# Water Unite Impact Pilot Phase Report



Managed by Wellers iMPACT











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Jibu

**Sanivation** 

Mr. Green Africa

**Gree Energy** 









## **Our Pilot Impact Report**



#### **Water Unite Impact Overview**

Water Unite Impact (WUI) is a collaboration between global non-profit Water Unite and FCA authorised impact investment manager Wellers Impact.

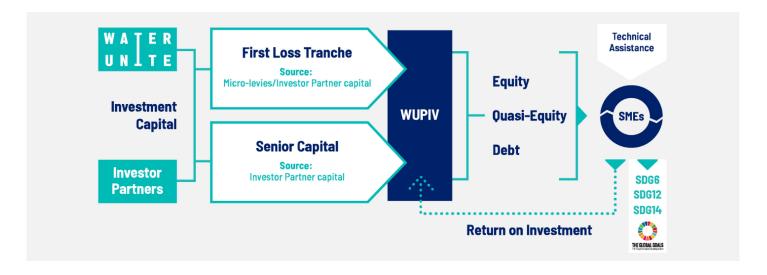
WUI was launched in 2020 to provide risk-tolerant capital to Small & Medium Enterprises ('SMEs') in the water, sanitation and circular economy sectors. This addresses the "missing middle" funding gap in parts of the finance landscape not met through charitable foundations, microfinance institutions, commercial banks and/or formal capital markets. The view is that over time, increased professionalism of these SMEs will lead to easier delivery and tracking of efforts to the sector.

Investment decisions for WUI are made by an experienced Investment Committee (IC) composed of professionals (including Water Unite board members) with a wealth of knowledge in water, infrastructure, finance, impact investment and emerging markets.

#### **Structure**

WUI adopts a "risk-reward" structure, where funding committed to the First Loss Tranche (FLT), sourced via Water Unite donors (including corporates such as Co-op, Eliot PLC, Britvic PLC, and Nisa) and Investor Partners allocating FLT capital, is utilised to take a higher risk/reward position, acting as a credit enhancement mechanism to leverage Senior Capital, which will rank higher in the pecking order in a default scenario.

This structure was awarded the 'Impact Project/Investment of the Year: Water Category' in Environmental Finance's IMPACT Awards. Existing partnerships have already secured over US\$10m committed to be invested into the catalytic first loss tranche, with total target capitalisation, including senior capital of US\$60m.



#### **Pilot Phase**

Following initial seed funding from Water Unite and The One Foundation, the vehicle was launched as a pilot. During this phase, the vehicle was known as Water Unite Pilot Investment Vehicle (WUPIV). The objective of the pilot was to assess the depth of deal-flow, test and develop the investment thesis, build the early portfolio and extract a preliminary track-record.

Across the last three years the analyst team have reviewed over 200 opportunities against the selection criteria, making investments into Sanivation, Mr Green Africa, GREE Energy and Jibu (more details in this report). These investments have already begun generating positive impacts, illustrating the effectiveness of the Water+ approach in addressing pressing water-related issues. Alongside these investments, Technical Assistance (TA) is being provided, and has included financial structuring, governance, financial modelling, structuring exit strategies and introductions to potential investors.

Following the success of the initial pilot WUI is now transitioning into its scale-up phase to accelerate and amplify its impact by making a further 10 investments over the next two years. WUI is now actively inviting new Limited Partners (LPs) to join forces.

## **Our Pilot Impact Report**



#### Water+

Water Unite Impact's Water+ investment thesis focuses on the whole water nexus. This includes the traditional WASH (water, sanitation and hygiene) sector but goes further to include food, agriculture, energy, industry and climate. The issue of water scarcity continues to escalate, with projections suggesting that 52% of the world's population will live in water-stressed regions by 2050, emphasising the urgency of sustainable solutions. In an increasingly water-scarce environment, all sectors will be impacted by water reduce, reuse and recycling, enhanced water use, water footprint and impact assets.

