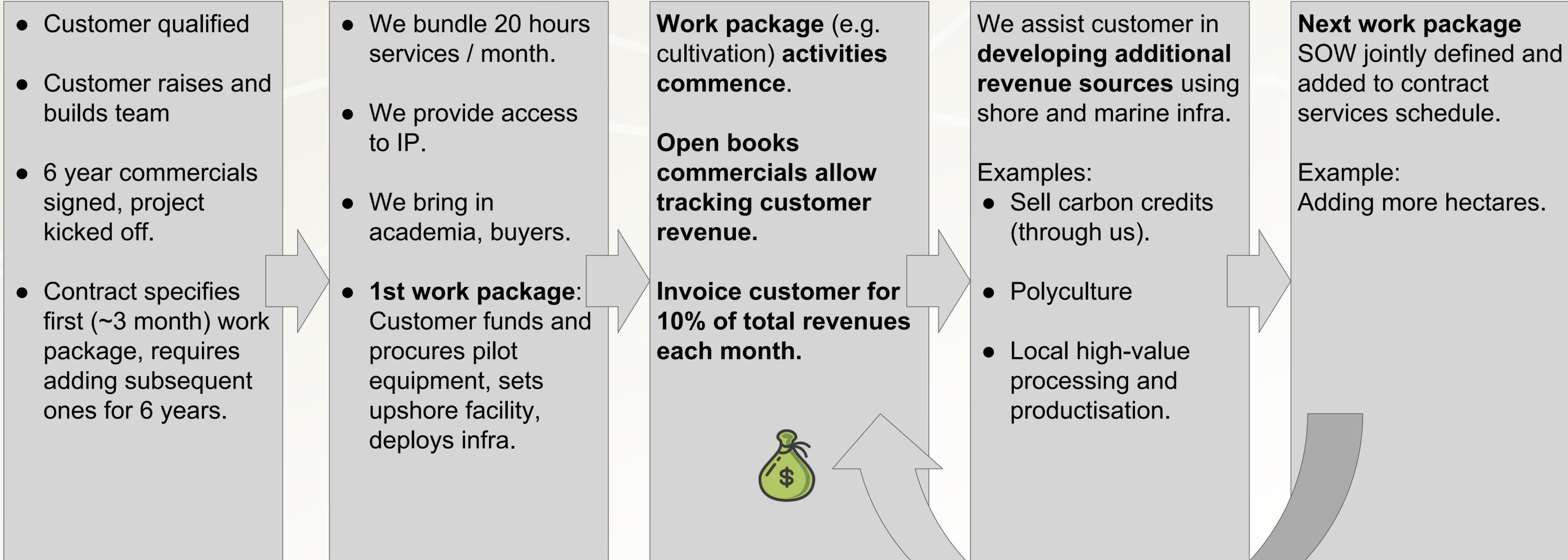
1. DEFINITIONS

Business Day means Monday to Friday inclusive, but excluding bank and other public holidays of the recipient of the Services is based.

\_\_\_\_\_ has been engaged by the Customer for the purpose of providing the Services to the Customer.



# BUSINESS MODEL



# 16.7 Billion USD

Is the global seaweed market in 2020  
(*cultivation alone* ), according to a recent  
Markets & Markets report\*

The report estimates a **CAGR** of **12.6%**

\* Markets & Markets 2020-2025 Seaweed Cultivation Market Report <https://www.marketsandmarkets.com/Market-Reports/commercial-seaweed-market-152763701.html>

## MARKET

The cultivation market is significant and fast-growing.

Tapping it through a scalable, livelihood-building, ecological, geographically distributed ag-tech model that shares in revenues will allow us to build a defining, global go-to product & services offering.

# COMPETITION

Traditional  
Low-tech  
Farming

Affordable  
(at hectare+  
scale)

Marine



Low-cost, low volume

Flexible  
Capabilities /  
Application  
Breadth

Floating  
marinas

Large scale  
industrial seaweed  
farming

When it comes to seaweed,

**Flexibility** allows **more revenue streams** .

**Affordability** opens up the **small grower market** .

Our competitive play:

**Flexible , low-cost , high-volume .**

# GO TO MARKET

Signing customers up requires *trust* among willing stakeholders.

To date, in geographies we are active, we successfully engaged through a local prime mover responsible for business development.

