

TEERISARA ATTASITH VORAWAN TAMONWAN



**Situation Analysis** 

**Issues & Objectives** 

**Proposals** 

**Financial Justification** 

Conclusion

### **Urban Water Partners: Business Inspiration**



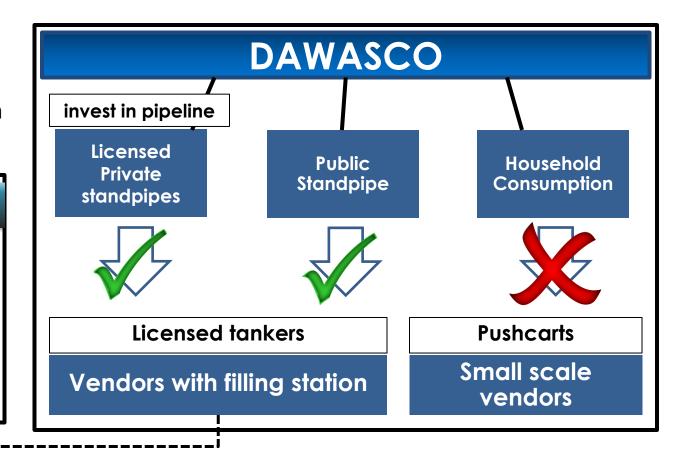
90% of population have no access to city water supply



- No piped connection
- Direct water access

#### **UWP**

Provide
affordable and
clean water
access to poor
communities



### **Our Incentive System**



#### Flat rate

- Ensure constant revenue (lower risk)
- Vendor pay control al rate for operating with our ter

### **Revenue Sharing**

- •We bear all installation & maintenance
- Control over and lice
- Reap upside begins when higher water sales are realized

80/20 Revenue sharing ratio

Year 1 Year 2 Year 3

**50 filters** 

1,950 filters

1,000 filters

Confidence in demand for our clean water

Justify risks associated with expansion plan in terms of sales and costs in order to guarantee a return aligning with your expectations.

**Situation Analysis** 

#### **Our Distributors**



### **Vendor Relations**

### **Operational Risk from Vendors**

- Vendor abusing/ misuse our filters
- Selling unfiltered water with UWP brand
- •Risk of under-reporting revenue (potential revenue lost 10%-15%)

**Exhibits Principal-Agent Conflict** 

Risk of Quality dilution in equipment, UWP brand & Lost Revenues



Strategic focus & continuous commitment to drive down the operational risks of the business.

**Situation Analysis** 

# **Product's Long term Viability**



WATER PURIFICATION TECHNOLOGIES ASSESSMENT				
	Slow Sand Filter	lron Reve Filter Osmosis		
	2.			
COST	\$ <mark>250</mark> -500	\$800-1000	\$400-800	
BACTERIA REMOVAL	98 <mark>-%</mark> 9.99%	Approx. 90%	90-99%	
PRODUCTIVITY	6,660 liters/day	21,090 <mark>li′e</mark> rs/day	288 liters/day	
POWER NECESSARY	<b>V</b> 10	<b>V</b> 3	Yes	
COMPLEXITY	Sir/iple	Moderate	More Complex	

Proposition on selecting lucrative opportunities presented from sub-Saharan market to strengthen company's future

**Situation Analysis** 

#### **Transition**



#### Where we are

A social business in need of funding to commence operations In Dar es Salaam.

Revisiting Financial Forecast

Having a distribution network to poor communities via independent vendors, but encountering principalagent conflict.

Possesses an optimal economical & efficient filter solution to tap into other cities in Africa with inadequate water supply.

Principal-Agent Conflicts

Long Term Market Expansion

#### Where we want to be

Successfully utilized funds obtained to meet our social & business missions, thereby delivering promised returns to our investors.

Established sustainable relations with vendors, with enhanced reliability and transparency in working together.

Established a foothold in securing vendors in other best sub-Saharan location,

**Issues & Objectives** 

Pro

Financial

### **Proposals**



### Revisiting Financial Forecast

### I. Your Confidence



### Principal Agent Conflict

### **II. Our Commitment**



# Long Term Market Expansion

### III. On A Continuum



# **Revisiting Financial Forecast**





I. Your Confidence

### I. Your Confidence



# **Accelerating Expansion**

**Risks Associated** 

Sales Side

**Costs Side** 

### <u>UWP Option Relative to Alternative Clean Water sources</u>

	Cost (US\$ / liter)	Price Transparency	Quality Assurance	Convenience
Bottled Water	0. 3			
UWP-Filtered Water	Best Clear	n Water Source	e Available to	Urban Poor
Unbranded, Treated Water		$\bigcirc$	$\bigcirc$	M
Charcoal- Boiled Water		M(	M. te	

**Proposals** 

Financial

Conclusion

### I. Your Confidence



# **Accelerating Expansion**

**Risks Associated** 

Sales Side

**Our Forecasts** 

2011

2012

2013

**Costs Side** 

The Clean Water Market

Supply

**Demand** 

450 Million Litoro

With the competitiveness of our clean water offering and the Shortage in demand, our Sales forecasts are feasible targets.

