URBAN WATER PARTNERS

What We Do

Analysis

Tanzania Strategy

Expansion

Risks
$200,000 investment for a 20% equity stake in UWP

YIELD

3 year return = 2.55X = 155%
5 year return = 9.77X = 877%
7 year return = 20.63X = 1,963%
SOLUTION OVERVIEW

Provide Clean Water through existing channels

Utilize Slow-Sand Filter & mobile banking technology

Expand UWP to more urban cities

Enrich public health while growing & sustaining a profitable business
TANZANIA

Dar es Salaam Population: 2.8 million

Positive attitude towards FDI

90% can’t access tap water

Waterborne pathogens cause ~1.7 million deaths/year

What We Do

Analysis

Tanzania Strategy

Expansion

Risks
UWP MODEL

Legal Connection

Piped Water

UWP
1 Tech. = 20 vendors
1 Filter = 1 Vendor
1 Vendor = 150 Cons.
Vendor keeps 20% of revenue

UWP FILTER

Water Vendor (x20)

UWP Technicians

Safe Drinking Water

Consumer (x150)

What We Do

Analysis

Tanzania Strategy

Expansion

Risks
SLOW SAND FILTRATION

ADVANTAGES

• Simple design, no power, little maintenance
• Recognized as the superior surface water filtration system
• Removes over 99% harmful bacteria & viruses from water.

DISADVANTAGES

• Slower filtration rate than some other methods
• Necessary to perform "wet harrowing" and maintain the Smutzdecke
FILTER MANUFACTURING

PRESENT
Working with Blue Future for manufacturing ($445)

FUTURE
Open a manufacturing plant in the Temeke District of Dar es Salaam

Hire locals and maintain Blue Future support

Price per filter drops to $295
# ALTERNATIVE FILTRATION METHODS

<table>
<thead>
<tr>
<th></th>
<th>Fast Sand Filtration</th>
<th>Boiling</th>
<th>Distillation</th>
<th>UV Irradiation</th>
<th>Reverse Osmosis</th>
<th>Slow Sand Filtration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td><img src="yellow" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="green" alt="" /></td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td><img src="green" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="green" alt="" /></td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td><img src="yellow" alt="" /></td>
<td><img src="green" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="red" alt="" /></td>
<td><img src="green" alt="" /></td>
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<tr>
<td><strong>Effectiveness</strong></td>
<td><img src="green" alt="" /></td>
<td><img src="green" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="green" alt="" /></td>
</tr>
<tr>
<td><strong>Filtration Speed</strong></td>
<td><img src="yellow" alt="" /></td>
<td><img src="yellow" alt="" /></td>
<td><img src="green" alt="" /></td>
<td><img src="green" alt="" /></td>
<td><img src="green" alt="" /></td>
<td><img src="red" alt="" /></td>
</tr>
</tbody>
</table>

- ![](red) = Poor
- ![](yellow) = Fair
- ![](green) = Excellent
MOBILE BANKING – Tanzanian Market

**Strong User Base**
- 9.2 million registered mobile payment users
- Only 12% of population has a formal bank account

**High Value Proposition**
- Minimum risk in comparison to holding cash

**Growth Opportunity**
- 97% of population has access to mobile device
MOBILE BANKING – How It Works

CONSUMER

Acc. Balance:
100 TZS
(56.78 TZS)
43.22 TZS

VENDOR

Acc. Balance:
50 TZS
56.78 TZS
106.78 TZS
EXPANSION

Tanzania Strategy

Expansion

What We Do

Analysis

Risks
## CITY ANALYSIS

<table>
<thead>
<tr>
<th>CITY</th>
<th>Stability</th>
<th>Need for Purification System</th>
<th>Population</th>
<th>Water Connections</th>
<th>Vendor Access</th>
<th>Mobile Banking</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lusaka</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Maputo</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Accra</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Nairobi</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Kampala</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Kinshasa</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Maseru</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Kaduna</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Johannesburg</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>14</td>
</tr>
</tbody>
</table>

Weakest Fit 1  →  5 Strongest Fit
MAPUTO, MOZAMBIQUE

- Located close to Tanzania
- 43% population have access to water
- **CPI**: 2.7
- **Ease of Business**: 126
  *Steady Improvement*
- **Mobile Banking**: Top 3 mobile banking carriers located in country

CPI: Corruption Perception Index
LUSAKA, ZAMBIA

- Located close to Tanzania
- Efficient train route from Tanzania
- **CPI**: 3
- **Ease of Business**: 76
  
  *Rapidly Improving*
- **Mobile Banking**: Largest cellular use in country
RISKS INVOLVED

Filter Damage ➔ Incentive Program
Underreporting ➔ Filter Meters
Corruption/Bribes ➔ Develop local relationships
Currency Risk ➔ Hedging with Forwards
Quality Control ➔ Testing Program
Avoiding Under-Reporting

Because of revenue sharing agreement, vendors may be tempted to under-report.