#### The Pillars

We have identified 5 "pillars" that reflect the wider water nexus. The investment vehicle targets companies in the following pillars:



ACCESS TO CLEAN WATER



ACCESS TO SANITATION / TOILETS



PLASTIC / SOLID
WASTE CIRCULARITY



WASTE WATER
CIRCULARITY



WATER PRESERVATION

#### **Investment Approach**

The investment vehicle targets companies with strict selection criteria including:



Innovation



Growth



Target population and market



Proof of concept



Intentionality



Entrepreneurial management

## **Our Learnings**

The pilot phase of our fund has highlighted 5 key learnings:

- 1. It is not about WASH it is about water-sustainability. Classic WASH solutions have been maturing and showing limits in how they address the needs of rapid urbanisation and rural development, highlighting gaps in strategy and implementation and staying behind the curve.
- Water is a core climate risk. Water is a lasting and more permanent risk as opposed to more intermittent climate risks. It amplifies social risks with the poor on the frontline. Water scarcity is taking centre stage before the classic issues around WASH because its potential for conflict and social unrest is massive with a short timeframe to fix it.
- Circular economy solutions are key. These solutions cater to water-sustainability as there is a lot of "circularity" in water, particularly in wastewater and waste to energy. Many circular economy solutions preserve water as well as other resources.
- 4 A visible increase in water-tech solutions. This is a response to addressing both challenges around water and climate risks. Innovation is becoming diverse enough to offer a larger pool of investment opportunities. These innovations are a nexus of solutions in energy, food security, agriculture, industry, all connecting to water.
- 5. Blended finance is key. A blended finance approach is needed to foster private investment and de-risk senior capital. We found that our unique blend of funds using corporate venture philanthropy and private venture capital is a big advantage.

Our learnings have enabled us to identify an extensive pipeline of opportunities, with over 130 screened to date



## **Access to Clean Water**





#### **Summary**

In order to combat water poverty and contaminated water across Africa, Jibu created a decentralised solution to accessing safe drinking water at an affordable price through a water franchise network.

Their model involves purifying water from various sources (ground water, surface water, pipe water) using innovative solar-powered technology. Their franchisee model provides job and entrepreneurship opportunities as well as access to clean water.



THE CAPITAL THAT WE GOT FROM YOU

HELPS US TO REACH MORE PEOPLE AND INCREASE OUR FOOTPRINT AND HAVE MORE ENTREPRENEURS AND MORE BENEFICIARIES.

TIM KASPERIDUS, FORMER JIBU COO



#### Jibu's Range of Operations

Rwanda DRC

Ghana Burundi

Zambia Kenya

Uganda Tanzania

### Challenge

#### Globally, over 1 billion people lack access to safe drinking water.

4 billion people additionally experience water scarcity for at least one month of the year. This figure will be exacerbated by climate change.

П

In many cases, water that is available and accessible is unsafe to use. People are left with no alternative than to collect polluted and unsafe water and boil it to attempt to rid it of microbes and diseases, costing unnecessary amounts of fuel and money. Water security and the spread of diahorreal disease go hand in hand.

>52% of the global population will live in water stressed regions by 2050.

15% of Kenya's population are forced to use untreated water sources. Not only are these water sources often contaminated but global warming is catalysing the reduction in frequency of water sources, clean or otherwise.

In terms of sustainable development and climate change, water sector produces a huge amount of carbon emissions due to the transport, treatment and storage of water.

# 226m

people did not have access to safe drinking water in Eastern & Southern Africa

10%

of global GHG emissions are produced by the water sector

by 2050

52%
of the global population will live in water stressed areas



## **Access to Clean Water**





#### **Solution**

Jibu are not a water company, rather a franchise company that enable access to water through structuring entrepreneurship and providing entrepreneurs access to solar-powered purifying equipment.

Jibu overcomes the accessibility crisis by deploying 8,500 + retail points at 200m intervals and 192 franchises, the latter of which purifies the water which is sold at 7.4c/litre. The retail points also include the sale of other products such as porridge and LPG to leverage its last mile retail network by diversification.

Alongside creating a decentralised system to purchase water, Jibu has generated a wealth of positive impacts across the SDGs, including high employment rates for women, investing in underserved populations in emerging markets and reducing the environmental and financial impact associated with boiling water.