Liters Sold Per day

7,500

300,000

450,000

=1.5 Mn Liters of Drinking water Shortage <u>per day</u>

### I. Your Confidence



### **Accelerating Expansion**

**Risks Associated** 

### Sales Side

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	2011	2012	2013
Liters Sold	7,500	300,000	450,000

<u>Cost</u>	Best	Base	Worse
Underreporting Rate	5%	10%	20%

# Return to Your \$200,000 investment: 1.08 times – 5.4 times initial investment

☐ Filter units bought

Quality monitoring

■ Maintenance costs

Loss (per filter)	1.08	100	200
NPV (in millions)	\$6.4	\$4.76	\$1.1

# **Principal Agent Conflict**





**II. Our Commitment** 

#### II. Our Commitment



### The Principal-Agent Conflict: Reliance on Vendors as our Distributors

### **Principal-Agency Costs:**

Underregorting Rayenues

Filter Equipment Exploitation

**Informal Costs** 

Select

2 Evaluate

3 Maintain

Vendor Selection Criteria Leveraging on technician network

Incentive Revenue Sharing Scheme

**Recommendations** 

#### II. Our Commitment



The Principal-Agent Conflict: Reliance on Vendors as our Distributors

3 Year Focus

1

Vendor Selection Criteria 2

Leveraging on technician network

3

Incentive Revenue Sharing Scheme

Incremental Reduction in Agency costs from Vendors= \$768,500

- Licensed to sell
- Business Etiquette

Deliver our Social Goals

- Screens vendors
- Quality Monitor

Inside Community Knowledge

Reduce Revenue Underreporting

# **Long Term Market Expansion**





III. On A Continuum

#### III. On A Continuum



2015 Expansion Plan: Roll out our slow-sand business to other African cities

#### **WHERE? Criteria for City Selection** % of **COUNTRY Political Stability Population** Effectiveness of Income per Capita Unconnected (10=least stable) Density (/km2) (CITY) **Public Utility** Households Ethiopia *5*,165 \$350 Addis Ababa) Mozambique HOW? (Maputo) Zambia

Leverage on our current Blue Future Filter supplier to supply slowsand filters for vendors in Addis Ababa.

# **Pricing**

- ☐ We will charge at a "locally" competitive prices
- ☐ City water to bottled water range from \$0.0125-\$0.5/liter
- ☐ Maintain our \$0.08/liter to make UWP water affordable

**Proposals** 

(Lusaka)

Kenya (Nairobi)

Namibia (Win<u>dhiek)</u>

Rep. of Congo

(Kinshasa)

Malawi (Blantyre)

### **Timeline**



# **TIMELINE**

I.

Expansion in Dar es Salaam

II.

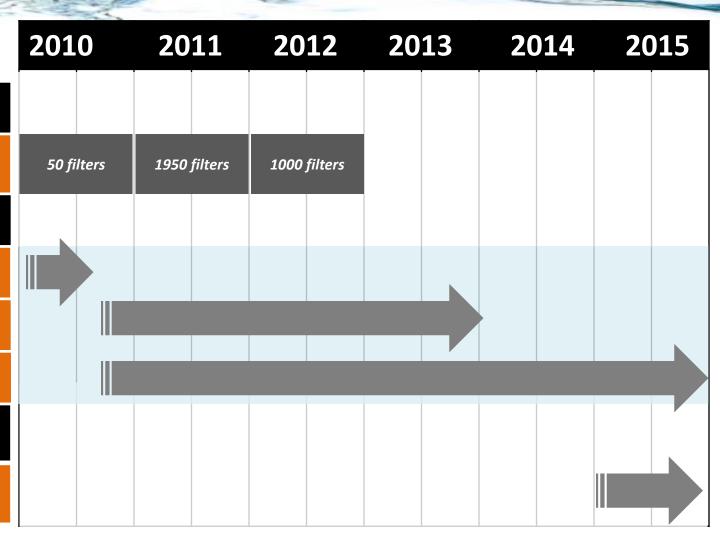
Hire Technicians

Vendor recruitment system

Incentive plan

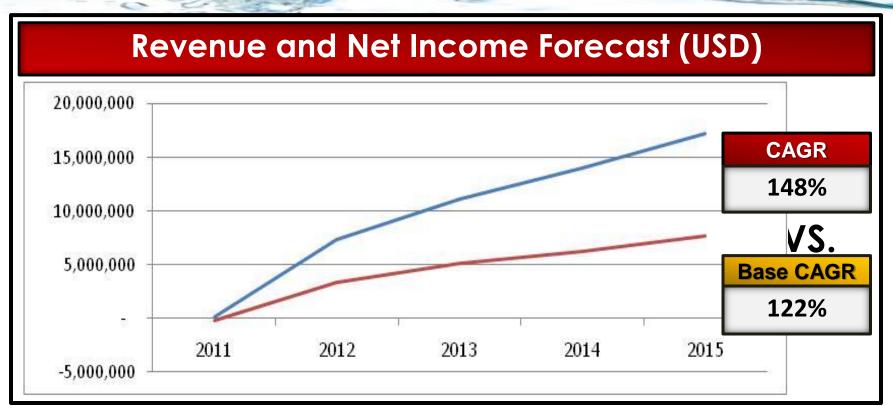
III.