To prevent this, meters will be installed on every filter to measure output.

Technicians will check meters on a regular basis and meters can only be removed or reset by key.

Vendors billed 80% of what meter reports.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MITIGATING FILTER DAMAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Due to risk of damaged or abused filters maintenance costs could increase by almost 30%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vendors are made aware that costs saved by keeping filters operational will be returned to them by UWP</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Giving incentives will lessen but not eliminate risk, maintenance costs now estimated at a 15% increase</strong></td>
<td></td>
</tr>
</tbody>
</table>
TIMELINE

Year 1
- Implement 50 Filters
- Open Manufacturing Plant

Year 2
- Total 2000 Filters
- Market Analysis for Expansion

Year 3
- Total 3000 Filters
- Evaluate Meter System

Year 4 & 5
- Enter Lusaka & Maputo
- Evaluate Current Strategy

Year 6 & 7
- Target New Cities for expansion

What We Do
Analysis
Tanzania Strategy
Expansion
Risks
FINANCIALS – Key Assumptions

Cost Drivers

- $400k CapEx in year 2 for local manufacturing facility (15yr straight-line dep)
- 20% sales commission to vendors
- $45 added cost per filter for meters

Risk Factors

- Underreporting: 10% of gross revenue
- Filter misuse: 15% increase in base filter maintenance costs
- Corruption: 15% of gross revenue

Growth Rates

<table>
<thead>
<tr>
<th></th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Rate</td>
<td>25%</td>
<td>50%</td>
<td>35%</td>
<td>15%</td>
</tr>
</tbody>
</table>
# PRO FORMA - Income Statement

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Revenues</strong></td>
<td>$219,000</td>
<td>$8,760,000</td>
<td>$13,140,000</td>
</tr>
<tr>
<td><strong>Cost of Sales</strong></td>
<td>$(43,800)</td>
<td>$(1,752,000)</td>
<td>$(2,628,000)</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>$175,200</td>
<td>$7,008,000</td>
<td>$10,512,000</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td>$(251,783)</td>
<td>$(1,248,000)</td>
<td>$(1,745,567)</td>
</tr>
<tr>
<td><strong>Risk Related Costs</strong></td>
<td>$(55,500)</td>
<td>$(2,220,000)</td>
<td>$(3,330,000)</td>
</tr>
<tr>
<td><strong>EBIT</strong></td>
<td>$(132,083)</td>
<td>$3,540,000</td>
<td>$5,436,433</td>
</tr>
<tr>
<td><strong>Interest Expense</strong></td>
<td>$(100,000)</td>
<td>$5,436,433</td>
<td>$5,436,433</td>
</tr>
<tr>
<td><strong>Profit Before Tax</strong></td>
<td>$(132,083)</td>
<td>$3,440,000</td>
<td>$5,436,433</td>
</tr>
<tr>
<td><strong>Income Tax Expense</strong></td>
<td>$39,625</td>
<td>$(1,032,000)</td>
<td>$(1,630,930)</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>$(92,458)</td>
<td>$2,408,000</td>
<td>$3,805,503</td>
</tr>
</tbody>
</table>
# PRO FORMA – Cash Flow Statement

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Cash from Operating Activities</td>
<td>$ (86,975)</td>
<td>$ 2,577,000</td>
<td>$ 4,041,670</td>
</tr>
<tr>
<td>Net Cash from Investing Activities</td>
<td>$ (42,250)</td>
<td>$ (1,467,750)</td>
<td>$ (532,500)</td>
</tr>
<tr>
<td>Net Cash from Financing Activities</td>
<td>$ 200,000</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Free Cash Flow</strong></td>
<td>$ 70,775</td>
<td>$ 1,109,250</td>
<td>$ 3,509,170</td>
</tr>
<tr>
<td><strong>Ending Cash Balance</strong></td>
<td>$ 70,775</td>
<td>$ 1,180,025</td>
<td>$ 4,689,195</td>
</tr>
</tbody>
</table>