Currently, Jibu has around 192 franchises in total across its network, its operations extending across Kenya, Rwanda, the Democratic Republic of Congo, Ghana, Burundi, Zambia, Tanzania and Uganda.



## **Impact Metrics**

Metric

**Investment Period Q2 2021 - Q2 2023** 

**IRIS** 

Code

PI6659

PI1263

PI2210

OD0660

Photography: Alexander James-Aylin

	male franchisees men in leadership	46 (avg)
	res of water produced al clean water produced	125,576,257
Nu	mber of consumers reached mber of people with access to an water (Est.)	461,528
LP	G cooking gas sold (tons)	263

**Pilot** 

**Duration** 

25%

(avg)

(avg)

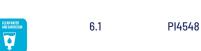
1025

(avg)





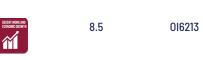




7.1







8.5



Indirect jobs created By % of employees, average full time jobs hed by women	1812 (avg)	
Direct jobs created	1025	

By number of employees

**Total franchises operating** 

8 HEIST WORK AND HE WORK AND HEIST WORK AND HEIST WORK AND HE WORK AND HEIST WORK	8.5	013160

9 NOUSTRY INNOVATION MONTHLY INNOVATION	9.4	PI1060



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## **Access to Toilets & Sanitation**





#### **Summary**

Sanivation are a pioneer for sanitation services in East Africa. Their business model enables them to transform waste into a useful energy product that is an alternative to burning wood as fuel.

Sanivation partners with local utilities, governments, NGOs and other global organisations to improve the Kenyan sanitation infrastructure and to channel funding into the sanitation sector through showcasing solution viability.



WATER UNITE HAVE ALLOWED US TO PARTNER WITH NEW LOCAL GOVERNMENTS AND TAKE ON INNOVATION THAT ALLOWS CITIES TO BE CLEAN, HEALTHY AND PRODUCTIVE TO NEW LOCATIONS...

ANDREW FOOTE, SANIVATION CO-FOUNDER



## Challenge

In 2018, almost 1.5 million cases of diarrhoeal disease were reported, 9% of which were found in Nairobi.

Access to sanitation is human right and sanitation is intrinsically linked to climate change, however the link is not globally recognised; only 0.5% of NDCs (National Disclosure Commitments) relate specifically to sanitation without water.

Climate change has revealed vulnerabilities in sanitation infrastructures and has additionally been linked to rising instances of waterborne diseases and infections such as cholera and tuberculosis. Reducing the transmission of these diseases will substantially reduce the fiscal burden on the healthcare sector.

The estimated funding gap for SDG 6 in 2016, one year after the SDGs were established, was estimated to be 114 USD billion. Now, the World Bank estimates that 114 billion USD per annum is needed to achieve targets 6.1 and 6.2. of SDG 6.

29% of people in Kenya have

Kenya have access to basic Sanitation

Funding gap of

\$114bn

to reach targets 6.1 and 6.2 of SDG 6 alone

Only
0.5%
of NDCs relate specifically to sanitation without water



## **Access to Toilets & Sanitation**





#### **Solution**

Sanivation brings in expertise and capacity to deliver and implement sustainable sanitation solutions and solve complex societal sanitation challenges using a circular economy approach. Through partnering with local utilities and governments, Sanivation are able to fill financial, technical and human resource gaps and showcase the viability of the solutions to channel funding down the sanitation pipeline.

Water Unite Impact's funding allowed Sanivation to develop a robust project pipeline, allowing the creation of a replicable model to allow waste management and energy production across more cities. In 2021, Sanivation successfully expanded operations, growing from 3 to 8 cities serviced in Kenya.

Through developing treatment plants across East Africa, Sanivation are able to meet the increased demand for waste management that cannot be managed by existing urban infrastructure which is typically underfunded and is not centred around sanitation services.

**Pilot** 

**Duration** 

By processing the waste into a solid fuel or briquette, they have provided a low carbon, affordable, bioenergy end product whilst simultaneously managing waste which may have otherwise resulted in the spread of diseases.