Sub-Saharan expansion



### Revenue & Net Income Forecast





	2011	2012	2013	2014	2015
Total Sales	184,661	7,386,432	11,079,648	14,034,221	17,210,714
Total Net Income	- 141,923	3,360,431	5,135,149	6,272,520	7,651,614

**Financials** 

### **Cost Estimation**



CAPEX (Amount in USD)	
Slowsand filters	1,170,000
Motorcycles for technicians	582,500
Flatbed trucks	587500
Total	2,340,000
Expenses	
Technicians	807,600
Local management	1,661,000
Sales Staff	144,000
Filter test	1,398,800
Maintenance	1,345,000
Marketing Expenditures	155,000
Vehicle operating expenses	535,000
*Informal Cost of doing business	4,987,721
Risk from underreporting	4,208,324
Filter-related loss	1,345,000
Increased Fuel Cost	13,000
One time fee for Blue Futures	40,000
Total	16,640,445

#### **Total Cost**

**USD 19 Million** 

### **Sources of Funds**

**Internally Generated Fund** 

**Equity Funding** 

**One-Year Loan** 

**Financials** 

### **Cost Estimation**



CAPEX (Amount in USD)	
Slowsand filters	1,170,000
Motorcycles for technicians	582,500
Flatbed trucks	587500
Total	2,340,000
Expenses	
Technicians	807,600
Local management	1,661,000
Sales Staff	144,000
Filter test	1,398,800
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Total	16,640,445

# **NPV**

**USD 8.7 Million** 

# **PBP**

2 Years

**Financials** 

#### Conclusion



#### **ISSUES**

Revisiting Financial Forecast

Principal-Agent Conflict

Long Term Market Expansion

#### I. Your Confidence

 Revise the original plan to ensure investor's confidence in the accuracy of the forecast

#### **II. Our Commitment**

- Vendor Selection Criteria
- · Leverage on technician network
- Incentive revenue sharing scheme

#### III. On A Continuum

Expand into Addis Ababa (capital city of Ethiopia)



### **Slide Navigator**



#### PRESENTATION:

- Situation Analysis
  - <u>Urban Water Partners: Business</u> <u>Inspiration</u>
  - Our Incentive System
  - Our Distributors
  - Product's Long term Viability
- Transition
- Proposal 1
  - Alternative Clean Water
  - Sales Side
  - Cost Side
- Proposal 2
  - Principal Agency Costs
  - 3 Year Focus
- Proposal 3
  - City Selection
- Timeline
- Rev & NI Forecast
- Cost Estimation & Financing
- NPV & PBP
- Conclusion

#### ANALYSIS:

- SWOT
- Company's Objectives
- <u>Tanzania Consumer</u>
   Environment
- Geo-political Issues
- Operational Risks
- Macro-level Risks
- Business Model
- Sources of Water + Chain
- Manufacture by Blue Future
- Celebrity

#### PROPOSAL 1:

Can We Be Price Competitive? [1]

#### **PROPOSAL 2:**

- Details for Proposal 2 [2]
- Risk Analysis II
- Mobile Banking Payment
   Assessment [2]

#### PROPOSAL 3:

- Addis Ababa (Ethiopia) [3]
- Adv & Disadv Slow Sand V.S. Rapid
  - Sand Filter [3]
- Risk Analysis III
- Implementation 3

### Slide Navigator (FN)



#### **FINANCIALS:**

- Financial Position
- Revenue Breakdown
- Revenue Assumptions on FN Statement
- Cost Assumptions on FN Statement -1
- Cost Assumptions on FN Statement -2
- Scenario Analysis NPV 3 Years
- Revenue Breakdown Assumptions 2
- Revenue Breakdown Assumptions 3
- Cost Breakdown Assumptions 3

- Unit Cost
- Break-Even Analysis
- Balance Sheet
- Income Statement
- Cash Flow Statements
- Valuation 3 Year Base
- Valuation 3 Year Best
- Valuation 3 Year Worst
- Valuation 5 –year with Recom
- Return on Equity Investor



#### STRENGTHS:

Superior water purification technology

#### **WEAKNESSES:**

- Financially weak → Lack of funding
- Profit-sharing scheme dependent on vendor's motive

#### **OPPORTUNITIES:**

- 90% of population (low-mid income) relied on private vendors to get water
- Demand for clean water exceeds supply in African coutries

#### **THREATS:**

- Skepticism by investors
- Academic medical establishment does not trust & thinks of business as sth evil

# Company's Objectives



- 1. Public Health reduction in the prevalence of diarrhea in Children
- 2. **Profitability** create a social business that generates revenue sufficient to cover operating costs, while financing future growth
- 3. Community Building hire women to be company's technicians who maintain & service the filters & educate the community about clean water
- 4. Environment reduce deforestation associated with boiling water using charcoal

### **Tanzania Consumer Environment**



#### Tanzania

- Low per capita in come (annual): \$US 440, bottomw 10%
- More politically stable nation in sub-saharan Africa

#### Dar es Salaam

Population est. 2010: 3 million people; Growth @ 22%

<u>Water Connections (Piped)</u> → Mid-upper mid income households, industry, government institution.

