



# INNOVATE 4 WATER

## TOPIC 1: WATER AND SANITATION IN THE CIRCULAR ECONOMY

June 7 – 9, 2017 | Geneva, Switzerland



#Innovate4Water | #WIPOGREEN | @WIPO | @Waterpreneurs | @watervent

# Innovate 4 Water



## Challenge:

We envisage a world in which the safe re-use of toilet resources is the norm, providing energy, agricultural products, clean water, and more, connecting sanitation to a system alongside many other sectors in the biocycle. To create that system, several barriers need to be overcome, starting with health and safety standards, as well as perception, which can affect decisions at every level.

## Question to / Need from the audience

How do we make connections with other sectors to monetise the value of the biocycle, and make the system profitable?



**Cheryl Hicks**  
Toilet Board Coalition, Executive  
Director



# Innovate 4 Water



## Challenge:

No water to drink so where does one get to flush his shit....60 % of Indian population feels defecating in the open is safe(ok to contaminate water) , and less than 3% of the waste is treated. Technology adoption and onsite waste treatment with water recycling is key to address WASH -"SHIT is a **VERY** serious business"

## Question to / Need from the audience

Where can I find those patient people who might be interested in this shitty business globally



**Namita Banka,**  
Banka BioLoo , Founder &  
Director



# Innovate 4 Water



## Challenge:

**making freshwater go round and round and round...**

Circular Water Management is a great way to increase efficiency, save costs, meet corporate water targets and address shared water availability and quality risks. There are however still many barriers to its adoption at scale, among which: regulation, resources, lack of awareness and dialogue.

## Question to / Need from the audience

What are the best strategies to increase awareness at all levels that 'waste' water is a valuable resource worth investing into?



**Tatiana Fedotova**  
WBCSD, Director Water





# Innovate 4 Water



## Challenge:

In order to support sustainable agriculture businesses, we work with small and medium-sized enterprises in developing countries. Access to new water technologies and awareness of solutions and best practices is a key challenge to most local entrepreneurs trying to be more competitive, efficient and productive and expand to new markets.

## Question to / Need from the audience

How can we assist SMEs having better access to water technologies and solutions to grow their business from developing countries?



**Mathieu Lamolle,**  
ITC, Senior Advisor,



# Innovate 4 Water



## Challenge:

The sanitation sector is changing with technical innovations, community-led approaches, new business models. These need to be combined into inclusive, coherent, long-term strategies, action plans, financing schemes, i.e. public policies. The challenge is to integrate them into comprehensive and sustainable scenarios, to gather public support for sanitation services.

## Question to / Need from the audience

What donors and local decision-makers need to be convinced urban sanitation services and policies are feasible and transformative?



**Laure CRIQUI**  
IDDDRI, Urban development  
specialist



# Innovate 4 Water



## Challenge

In Nigeria millions of emptied polythene sachets, used for drinking water, are freely disposed daily, impacting public health, the environment, and the economy. We want to tackle this issue and contribute to improve the way safe drinking water is provided.

## Question to / Need from the audience

Establish partnerships to promote polytene recycling and re-processing efforts, and to investigate alternative solutions.



**Sergio Vallesi**  
Durham University, Research Associate



# Innovate 4 Water



## Challenge

We believe Access to Energy is a basic human right. For the poorest, it triggers improvement of health, economical development, security, education, and access to water. We provide sustainable solutions and trainings addressing homes, communities, micro-businesses, public services, agriculture, health care facilities... using renewable sources of energy.

## Question to / Need from the audience

How to best transform local pilot initiatives into scalable business throughout the emerging world?



Olivier Jacquet  
Schneider Electric, Sustainable Dvpt







# **INNOVATE 4 WATER**

## **TOPIC 2: WATER - ENERGY NEXUS**

**June 7 – 9, 2017 | Geneva, Switzerland**



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# Innovate 4 Water



## Challenge:

### **Agrifood/mining industry and sustainable water use**

Dublin Principles: The management of water resources 1) demands a holistic approach, linking social and economic development with protection of natural ecosystems; and 2) should be based on a participatory approach, involving users, planners and policy-makers at all levels

## **Question to / Need from the audience**

Do you know some best practices of a Nexus Approach to water resource management that benefit to local communities in Africa?