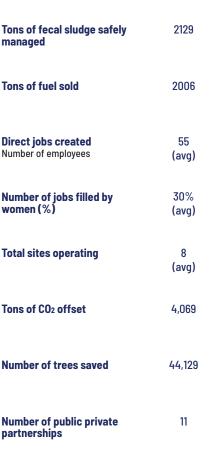
## **Impact Metrics**

**Investment Period** 02 2021 - 02 2023

Photography: Sanivation	

managed
Tons of fuel sold
<b>Direct jobs created</b> Number of employees
Number of jobs fill women (%)

**Metric** 









## **Plastic & Solid Waste Circularity**





#### **Summary**

Mr. Green Africa (MGA) is pioneering Kenya's plastics sector. MGA saw the plastic problem as an opportunity to leverage the market and provide a circular economy solution to recycling across Kenya.

Their model offers payment to those in the informal sector who bring in plastic waste. The plastic is separated and processed, the resulting plastic product is sold onto third parties such as Unilever and FMCG brands to reduce our dependency on virgin plastics.



SUCH FUNDING WILL ALLOW US TO BRING IT
TO THE NEXT LEVEL AND MAKE IT RELEVANT
AND PROVE THE CASE THAT YOU CAN DO
LOCAL VALUE ADDITION BY EMPOWERING
THE POEPLE THAT ARE INVOLVED IN THE
COLLECITON AND ULTIMATELY CREATING
BETTER LIVELIHOODS.

KIERAN SMITH, MR. GREEN AFRICA CEO



## Challenge

It is estimated that by 2030, the emissions produced from the plastics sector could reach 1.3 Gigatons annually.

Petrochemicals that are used to create "virgin" plastics are a huge driver of the fossil fuel market. Our reliance on new plastics takes us further away from our global commitments to reduce our emissions.

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Many countries have agreements to export their waste to other countries in exchange for investment in the importee's recycling sector. After the sector moved away from exporting plastic waste to China in 2018, exports to Africa quadrupled in 2019.

A huge proportion of waste is generated through fast moving consumer goods (FMCGs) via single-use plastic packaging. Additionally, microplastics cannot be broken down naturally and are transferred between natural systems, having even been found in the human food chain.

With recycling infrastructures typically underfunded, those who are employed within the sector in Africa are often underpaid or working within the informal sector.

We globally produce

400m

tons of plastic waste, annually

By 2025

250m
metric tons of plastic are estimated to enter our oceans.

Virgin plastics account for

14%

of global oil demand



## **Plastic & Solid Waste Circularity**





#### **Solution**

MGA created a sustainable business model that strategically increases the useful life of plastics.

MGA offers payment to waste pickers to collect the waste which is then transported to MGA recycling plants where it is then sorted into its varying plastic types. After using innovative technology to process the plastic waste, MGA sells the useful end-product to third party FMCG brands such as Unilever, and a proportion of the profits generated are distributed to the bottom of the recycling chain.

Through their circular economy solution to the plastic burden, MGA's plastic picker model has additionally inspired entrepreneurship within its network, as well as stable employment for its employees and payment for the wider plastic picker network.

Having already made waves in the recycling sector, Water Unite Impact's investment into MGA has enabled continued growth into new markets and sectors and will allow them to build its collection network to integrate customers into the system.



## **Impact Metrics**

**Investment Period Q1 2022 - Q2 2023** 

**IRIS** 



Metric	Duration	
<b>Direct jobs filled by women</b> By % of employees, average full time jobs held by women	33.5% (avg)	
Indirect iche excered	1250	

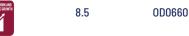












**SDG** 



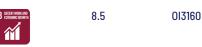


128

27

(avg)

**Pilot** 





**Total materials processed** 

Tons per country

**Direct jobs creared** Number of employees







3610	12 RESPONSIBLE ODESINATION AND PROCUCE
	$(\infty)$



## **Waste Water Circularity**

# Gree

ENERGY



#### **Summary**

Water pollution is a major threat to global water security and climate. An estimated 3.4 million people die each year from water related disease whilst wastewater gives rise to up to 7% of all greenhouse gas emission globally.

Gree Energy is tackling this prevalent issue through biogas production. Through their business model, their facilities enable the treatment of wastewater and the protection of Indonesia's wetland environments.