Poor scattered in 55 settlements	Residential Households	
- Rely on vendors for water supply	- Think DAWASO water unsafe to drink	
→cheaper, unsafe to drink w/o treatment		
→bottled water often unaffordable	- Boil water with charcoal if they can	
- Buy on an"on-the-go"basis (pay more/litre) & buy in smaller quantities	afford it to purify	

# **Geo-political Issues**



- 1. Corruption (120 out of 180 countries)
- 2. Bottom 10% of income per capita in the world
- 3. Water supply owned by state
- 4. Connections are essential
- 5. Many illegal competitors
- 6. Ease of doing business ranked out of 183:

2009	2010	2011
126	131	128

### **Operational Risks**



#### Vendors

- → Abusing/Misusing our filter equipment
- → Sell unfiltered as filtered UWP water : Impact→ brand dilution, lower demand
- → Underreporting revenue (could decrease revenue by 10-15%)

#### <u>Technicians (local women)</u>

- → Might coorperate with vendors jeopardising our interests
- → They don't work → take advantage of transportation means

#### Informal Cost

- →Engage with local officials
- → Hidden costs of 10-20% of revenue

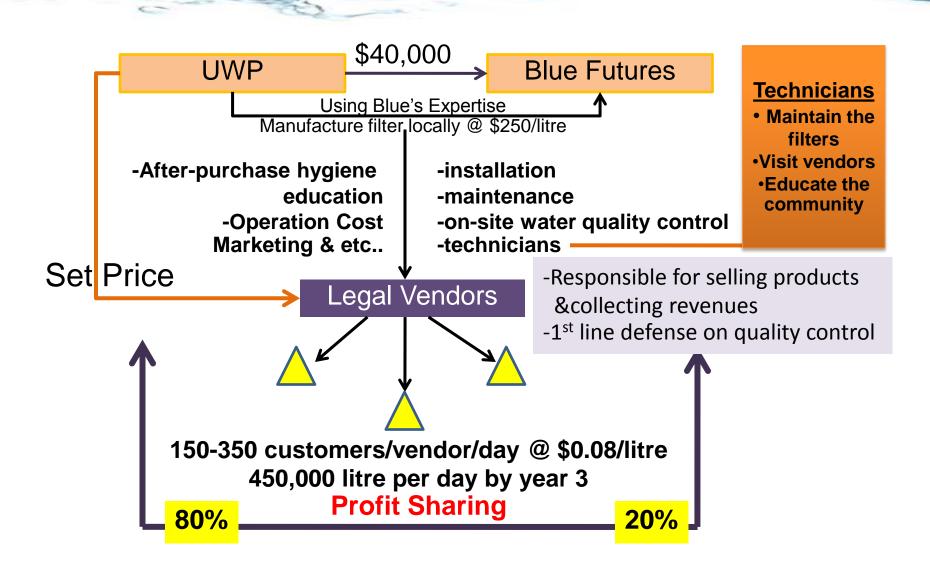
### **Macro-level Risks**



- Increase in number of publicly owned kiosks
- Ranked 128<sup>th</sup>/183 most difficult in doing business
- Price regulation
- Development of water infrastructure → may put vendors our of business or change in business plan
- Competition from bottled water providers → Price war!!

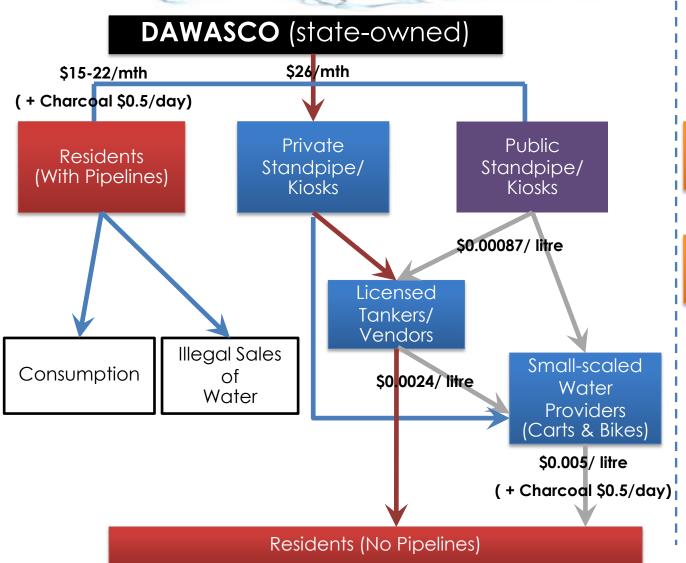
#### **Business Model**

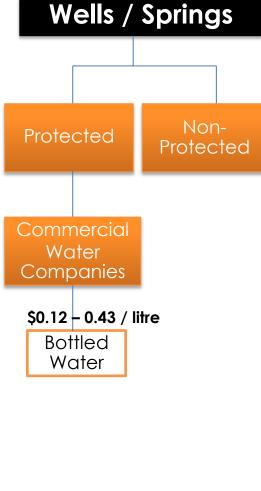




#### Sources of Water + Chain







# Manufacture by Blue Future



- We partner with Blue Future Filter, a company that specializes in the manufacture and installation of slow sand filters in developing countries.
- We reply on them to do the manufacturing work for us.