**Notes:**
- Year 1, Year 2, Year 3 refer to different financial years.
- Cash flows are in USD ($).
$200k Investment for 20% Equity Stake

- 3 year return = $510k
- 3 year return = 2.55X
- 3 year return = 155%
- 5 year return = $1.535M
- 5 year return = 9.77X
- 5 year return = 877%
- 7 year return = $2.562M
- 7 year return = 20.63X
- 7 year return = 1,963%

THE OPPORTUNITY
Even if underreporting is rampant, there is an 7X return by year 7.
SUMMARY

Risks & Returns

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigation</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Damage,</td>
<td>Incentives, meters,</td>
<td>3 Yr = 2.55X</td>
</tr>
<tr>
<td>under-reporting,</td>
<td>education, hedging,</td>
<td>5 Yr = 9.77X</td>
</tr>
<tr>
<td>bribes, currency</td>
<td></td>
<td>7 Yr = 20.63X</td>
</tr>
<tr>
<td>risk, quality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Alternative Filtration Methods

- **Fast Sand Filtration**
  - Usually only cost effective for serving a population over 30,000
  - water must be pre treated before filtration
  - faster filtration
  - uses less area, sand, less sensitive to water quality
  - much greater maintenance
  - Cannot remove bacteria

- **Boiling**
  - cost of charcoal

- **UV irradiation**
  - Expensive to set up
  - Electricity required
  - Water must be somewhat clear before starting

- **Distillation**
  - bacteria or particles can find their way into collected water

- **Reverse osmosis**
  - expensive membrane
  - Membrane hard to maintain. gets clogged with dirty water.
City Data

- **South Africa, Johannesburg**
  - stability: high
  - water need: medium
  - Population: 5m
  - Household sellers: 0
  - mobile banking implemented
  - Water connection rate: 88%

- **Ghana, Accra**
  - stability: high (with past fluctuation)
  - water need: high
  - Population: 4.5 million
  - Household sellers: yes
  - mobile banking expansion - zap
  - Water connection rate: 56%

- **Kenya, Nairobi (no resellers)**
  - stability: high
  - water need: high
  - Population: 4 million
  - Household sellers: 0
  - Water connection rate: 51%
  - mobile banking implemented

- **Mozambique, Maputo**
  - stability: high
  - water need: medium
  - Population: 1.4 million
  - Household seller rate: 26%
  - Water connection rate: 26%
  - mobile banking expansion-2010
  - multiple m-banking options

- **DR Congo, Kinshasa**
  - stability: low
  - water need: high
  - Population: 10m
  - mobile banking expanding-volatile
  - Household sellers: yes
  - Water connection rate: 36%

- **Lesotho, Maseru**
  - stability: high (high past fluctuation)
  - water need: low
  - Population: 300,000
  - Household seller rate: 31%
  - Water connection rate: 33%
  - mobile banking-not lucrative yet

- **Uganda, Kampala**
  - stability: low
  - water need: high
  - Population: 1.5m
  - Household sellers: yes
  - Water connection rate: 30%
  - Mobile banking expansion

- **Nigeria, Kaduna**
  - stability: medium
  - water need: medium
  - Population: 760,084
  - Water connection rate: 48%
  - Household sellers: yes
  - mobile banking-infancy

- **Zambia, Lusaka**
  - stability: medium
  - water need: medium
  - Population: 1.75 million
  - household connection: 27%
  - household sellers: yes
  - Great mobile banking potential!
  - mobile banking expansion
Temeke Warehouse

• Staff of ten includes management and workers

• Once warehouse is up and running will be self-sufficient

• Every filter checked for quality before transport

• Location provides access in Tanzania but also to neighboring countries by road and rail
• Siphon Filter: focus on hygienic usability
• Flexible market
• Market: low to middle class
• Still a pilot project; need approval from Tanzanian government to sell the filter
• Natural taste, soil taste
• Flow rate: 4-5L/hour
• Filter capacity: 7,000 L = 1 year
• Expensive:
  – Complete filter: 7-11 Euro = 15,156 – 23,817 TZS
  – Replacement: 2 Euro= 4,330.5 TZS
1. Modified bucket
2. New pre-filter
3. Modified filter-tube connection
4. Feedback water-level in bellow
5. Integration of valve and tap
6. Modified tap
WATERGUARD