EACH FOOD PROCESSOR WE PARTNER
WITH, TYPICALLY GENERATES AS MUCH
WATER POLLUTION AS 300,000 TO
400,000 POOPULATION-EQUIVALENT. THE
TECHNOLOGY WE DEPLOY TREATS UP TO
99% OF SUCH POLLUTION.

NICHOLAS STIRER, GREE ENERGY FOUNDER & CEO



## Challenge

In the Lampung and Central Kalimantan regions of Indonesia where Gree Energy is active, 75% of the rivers are seriously polluted.

A significant proportion of the pollution input, classified as point source pollution, is produced by domestic primary food producers in the region who create wastewater, the sum of which is equivalent to the waste of 319 million people.

Food processors in Indonesia emit 50 million tons of CO2 eq per year. Removing this is equivalent to taking out 10 million cars off the road. Less than 9% of the 1,350 super emitting primary food processing sites are equipped with methane capture facilities.

Energy access is often unreliable, rural areas are particularly prone to power outages. Fossil fuels are Indonesia's primary energy source, however, Indonesia is aiming to reduce reliance on fossil fuels and aims to increase their proportion of renewable energy to 25%.

Indonesia's commitment to becoming more sustainable was reflected by the \$20 billion pledge of public and private finance by nations around the world to support Indonesia in retiring its coal plants.

72%
of global water
withdrawals are
attributed to
agriculture

tons of CO<sub>2</sub> eq per year is emitted by food processors in Indonesia

The waste-water equivalent generated by Indonesian primary food processors



# **Waste Water Circularity**





#### **Solution**

Gree Energy provides a proven biogas technology solution to Indonesia's fossil fuel dependency. Their mission is to fight climate change by scaling porfitable biogas solutions that transform food industry waste into valuable resources for people and the planet.

Through innovative wastewater processing that removes organic pollutants, Gree can produce biogas energy. There are numerous co-benefits associated with this process including by-products such as organic fertilisers, methane capture and effluent treatment.

This solution provides a means to reduce Indonesia's carbon emissions in agriculture and food supply chains while also improving public health through wastewater treatment. By working with Indonesia's primary food producers, Gree are able to address the significant pollution challenges that the Indonesian agriculture sector faces and enables them to leverage their platform to instil sustainable long-term impact across the agriculture sector.

Gree Energy is additionally the only B-Corp certified biogas solution provider in Asia.



**Investment Period Q3 2022 - Q3 2023** 

**IRIS** 

Code

019412

PI5842

			-	
Photogr	aphy: Gree Energ	y		

Metric	Duration
Hydrogen sulphide emissions avoided (tons)	4,275

**Pilot** 

1,774

27

(avg)

11

33.012

DOOD HEALTH NO WELL-BEING	3.9	019412
<b>₩</b>		

3.9

**SDG** 

**Target** 



BOD removed (tons)	5,647
Biological oxygen demand,	







**Direct jobs created** Number of employees

CO2e avoided (tCO2e/year)

attributed to pollutants

Methane emissions avoided

(tons)







Quantity of net electricity	10,114,/6/
supplied to the grid (kwh)	





DECENT HORK AND ECONOMIC SPONTH	8.5	013160
î Î		

7.1



Since WUPIV joined Gree Energy's round of funding last year, they have not started reporting impact for all projects. These impact metrics reflect the Hamparan project for the full annual 2022 reporting period.

Wellers Impact is a UK-based, FCA-Authorised and Regulated Impact Investment Manager which works to unlock community-focused impact through SDG-focused impact investing. Through innovative investment models that utilise fair economics, Water Unite Impact, managed by Wellers Impact, originates investment opportunities and direct investment into private water, sanitation and plastics recycling firms globally. Investment involves risk. Suitable for Sophisticated, Professional and High Net Worth Investors only.

The information in this document is in extremely summarised form for the convenience of presentation.

Wellers Impact Limited ("the Firm") is registered at Companies House in England & Wales, number 09857205, and is authorised and regulated by the Financial Conduct Authority (FCA), firm reference number 767086.



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