# Celebrity



Halt marketing budget for celebrity ambassador

WHY: Not an effective marketing

- 1. The fact that we reply on B2B relationship, there is no need to use celebrity endorsement as a means of advertising.
- 2. Limited financial resource the need to build a strong distribution network is our priority

# Can We Be Price Competitive? [1]



- Our price is set at \$0.08 (considered to be in a competitive position)
  - → Bottled water = \$0.43 / litre
  - → Boiled water in bags = \$0.08 / litre
  - → Normal water + Boil = \$0.05 / litre + \$0.5 charcoal cost per day
  - + Our filtered water is cleaner than boiled water
- 1st Year Cost per unit = \$0.13 → Loss making
- 2<sup>nd</sup> Year Cost per unit = \$ 0.03 → Margin = \$0.05 per unit
  - → Ability to drive down the price to be even more competitive

### **Mobile Banking Payment Assessment [2]**



- Efficient & economical
- Currently, in negotiation with an India company to develop a mobile banking application
- But, we do not believe that Tanzania market is ready to use this technology as a means of collecting cash
- WHY:
  - 1. People are not familiar with using mobile applications
  - 2. Infrastructure
  - → hard to convince all vendors to subscribe for it
- Every method of payment available will not be able to solve the Underreporting issue.
  - → It only helps to speed up the payment process.
- Most viable method → Technicians collect money from vendors

### Details for Proposal 2 [2]



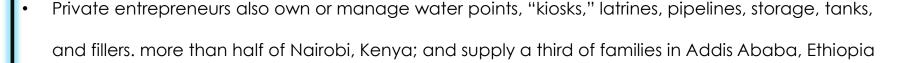
### Addition to the original business model

- Incentive Revenue Sharing System
  - → Vendors have to report litre sold on a daily basis
  - → Revenue share vendors will get is based on their weekly cumulative litre sold
  - → Technicians will be required to set thresholds by estimating potential demand for each vendor station
  - → If certain threshold is met, vendors get certain share of revenues

### Addis Ababa (Ethiopia) [3]



- Population = **3,384,569 people**
- Economic <u>activities</u> in Addis Ababa are <u>diverse</u>
- Access to water supply & sanitation in Ethiopia is among the lowest in Sub-Saharan Africa and the entire world
- Water Demand: 64% relying on public taps or yard taps
- Water Supply: In 2001 the government adopted a National Water Strategy → aims at:
  - Promoting the involvement of all stakeholders, including the private sector
  - Integrating water supply, sanitation and hygiene promotion activities.
  - More decentralized decision-making





## Adv & Disadv - Slow Sand V.S. Rapid Sand Filter [3]



### **SLOW SAND**

### ADVs:

- Cheapest (+low maintenance cost)
- Simplest
- Most efficient method
- Makes better use o the local skills & material available in developing countries
- Skilled supervision is not needed

### **DISAVDs**:

Low filtration rate

### RAPID SAND

### ADVs:

- Much higher flow rate
- Requires less quantity of sand

### **DISAVDs**:

- Requires greater maintenance
- Ineffective against taste problems
- Skilled supervision is needed
- Requires on-going investments in costly flocculation reagents

### Risk Analysis II



 Many vendors are interested in our incentive plan in which it might tolerate our revenues

**COUTERARGUMENT:** - Vendors have limited supply of water because DAWASCO supplies water during limited hours.

### Risk Analysis III



 Vendors not interested in implementing our filter technology and share revenues with us

MITIGATION: - Send technicians team to educate vendors about the slow sand filter technology

**COUTERARGUMENT:** - This business plan will provide vendors with higher revenue per litre since filtered water can be sold at a premium price.

- Vendors bear no costs → all the costs are borne by us

### **Implementation 3**



**STAGE 1**: - Do some market research to gain insight information about the

industry and customer

**STAGE 2**: - Plan for negotiation with vendors

**STAGE 3**: - Plan for negotiation with vendors

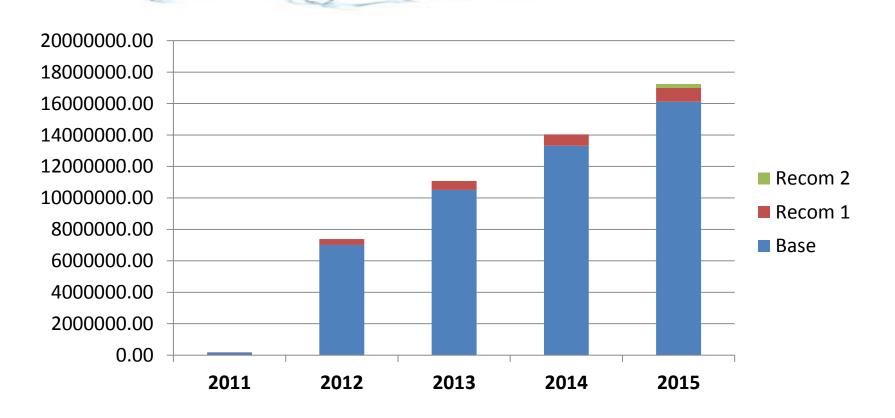
### **Financial Position**



- A newly start-up company in need of external financing to fund its expansion
- Equity Funding of \$200,000 in year 1
- One-Year loan of \$1,000,000 in year 2
- Will be able to pay back its loan within the year after generating sufficient cash flow

## Revenue Breakdown (in USD)





	2003	2004	2005	2006	2007	2008
Base Case	1,635,266	1,947,483	2,331,860	2,776,668	3,162,712	3,263,332
Recommendation 1	-	92,093	106,744	123,907	138,140	138,140
Recommendation 1 and 2	-	-	136,047	353,721	644,456	835,675