• Price: 7.5 TZS/litre
• A household uses approx. 10 litres of drinking water/day
• Collaborate with Ministry of Health & Social Welfare and the Ministry of Water & Irrigation
• Simple, safe, low cost chlorine based household water treatment
• Liquid – common in urban areas; tablet – in rural area (ease of transportation & longer shelf life)
• Chemical taste & odor, burns throat
• Ads targeting women: supported by local & national radio spots
• Ineffective at killing some parasites and can lose effectiveness when used with highly turbid water
WATERGUARD

KASUNGIDWE KABWINO KA MADZI

Sungani madzi anu wotetezedwa kale ndi WaterGuard mu ndowa kapena mtsuko wokhala ndi chivindikiriro chokwana bwino. Gwiritsani ntchito makapu awiri wotsuka bwino, yina ikhale yotungira ndi yina yomwera madzi.

UKHONDO WA CHAKUDYA NDI MALO WOTIZUNGULIRA

Kusamba m’manja ndi sopo ndi kofunika kwambiri kuti tipewe tizirombo toyambitsa matenda otsegula m’mimba. Tiyenera kusamba m’manja tisanadye chakuda.

WaterGuard ndi Thanzi akupezeka mu sitolo zonse pa mtengo wotsika

Tiyeneranso kusamba m’manja tikangochoka ku chimbudzi.
• Ceramic water filtration
• Point of Use method: easy to use
• Maintenance: boil the filter every 3 months
• Low flow rates:
  – Ideally: 1-3 liters/hour
  – Actual flow rates 0.2L/hour
• Effective useful life: 5 years
• High Cost production to maintain quality
### Table 2. Benefits and drawbacks of ceramic filtration

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Drawbacks</th>
</tr>
</thead>
</table>
| • Proven effective in removing bacteria and protozoa resulting in reduction of diarrhea by 60-70%  
• Can improve taste and smell of water and reduce turbidity  
• Take advantage of local materials and existing local knowledge  
• One time investment ranging from 12-25 USD (pot) 12-60 USD (candle)  
• Simple to use  
• Simple to maintain | • Limited removal of viruses, heavy metals, and pesticides  
• Water can become re-contaminated as there is no residual protection  
• Filter quality can vary by region (pot) or brand (candle)  
• Initial price can be relatively high  
• Ceramic membrane is fragile and taps may leak  
• Slow rate of filtration, 1-3 Liters per Hour (L/H)  
• The effective life span of the filter is unknown |
## Competitive Pricing

<table>
<thead>
<tr>
<th>Methods of Purification</th>
<th>Per liter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow-sand filters</td>
<td>$0.08</td>
</tr>
<tr>
<td>Bottled Water</td>
<td>$0.12</td>
</tr>
<tr>
<td>Charcoal boiling</td>
<td>$0.50</td>
</tr>
<tr>
<td>Waterguard</td>
<td>$0.13</td>
</tr>
</tbody>
</table>
MORINGA OLEIFERA Water Treatment

- Powder helps lower Turbidity of water
- The harvest of a mature single tree (3 kg) will treat just above 30,000 liters of water.
- For 450,000 liters a day you would need the harvest of 5,500 trees
- $16,500 \text{ kg} / 2.2 = 7,500 \text{ pounds}$
- $10$ per pound * 7,500 pounds: $75,000$ in year 3
MOBILE BANKING – How It Works

1. Register and open an account
2. Deposit money at an approved outlet
3. Use the mobile payment menu on your cellphone to send money
Technology adoption for select innovations (number years to reach 80% coverage)
MOBILE BANKING Potential Competition

**ADVANTAGES**

- Safaricom-Grundfos LIFELINK Partnership
  - Purchase water via M-PESA
  - Smart card used to access water

**DISADVANTAGES**

- Complex payment/water retrieval system
- Non-conventional
  - High set-up costs due to location differences
MOBILE BANKING – Market Share

- **TIGO**
  - TigoPeza
  - Market Share: 28%

- **VODACOM**
  - M-PESA
  - Market Share: 42%

- **Z-PEZA**
  - Market Share: 8%

- **ZANTEL**
  - Market Share: 22%

- **ZAIN**
  - Market Share: 28%
MOBILE BANKING SUCCESS

KENYA

• M-PESA grew by **61%** (2009-2010)
• Socially accepted: “**M-PESA Me**”
• Only form of payment at select locations

SOUTH AFRICA

• Largest use of Mobile Banking on continent
• Provides options for both bank/non-bank account holders
LUSAKA MOBILE BANKING SUBSCRIBER

The chart shows the percentage of mobile banking subscribers across different regions in Lusaka, including Lusaka, Copperbelt, Central, Southern, Eastern, Luapula, Northern, Western, and Northwestern. The regions are ranked based on the percentage of subscribers.

