

**WATER IS A HUMAN RIGHT \***

## **Project: Water Filter Stations**

**Making water clean, accessible and affordable for everyone.**

**\* [www.un.org](http://www.un.org), un-water 2014/5/29, [Resolution 64/292](#), 28 July 2010**

## basic facts:

**2 billion people**  
do not have access to clean and safe drinking water

**2000 children**  
die every day from contaminated water

**A big challenge? Yes!**

**Difficult to solve? No!**

## Water filter stations concept:

**the most affordable solution → a filter for 50\$ cleans 20k l/d, e.g.**

**saves money for the consumer → cost effective and easy to transport**

**easy to scale nationwide → no additional costs for boiling**

**technically sophisticated → great variety of designs**

**social business → instead of donation**

## **more key points:**

### **water filter stations:**

- create jobs**
- are a self-financing business**
- can fulfill the human right to water**
- are the most cost effective solution**
- can function as local supply hubs as well**
- generating surpluses due to CO2 compensations**
- generation surpluses due to the amount of stations**

**more facts:**

## **Impact:**

### **Clean Water means:**

**Stability** - less migration & rural exodus

**CO2 saving** - no dirty water needs to be boiled

**Health** - for children, adults, livestock and environment

**Money saving** - less medical costs and more efficient work time

**Food security** - better yield, after harvest processing & food production

**Safety** - no personal risk for girls & women fetching the water from far away

**income** - jobs at water stations and better sales of produced food with clean water



**components for a basic system :**

**no chemistry, like chlorine  
simple maintenance and  
easy cleaning by  
backwashing**

**basic system:  
pre-filter for dirt**



**+**

**basic system:  
manual pump (\*1)**



**+**

**basic system:  
nano/ultra-filter**



**\*1 manual pump, own design, in case of no or unsure electricity**

**how to realize:**

**our independent network:**

**African/German/Swiss engineers  
project managers  
water experts  
companies  
NGO's  
VIP's**

**provides**

**R&D  
digital solutions  
national concepts  
financing concepts  
social business concepts  
100%independent consulting  
100 % transparency of all transactions**



**Please get in touch to find out how simple it can be!**

**in detail:**

**steps:**

- **getting in touch with local authorities**
- **connecting with local existing initiatives**
- **connect with or create a local roof organization**
- **creating a water infrastructure map**
- **check out local demands and plan local solutions**
- **create business and financial plans**
- **connect with an education plan**
- **create a roll out plan**
- **integrate digital tools and solutions**
- **set up a digital payment system**
- **build up local production and supply chains**
- **connect with CO2 programs**
- **concept for international scaling**

## appendixes:

- **water boiling & water fetching**
- **environmental impact and business aspects**
- **pilot project 2019 - Kampala / Uganda**
- **Seguku & Kireka Slums (Kampala/Uganda) - 2 stations**
- **5 stations in Kampala City market places  
in cooperation with the KCCA**
- promotion history:**
- ***WATER BECOMES MUSIC***  
**special promotion at:**  
**Congresses - Festivals - Awards**
- **Gala in the Royal Albert Hall (London)**
- **SUSCON with Vandana Shiva and Jane Godall**
- **UN - DPI / NGO conference**

## the situation:

# water boiling & water fetching

- Majority of the people are using firewood /charcoal to boil (tap) water
- To boil 10L of water, you need ~1Kg of charcoal
- 1Kg of charcoal costs about 0,53\$ USD
- 1Kg of charcoal is releasing about 4,33Kg CO<sub>2</sub>



- Most families are more than 2km from the next water source away
- mostly young girls and children have to fetch and carry 40 liters of water every day
- in many parts the way is dangerous
- the children miss 2-4 hours a day at school or to help at home

# Environmental impact and business aspects: CO2 compensations can finance water filters stations.

Compare the options based on 1 L

Ready 2 Drink	Self boiling	Buying boiled water
\$ 0,01	\$ 0,05	\$ 0,11

100 water stations can prevent to release

**~250t of CO2**

That is the equivalent CO2 emission of ~675 VW vehicles per year.

(Scope 1 according VW Sustainability report)



no health impact  
save a lot of CO2  
(part of project can be financed by CO2 compensation payments)



creating jobs, especially for young people  
safe money, especially for the families with low income  
water security and price stability

## pilot project 2019 - Kampala / Uganda:

- the only water stations with clean water within 2 km
- 75.000 liters sold in 50 month = 1500 liter per day
- ECA water disinfection from own development
- serving school and youth center near by



## Seguku & Kireka Slums (Kampala/Uganda) - 2 stations

- people have a long way to the next water station
- women & children have to carry 20 liter jerry cans often more than 1 km
- more than 222.000 households are up to 1km away from the nearest water source
- the water has to be boiled in order to drink it
- boiling cost 4-6 times more, than the water itself
- boiling causes health and environmental problems, such as CO2 and deforesting
- because poor fear to get ill from water, they not drink enough
- water-borne diseases (cholera, diarrhoea, Hepatitis A, typhoid) are daily threats to millions
- the micro organisms which cause these diseases kill many people in Africa every year