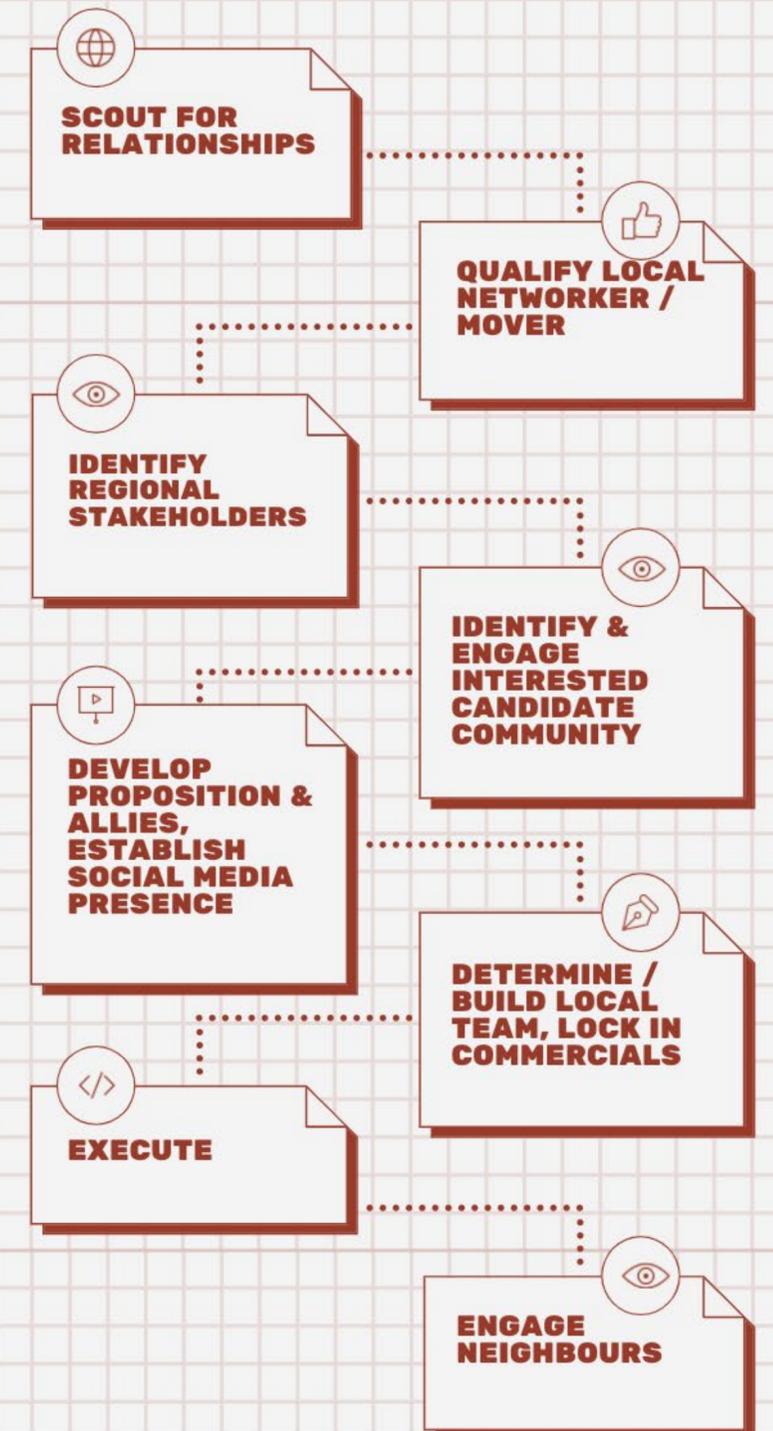
Such a person/partner-org was recruited on grounds of understanding local context, established connections, and an ability to develop more.

Through the prime mover, and by placing emphasis on the sustainable development goals most relevant in the geography, we plan local government engagement, academia, partners, buyers, and **identify the region** where we seek interested communities. This is followed by engaging local stakeholders, launching a local digital campaign and developing the proposition, through to the signing of commercials and execution.

A follow-on strategy, where we are successful, is to engage neighbouring communities who are already aware of work we have done in their area.

## QUILIBRIUM GO TO MARKET

STRATEGY



# TEAM

Our team has two foundational strengths.

We are each “**T-shaped**”, *each of us* in their own way combining an advanced career of **expert depth** with a generalist’s **big-picture breadth** and ancillary skills. Deep expertise gives humility when seeking to add generalism, and an appetite to be coached, learn and grow. This is our first strength.

Our second core strength is our ability to take on challenges as a high-performing team, now a year in the making. We have worked together, done business together in the past, take care of each other to survive the long haul, and have committed to the vision of together building this business.



**Miki Shapiro**  
Founder and CEO

Coming from a principal-level enterprise decision-maker-facing consulting background at Red Hat, Miki has built the team, commands the vision, and brings the strategic solution design experience where humans, technology and biology meet. Miki has past startup founder experience, a Masters of Entrepreneurship and Innovation (MEI) from Swinburne University and a Melbourne University background in science and biology.



**Peter Goyen**  
Co-Founder and COO

With consulting and business relationship building experience across multiple industries and countries, as well as past startup founder experience, Peter brings a rich network of business ties and SE Asia relationships to the team. Peter works on identifying opportunities, to bring efficiency to businesses and improved self-sufficiency to communities in Australia and our neighbours to the north.



**Dr Paul Van Den Bergen**  
Co-Founder and CTO

A materials engineer and geologist, with breadth skills covering mechanical engineering, prototyping and production engineering, as well as IT, devops, IoT and cloud technology. Paul brings to the team the perspective of a broad-spectrum cross-disciplinary designer.



**Ms Irit Camon**  
Co-Founder,  
Head of Business Development, Israel  
Chair, Academic Panel

A Biologist (B.Sc.) and Bio-medical engineer (M.Sc.), Irit brings experience as a Product Manager within large technology organisations, business development experience, offers strong academia relations, and currently working as UX expert and Human Factor Engineer on complex multi-disciplinary systems.



**Josh Muirhead**  
CMO

An entrepreneur packing startup experience and a background in media and filmmaking, Josh brings expertise in marketing, digital content creation, photography, filmmaking and communication to the team.