- **Lusaka**: The highest percentage of subscribers, indicating a significant adoption rate.
- **Copperbelt**: A notable percentage, suggesting a substantial interest in mobile banking.
- **Central**: A moderate percentage, indicating moderate adoption.
- **Southern**: A lower percentage, showing less adoption compared to other regions.
- **Eastern**: A significantly lower percentage, indicating the least adoption among the listed regions.
- **Luapula**: A moderately low percentage, showing a lower adoption rate.
- **Northern**: A very low percentage, indicating minimal adoption.
- **Western**: A very low percentage, similar to the Northern region.
- **Northwestern**: A low percentage, showing least adoption.

The chart uses different colors to signify different types of subscriptions, with a legend indicating personally owned with a contract/subscription, personally own with a pre-paid card, regularly use, and have access to now.
Mobile Payment; Tariff Costs

Total net tariff rates for depositing and sending money by Postapay and by M-PESA to a registered user and to a non-registered user.
MOBILE BANKING – Regulations & Security

Coordinated Regulation

Bank of Tanzania

--------

Financial Transactions

Tanzania Communication Regulatory Authority

--------

Communication Infrastructure

Less Fraud

Improved Security

Comprehensive Legislation by EOY
DEALING WITH BRIBES

• Many local leaders will attempt to extract bribes for information or permission to operate
• Educate local leaders on social mission of company: eliminate disease, provide clean water, stimulate business, etc.
• Local workers are less likely to be asked for bribes
• Gain support of government and port authority
• Brand image will diminish if quality degrades

• Technicians must file weekly quality checks on each filter in their area

• Any filter that does not pass quality check will be immediately disabled and an investigation will take place
How can we mitigate this risk?

- Use forwards swaps → a series of forward contracts
- Locks in exchange at current forward rate. Less exposed to risk related to currency exchange rate volatility
Even if corruption is at an extreme, there is a 7X return by year 7.
Large changes in filter misuse do not have a large impact on investor return.
Even with conservative growth rates there is a 12X return by year 7.
Even with an extremely low amount of customers there is a 5X return by year 7
# COST OF CAPITAL

## Cost of Equity Capital

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta</td>
<td>0.689</td>
</tr>
<tr>
<td>Risk-free rate</td>
<td>3.46%</td>
</tr>
<tr>
<td>Return on market</td>
<td>6.84%</td>
</tr>
<tr>
<td>(K(e))</td>
<td>8.17%</td>
</tr>
</tbody>
</table>

## Cost of Debt Capital

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
<td>10.00%</td>
</tr>
<tr>
<td>(K(d))</td>
<td>10.00%</td>
</tr>
</tbody>
</table>