**pilot project 2021:**

**5 stations in Kampala City market places  
in cooperation with the KCCA**



- Market places are very crowded.
- Customers are visitors and workers.
- We will sell the water for a minimal price.
- We offer cold water as well (from fridge).
- We will establish a cash free payment system with cards / chip-keys.
- We get 5 locations from the KCC.
- We can scale the project national wide.
- We want to join the 10.481 water stations for the poor in Uganda with filters.
- We earn from maintenance of these stations.
- Due to so many stations we can keep the current price for unfiltered water (but deliver filtered water!).
- The project can be an examples for other countries as well and can be scaled.

promotion history:

# *WATER BECOMES MUSIC*

special promotion at:  
Congresses - Festivals - Awards



64TH ANNUAL UN DPI/NGO CONFERENCE

**Sustainable Societies; Responsive Citizens**



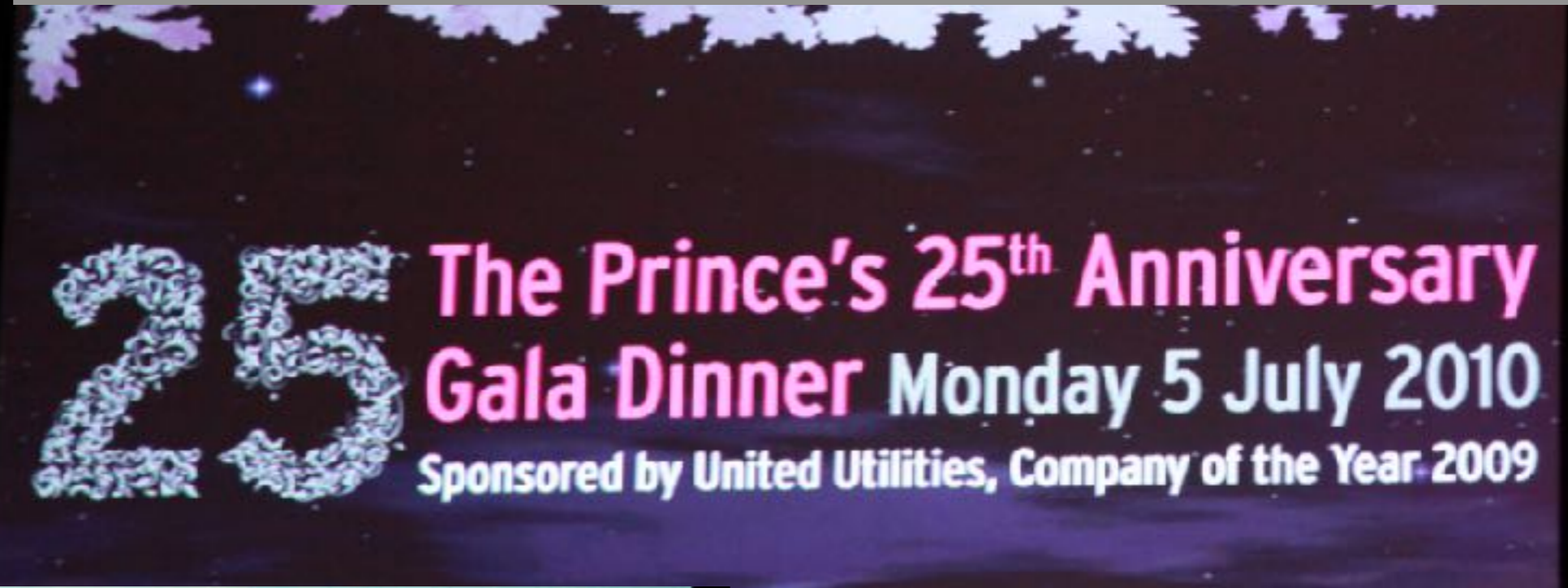
BONN. GERMANY, 3-5 SEPTEMBER 2011



64. UN DPI/NGO Konferenz  
(3. - 5. September 2011, Bonn)



# Gala in the Royal Albert Hall (London)



# SUSCON with Vandana Shiva and Jane Godall



# UN - DPI / NGO conference



64<sup>th</sup> Annual UN DPI/NGO Conference  
3-5 September 2011  
Maritim Hotel • Bonn, Germany

## Opening Ceremony

Achim Steiner  
Executive Director, UNEP



**SUSTAINABLE SOCIETIES  
RESPONSIVE  
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In Partnership with the Federal Government of Germany,  
UN Volunteers and the NGO/UN Executive Committee, and hosted  
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**COMMIT • ENCOURAGE • VOLUNTEER**  
64<sup>th</sup> Annual United Nations  
DPI/NGO Conference  
Bonn, Germany • 3-5 September 2011  
[www.un.org/ngoconference](http://www.un.org/ngoconference)

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