## Revenue Assumptions on FN Statement



### Revenue

<b>Expected Filters Distributed</b>	Year 0	Year 1	Year 2	Year 3
Additional filter (unit)		50	1950	1000
Total Unit Sold		50	2000	3000
Price/litre (\$)		0.08		
Customers per vendors		150	people	
Each customer/household use		1	litre	
Demand per Day (Litre)		7,500	300,000	450,000
Demand per Year (Litre)		2,737,500	109,500,000	164,250,000

### **Arriving at Demand per Year**

- 1. Expected Vendors reached (Filter Unit): 3000 by year 3
- 2. Price @ \$0.08/litre
- 3. Customers per vendors: 150 people with 1 litre each

### Cost Assumptions on FN Statement -1



### Cost

Capital Investment (\$)	Year 1	Year 2	Year 3	Year 4	Year 5
Slowsand filters					
Number installed	50	1950	1000	800	800
Cost of each filter	400	250	250	250	250
Total expenditure	20,000	487,500	250,000	200,000	200,000
Motorcycles for technicians					
Number	3	97	50	40	40
Cost per motorcycle	2500	2500	2500	2500	2500
Total expenditure	7,500	242,500	125,000	100,000	100,000
Flatbed trucks					
Number	1	20	9	8	8
Cost per truck	12,500	12,500	12,500	12,500	12,500
Total expenditure	12,500	250,000	112,500	100,000	100,000
Grand total expenditures	40,000	980,000	487,500	400,000	400,000

- 1. 1 motorcycle serves 20 vendors
- 2. 1 flatbed truck serves 100 vendors

### Cost Assumptions on FN Statement -2



Operating Cost (\$)	Year 1	Year 2	Year 3	
Technicians				
Number of technicians	3	100	150	
Monthly Salary	100	100	100	
Annual Costs for Technicians	3600	120000	180000	
Local Management Team				
Number of Local Mgnt	5	13	17	
Monthly Salary	2000	2000	2000	
Annual Costs for Local mgnt	120,000	325,000	400,000	
Sales Staff				
Number of sales staff		20	20	
Monthly Salary		150	150	
Annual Costs for Sales Staff		36000	36000	
Filter weekly test				
Cost per filter per week	2	2	2	
Number of filter installed	50	2000	3000	
Annual Cost for Filter test	5200	208000	312000	
Maintenance Cost				
Maintenance fee per filter per year	100	100	100	
Number of filter installed	50	2000	3000	
Annual Cost for Maintenance	5000	200000	300000	
Marketing Expenditures	10,000	25,000	40,000	
Vehicle operating expenses	2500	65000	110000	
*Informal Cost of doing business	15768	700800	1051200	
Risk from underreporting	14892	700800	1051200	
Filter-related losses frm vendor abuse				
losses per filter per year	100	100	100	
Number of filter installed	50	2000	3000	
Annual Cost for Filter-related loss	5000	200000	300000	
One time fee for Blue Futures	40,000			
Increased Fuel Cost	2600	2600	2600	

- -Technicians
- -Local Mgnt
- -Sales Staff
- -Filter Test
- -Maintenance
- -Marketing
- -Vehicle Related
- -Informal
- -Underreporting
- -Vendor Abuses
- -Blue future fees
- -Fuel costs

# Scenario Analysis – NPV 3 Years Cost of Capital 30%



<u>Demand</u>	Best	Base	Worse
Vendors Reached	3200	3000	2050
Customers Reached	150/vendor	150/vendor	150/vendor
Water Consumption/cust.	1 liter/day	1 liter/day	1 liter/day
Cost	Best	Base	Worse
Underreporting Rate (as % of revenue)	5%	10%	20%
Informal Cost	10%	15%	20%
Fuel Cost	\$2080	\$2600	\$ 3328
Maintenance Cost	100/filter	100 / filter	200/filter
Filter-related Loss given Vendor's abuse	100/filter	100/filter	200/filter
PBP	1.08	2	2.78
NPV	\$6.4 million	\$4.76million	\$ 1.1 million

## Revenue Breakdown Assumptions 2



	Year 1	Year2	Year 3
Total Vendors	50	2000	3000
20%	10	400	600
50%	25	1000	1500
30%	15	600	900
Revenue Share Scheme			
82-18 (120 litre/day) (20%)	438,000	17,520,000	26,280,000
80-20 (150 litre/day) (50%)	1,368,750	54,750,000	82,125,000
78-22 (200 litre/day) (30%)	1,095,000	43,800,000	65,700,000
Total Demand per year	2,901,750	116,070,000	174,105,000

### **Cost Comparison**

Risk from underreporting	15,696	738,643	1,107,965
<b>New underreporting Cost</b>	10,731	429,240	643,860

### Revenue

Base Revenue	175,200	7,008,000	10,512,000
New Revenue	184,661	7,386,432	11,079,648