## Weighted Average Cost of Capital

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Debt Weight</td>
<td>13.30%</td>
</tr>
<tr>
<td>Total Equity Weight</td>
<td>86.70%</td>
</tr>
<tr>
<td>Cost of Debt</td>
<td>10.00%</td>
</tr>
<tr>
<td>Cost of Equity</td>
<td>8.17%</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>40%</td>
</tr>
<tr>
<td>(K)</td>
<td>7.88%</td>
</tr>
</tbody>
</table>
### Pro Forma Income Statement (detailed)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendors</td>
<td>50</td>
<td>2,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Customers per vendor</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Total customers</td>
<td>7,500</td>
<td>300,000</td>
<td>450,000</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>219,000</td>
<td>8,760,000</td>
<td>13,140,000</td>
</tr>
<tr>
<td><strong>Vendor Revenue Share</strong></td>
<td>(43,800)</td>
<td>(1,752,000)</td>
<td>(2,628,000)</td>
</tr>
<tr>
<td><strong>Net Revenue</strong></td>
<td>175,200</td>
<td>7,008,000</td>
<td>10,512,000</td>
</tr>
<tr>
<td><strong>Operating Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technician Salary</td>
<td>3,600</td>
<td>120,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Management Salary</td>
<td>120,000</td>
<td>325,000</td>
<td>400,000</td>
</tr>
<tr>
<td>Sales Staff</td>
<td>0</td>
<td>36,000</td>
<td>36,000</td>
</tr>
<tr>
<td>Filter Testing</td>
<td>5,200</td>
<td>208,000</td>
<td>312,000</td>
</tr>
<tr>
<td>Filter Maintenance</td>
<td>5,000</td>
<td>200,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Marketing</td>
<td>10,000</td>
<td>25,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Brand Ambassador</td>
<td>100,000</td>
<td>100,000</td>
<td>131,400</td>
</tr>
<tr>
<td>Vehicle Operations</td>
<td>2,500</td>
<td>65,000</td>
<td>110,000</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>5,483</td>
<td>169,000</td>
<td>236,167</td>
</tr>
<tr>
<td><strong>Total Operating Costs</strong></td>
<td>(251,783)</td>
<td>(1,248,000)</td>
<td>(1,745,567)</td>
</tr>
<tr>
<td><strong>Total Operating Income</strong></td>
<td>(76,583)</td>
<td>5,760,000</td>
<td>8,766,433</td>
</tr>
<tr>
<td><strong>Risk Related Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underreporting</td>
<td>21,900</td>
<td>876,000</td>
<td>1,314,000</td>
</tr>
<tr>
<td>Filter Misuse</td>
<td>750</td>
<td>30,000</td>
<td>45,000</td>
</tr>
<tr>
<td>Corruption Costs</td>
<td>32,850</td>
<td>1,314,000</td>
<td>1,971,000</td>
</tr>
<tr>
<td><strong>Total Risk Cost</strong></td>
<td>(55,500)</td>
<td>(2,220,000)</td>
<td>(3,330,000)</td>
</tr>
<tr>
<td><strong>Interest Expense</strong></td>
<td>0</td>
<td>(100,000)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Profit Before Tax</strong></td>
<td>(132,083)</td>
<td>3,440,000</td>
<td>5,436,433</td>
</tr>
<tr>
<td><strong>Income Tax Expense</strong></td>
<td>39,625</td>
<td>(1,032,000)</td>
<td>(1,630,930)</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>(92,458)</td>
<td>2,408,000</td>
<td>3,805,503</td>
</tr>
</tbody>
</table>
### Pro Forma Cash Flow Statement (detailed)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash Flow from Operating Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>$(92,458.33)</td>
<td>$2,408,000.00</td>
<td>$3,805,503.33</td>
</tr>
<tr>
<td>Add back Depreciation</td>
<td>$5,483</td>
<td>$169,000</td>
<td>$236,167</td>
</tr>
<tr>
<td><strong>Net Cash from Operating Activities</strong></td>
<td>$(86,975.00)</td>
<td>$2,577,000.00</td>
<td>$4,041,670.00</td>
</tr>
</tbody>
</table>

| **Cash Flow from Investing Activities** |                 |                 |                 |
| Capital Expenditures            | $(42,250)       | $(1,467,750)    | $(532,500)      |
| **Net Cash from Investing Activities** | $(42,250)       | $(1,467,750)    | $(532,500)      |

| **Cash Flow from Financing Activities** |                 |                 |                 |
| Payments of debt                | $                 | $(1,000,000)    | $                 |
| Equity Investment               | $200,000          | $                 | $                 |
| Proceeds from debt              | $1,000,000        | $                 | $                 |
| **Net Cash from Financing Activities** | $200,000         | $                 | $                 |