### **NPV** comparison

Base	Incentive
\$4.8	\$6.57
million	million

# Revenue Breakdown Assumptions 3



<b>Ethiopia Expansion</b>				2015
Population	3300000			
Private Sector	376,000			
Available Vendor	2,000			
Additional filter sold (unit)				50
Total Unit Sold				50
Price/litre (\$) \$0.0125 - \$0.5		\$0.08 pe	r litre	0.08
Customers per vendors		190 pe	ople	
Each customer/household use		1 litr	e	
Demand per Day (Litre)				9500
Demand per Year (Litre)				3,467,500
TOTAL				221,920

# Cost Breakdown Assumptions 3



Expansion to Ethiopia	
Capital Investment (\$)	Year 5
Slowsand filters	
Number installed	50
Cost of each filter	250
Total expenditure	12,500
Motorcycles for technicians	
Number	3
Cost per motorcycle	2500
Total expenditure	7,500
Flatbed trucks	
Number	1
Cost per truck	12,500
Total expenditure	12,500
Grand total expenditures	32,500

and a	200
Expansion to Ethiopia	
Operating Cost (\$)	Year 5
Technicians	
Number of technicians	3
Monthly Salary	100
Annual Costs for Technicians	3600
Local Management Team	
Number of Local Mgnt	4
Monthly Salary	2000
Annual Costs for Local mgnt	96,000
Sales Staff	
Number of sales staff	0
Monthly Salary	150
Annual Costs for Sales Staff	0
Filter weekly test	
Cost per filter per week	2
Number of filter installed	50
Annual Cost for Filter test	5200
Maintenance Cost	
Maintenance fee per filter per year	50
Number of filter installed	50
Annual Cost for Maintenance	2500
Marketing Expenditures	5,000
Vehicle operating expenses	2500
*Informal Cost of doing business	19973
Risk from underreporting	17754
Filter-related losses frm vendor abuse	
losses per filter per year	50
Number of filter installed	50
Annual Cost for Filter-related loss	2500
TOTAL	155,026

# **Unit Cost**



	2011	2012	2013
Total Capex	40000	980000	487500
Total Expenses	327293	2816933	4086020
Demand per Year (Litre)	2,737,500	109,500,000	164,250,000
Unit Cost	0.13	0.03	0.03

# **Break-Even Analysis**



Total Capex	40000	980000	487500
Total Expenses	327293	2816933	4086020
Demand per Year (Litre)	2,737,500	109,500,000	164,250,000

	2011	2012	2013
Fixed Cost	40,000	980,000	487,500
Var Cost / Unit	0.12	0.03	0.02
Price	0.08	0.08	0.08
Break-even Unit (Litre)	(1,011,143)	18,056,335	8,843,832

## **Balance Sheet**



	2,010	2011	2012	2013	2014	2015
Assets:						
Cash	40,000	96,932	264,640	3,694,594	8,443,378	14,446,836
Account Receivable		55,398	2,215,930	3,323,894	4,210,266	5,163,214
Inventories	-	-	-	-	-	-
Others	-	-	-	-	-	-
Total Current Assets	40,000	152,331	2,480,570	7,018,488	12,653,644	19,610,050
Properties, Plant & Equipment		34,667	878,333	1,165,333	1,311,500	1,404,333
Others						
Total asset	40,000	186,997	3,358,903	8,183,822	13,965,144	21,014,384
Liabilities:						
Account payable						
Short-Term Loan		-	-	-	-	-
Others						
Total Current Liabilities	-	-	-	-	-	-
Long Term loan		-	-			
Others						
Total liabilities	-	-	-	-	-	-
Shareholder's equity:						
Paid up capital	40,000	240,000	240,000	240,000	240,000	240,000
Retained earnings		- 53,003	3,118,903	7,943,822	13,725,144	20,774,384
Total shareholder's equity	40,000	186,997	3,358,903	8,183,822	13,965,144	21,014,384
Total Liabilities & Owner's Equity	40,000	186,997	3,358,903	8,183,822	13,965,144	21,014,384

## **Income Statement**



	2010	2011	2012	2013	2014	2015
Total Sales	0	184,661	7,386,432	11,079,648	14,034,221	17,210,714
Gross margin	0	184660.8	7386432	11079648	14034220.8	17210713.6
Expenses:		321250.472				
Depreciation Expense		5333	136333	200500	253833	307167
Annual Costs for Technicians	0	3600	120000	180000	228000	276000
Annual Costs for Local mgnt	0	120000	325000	400000	408000	408000
Annual Costs for Sales Staff	0	0	36000	36000	36000	36000
Annual Cost for Filter test	0	5200	208000	312000	395200	478400
Annual Cost for Maintenance	0	5000	200000	300000	380000	460000
Marketing Expenditures	0	10000	25000	40000	40000	40000
Brand Embassadors	0	100000	100000	110796.48	0	0
Vehicle operating expenses	0	2500	65000	110000	143000	214500
*Informal Cost of doing business	0	16619.472	738643.2	1107964.8	1403422.08	1721071.36
Risk from underreporting	0	10731	429240	643860	1403422.08	1721071.36
Annual Cost for Filter-related loss	0	5000	200000	300000	380000	460000
Increased Fuel Cost		2600	2600	2600	2600	2600
One time fee for Blue Futures	0	40,000	0	0		
Total expenses	0	326584	2585817	3743721	5073477	6279836
EBIT	0	-141923	4800615	7335926.72	8960743.307	10930877.81
Interest expense		0	0	0	0	0
EBT	0	-141923	4800615.467	7335926.72	8960743.307	10930877.81
Tax		0	1440184.64	2200778.016	2,688,223	3,279,263
Net Income	-	- 141,923	3,360,431	5,135,149	6,272,520	7,651,614

## **Cash Flow Statements**



	2010	2011	2012	2013
Operating Activities				
Cash collections from sales		122,640	4,958,160	9,460,800
Annual Costs for Technicians	0	3600	120000	180000
Annual Costs for Local mgnt	0	120000	325000	400000
Annual Costs for Sales Staff	0	0	36000	36000
Annual Cost for Filter test	0	5200	208000	312000
Annual Cost for Maintenance	0	5000	200000	300000
Marketing Expenditures	0	10000	25000	40000
Brand Embassadors	0	100000	100000	105120
Vehicle operating expenses	0	2500	65000	110000
*Informal Cost of doing business	0	15768	700800	1051200
Risk from underreporting	0	14892	700800	1051200
Annual Cost for Filter-related loss	0	5000	200000	300000
Increased Fuel Cost		2600	2600	2600
One time fee for Blue Futures	0	40,000	0	C
Cash paid for interest and taxes		-	1,256,540	1,927,014
Net cash increase (decrease) from operating activities		- 201,920	1,018,420	3,645,666
Investing Activities				
Purchase of equipment		40,000	980,000	487,500
Purchase of intangibles		·	·	
Net cash increase (decrease) from investing activities		- 40,000	- 980,000	- 487,500
Financing Activities				
Proceeds from issuing equity	40,000	200,000		
Proceeds from issuing debt			1,000,000	
Principal payments on long-term debt	-		1,000,000	
Net cash increase (decrease) from financing activities	40,000	200,000	-	-
Increase (decrease) in cash balance		- 41,920	38,420	3,158,166
Beginning cash balance (January 1, 2003)		40,000	- 1,920	36,500
Ending cash balance (December 31, 2003)	40,000	- 1,920	36,500	3,194,666
Ending cash salance (Becomber 51, 2005)	+0,000	1,520	30,000	5, 15-7,000

## Valuation 3 Year - Base



### **Base Case**

FCF Base 3 Years	2010		2011	2012	2013
EBIT	-	-	167,833	3,838,067	5,897,780
EBIT(1-T)	-	-	117,483	2,686,647	4,128,446
+ Depreciation	-		120,000	325,000	400,000
- Change in WC	40,000		52,560	2,049,840	1,051,200
- Capex			40,000	980,000	487,500
FCF	- 40,000	-	90,043	- 18,193	2,989,746
Terminal Value					10,891,218
FCF	- 40,000	-	90,043	- 18,193	13,880,964
		-	130,043	- 148,237	
NDV/	D 4 707 700 00				
NPV	<b>B</b> 4,767,780.89				

PBP: 2 years

### Valuation 3 Year - Best



### **Best Case**

FCF Best Case	2010	2011	2012	2013
EBIT	-	- 49,793	4,639,387	7,521,667
EBIT(1-T)	-	- 34,855	3,247,571	5,265,167
+ Depreciation	-	120,000	325,000	400,000
- Change in WC	40,000	52,560	2,049,840	1,261,440
- Capex		40,000	980,000	600,000
FCF	- 40,000	- 7,415	542,731	3,803,727
Terminal Value				13,856,433
FCF	- 40,000	- 7,415	542,731	17,660,160
		- 47,415		
NPV	B6,395,188.36			

PBP: 1.08 years

## Valuation 3 Year - Worst



FCF 3-year Worst	2010	2011	2012	2013
EBIT	-	- 118,857	1,209,039	2,139,297
EBIT(1-T)	-	- 83,200	846,327	1,497,508
+ Depreciation	-	120,000	325,000	400,000
- Change in WC	40,000	42,048	1,009,152	672,768
- Capex		40,000	592,500	400,000
FCF	- 40,000	- 45,248	- 430,325	824,740
Terminal Value				3,004,410
FCF	- 40,000	- 45,248	- 430,325	3,829,151
		- 85,248	- 515,573	
NPV	<b>B</b> 1,087,279.46			

PBP: 2.78 years

# Valuation 5 –year with Recom



FCF 5 year with recom	2010	2011	2012	2013	2014	2015
EBIT	-	- 53,003	4,531,294	6,892,741	8,259,032	10,070,342
EBIT(1-T)	-	- 37,102	3,171,906	4,824,919	5,781,323	7,049,239
+ Depreciation	-	120,000	325,000	400,000	408,000	408,000
- Change in WC	40,000	55,398	2,160,531	1,107,965	886,372	952,948
- Capex		40,000	980,000	487,500	400,000	400,000
FCF	- 40,000	- 12,500	356,374	3,629,454	4,902,951	6,104,292
Terminal Value						22,237,062
FCF	- 40,000	- 12,500	356,374	3,629,454	4,902,951	28,341,354
		- 52,500	303,874			
NPV	B8,586,977.99					

PBP: 2 years

## **Return on Equity Investor**



Initial Investment 20% Ownership of \$200,000

NPV range between \$1.08 - \$6.4 million

Return range from \$217,000 - \$1.28 million

% Return range from 8.7% - 540% From 0.8 times – 5.4 times