**Free Cash Flow**                | $ 70,775.00      | $1,109,250.00   | $3,509,170.00    |
**Ending Cash Balance**           | $ 70,775.00      | $1,180,025.00   | $4,689,195.00    |
## CapEx Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing Plant</strong></td>
<td>0</td>
<td>400,000</td>
<td>0</td>
</tr>
<tr>
<td><strong>Slowsand Filters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number installed</td>
<td>50</td>
<td>1,950</td>
<td>1,000</td>
</tr>
<tr>
<td>Cost per filter</td>
<td>445</td>
<td>295</td>
<td>295</td>
</tr>
<tr>
<td><strong>Total expenditure</strong></td>
<td>22,250</td>
<td>575,250</td>
<td>295,000</td>
</tr>
<tr>
<td><strong>Technician Motorcycles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>3</td>
<td>97</td>
<td>50</td>
</tr>
<tr>
<td>Cost per motorcycle</td>
<td>2,500</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td>7,500</td>
<td>242,500</td>
<td>125,000</td>
</tr>
<tr>
<td><strong>Flatbed Trucks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>1</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Cost per truck</td>
<td>12,500</td>
<td>12,500</td>
<td>12,500</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td>12,500</td>
<td>250,000</td>
<td>112,500</td>
</tr>
<tr>
<td><strong>Total CapEx</strong></td>
<td>42,250</td>
<td>1,467,750</td>
<td>532,500</td>
</tr>
</tbody>
</table>
# Depreciation Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (Filters)</td>
<td>1483.3</td>
<td>39833.3</td>
<td>59500.0</td>
<td>15 yr straight line</td>
</tr>
<tr>
<td>Depreciation Expense (Vehicles)</td>
<td>4000.0</td>
<td>102500.0</td>
<td>150000.0</td>
<td>5 yr straight line</td>
</tr>
<tr>
<td>Depreciation Expense (Plant)</td>
<td>0.0</td>
<td>26666.7</td>
<td>26666.7</td>
<td>15 yr straight line</td>
</tr>
<tr>
<td><strong>Depreciation Expense (Total)</strong></td>
<td>5483.3</td>
<td>169000.0</td>
<td>236166.7</td>
<td></td>
</tr>
<tr>
<td><strong>Accumulated Depreciation</strong></td>
<td>5483.3</td>
<td>174483.3</td>
<td>410650.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 3</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendors</td>
<td>50</td>
<td>2000</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>Customers per Vendor</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Total Customers</td>
<td>7500</td>
<td>300000</td>
<td>450000</td>
<td></td>
</tr>
<tr>
<td>Liters per day</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cost per liter</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Days</td>
<td>365</td>
<td>365</td>
<td>365</td>
<td></td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>219000</td>
<td>8760000</td>
<td>13140000</td>
<td></td>
</tr>
<tr>
<td><strong>Vendor Revenue Share</strong></td>
<td>43800</td>
<td>1752000</td>
<td>2628000</td>
<td></td>
</tr>
<tr>
<td><strong>Net Revenue</strong></td>
<td>175200</td>
<td>7008000</td>
<td>10512000</td>
<td></td>
</tr>
</tbody>
</table>
## INVESTORS RETURN

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Free Cash Flow</strong></td>
<td>$65,291.67</td>
<td>$940,250.00</td>
<td>$3,273,003.33</td>
<td>$4,091,254.17</td>
<td>$6,136,881.25</td>
<td>$8,284,789.69</td>
<td>$9,527,508.14</td>
</tr>
<tr>
<td><strong>Investor Share (20%)</strong></td>
<td>$13,058.33</td>
<td>$188,050.00</td>
<td>$654,600.67</td>
<td>$818,250.83</td>
<td>$1,227,376.25</td>
<td>$1,656,957.94</td>
<td>$1,905,501.63</td>
</tr>
<tr>
<td><strong>Initial Investment</strong></td>
<td>$(200,000)</td>
<td>$-</td>
<td>$(-)$</td>
<td>$(-)$</td>
<td>$(-)$</td>
<td>$(-)$</td>
<td>$(-)$</td>
</tr>
<tr>
<td><strong>Net Return</strong></td>
<td>$(186,941.67)</td>
<td>$188,050.00</td>
<td>$654,600.67</td>
<td>$818,250.83</td>
<td>$1,227,376.25</td>
<td>$1,656,957.94</td>
<td>$1,905,501.63</td>
</tr>
<tr>
<td><strong>NPV (3 years)</strong></td>
<td>$509,673.87</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>NPV (5 years)</strong></td>
<td>$1,953,781.06</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>NPV (7 years)</strong></td>
<td>$4,125,461.99</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
</tbody>
</table>

**Growth Rate**

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>50%</td>
<td>35%</td>
<td>15%</td>
</tr>
</tbody>
</table>
SELF-SUFFICIENCY

$4,689,195 FCF in Year 3

CapEx in Years 4 & 5

- $400k for manufacturing facility
- $1200k for filters
- $500k for motorcycles
- $526k for trucks
- **Total = $2,626,000**

*FCF can fund to projects and CapEx moving forward, while Sales will easily cover Operating Expenses. NO NEW DEBT OR EQUITY needed.*