**Florian Thevenon**  
WaterLex, Scientific Officer



# Innovate 4 Water



## Challenge:

How to implement **WGA** low energy intensity desalination technology, enabling access to water for all? Current industrial desalination is energy intensive while fresh water in nature comes from low-energy processes. Our patented desalination process mimics nature, reduces thermal resistances 15-30 times, lowers  $\Delta T$  needs, so huge efficiencies are derived. Proof of concept done, pilot unit ready.

From the audience we need partners/players with strong and immediate synergies to implement **GLOBAL ACCESS** to WATER worldwide



**Prof Eusebi Nomen PhD**  
co-founder WGA ,  
Water Global Access



# Innovate 4 Water



## Challenge:

Remote off-grid locations in Saudi Arabia satisfy their water needs by transporting water using trucks, and by shipping diesel so that it can be used for desalination purposes. This incurs a lot of costs and is not sustainable in the long run.

## Question to / Need from the audience:

How can we apply renewable energy to help tackle this problem and engage the local industry and the community?



**Mudhyan ALMudhyan**  
King Abdullah City for Atomic  
and Renewable Energy,  
Reseracher





# Innovate 4 Water



## Challenge:

Nobody wants to be blamed for not respecting groundwater regulations on pollution. We need to convince more companies that they need to start to invest in the real water scarcity problems at watershed level aiming to reduce water risk and cementing customer loyalty. A precondition for addressing water issues is to start gathering background information on water and undertaking water risk assessment.

## Question to / Need from the audience

How to provide incentives in corporate disclosure around water issues?



**José Luis, Carrasco**  
Aquasis Solutions, Director



# Innovate 4 Water



## Challenge

Water is essential for business to run smoothly. Companies are facing physical, regulation and reputational risks regarding water management. Companies must improve their water uses and work on effective solutions to reduce their water footprint, as water recycling and implementation of closed loop in their plant.

## Question to / Need from the audience

There is no development in a degraded environment.  
How to mainstream environmental issues systematically in project on better access to clean water and sanitation ?



**Annabelle PRIN-COJAN,**  
Head of Environment, EpE



# Innovate 4 Water



## Challenge

Managing the complexity! If we talk about the Food, Water, Energy, Health Sector we need to move away from “Silo Thinking” and start to collaborate across sectors. We need to meet the requirements of the local communities, the commercial partners, the NGO’s, the governments and also the financial sector. New business models can help to manage the complexity and even generate new USP’s.

## Question to / Need from the audience

Funding for inclusive projects is difficult anyway, if we add a holistic business model, it is almost impossible to sell to investors. How can we help each other to meet the needs of the financial sector?



**Lars Willi**  
WECONNEX AG, CEO



# Innovate 4 Water



## Challenge:

Increasing levels of salinity in ground & surface water supplies are rendering them unfit for drinking. Most existing desalination systems utilize reverse osmosis, which requires high energy inputs and complex maintenance, making them expensive & unsustainable for low-income, off-grid residents.

## Question to / Need from the audience

Can we develop a low-energy input, low-cost, and decentralized desalination system (ideally powered by photo-voltaics) for brackish water which can be taken to scale in areas of saline water intrusion?



**Tom Wildman**  
Oxfam GB, WASH Advisor for Sustainable Market Development





# Innovate 4 Water



## Issue

We have a strong understanding of the operational and financial proposition of our Stations, and work has been done on similar topics for solar powered utilities, there has not been work on combining the two. We believe by modelling revenue streams and integrated operating costs we can develop a financially and operationally strong utility to be field tested.

## Question to / Need from the audience:

Who has expertise on solar power – financial analysis and operational experience – to help develop a compelling case for a dual utility?



**Nat Paynter**

Safe Water Network, VP –  
Strategic Partnerships



# Innovate 4 Water



## Challenge

Giving sustainable access to water and energy is very difficult in rural areas, because of remote location aspects, poorness of people, size of the projects and their low profitability. Veolia and Odial propose to use a concession model to offer a global service covering both urban and rural areas and allowing tariff transfers and synergies among locations and among clients



## Question to / Need from the audience:

What are the levers to help promote the model ?



**Martine Vullierme**  
Veolia Africa Middle East SVP



**Thierry Barbotte**  
Odial Solutions CEO





# INNOVATE 4 WATER

## TOPIC 3: SMART WATER TECHNOLOGIES

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## Challenge:

Smart water technology is a call for digital disruption all along the value chain of the water economy. From a perspective of a better governance to people education and how to bridge cultural gaps, going through spreading technology for usage optimization and productivity improvement or thinking new compensation mechanisms on negative impacts

## Question to / Need from the audience

In this panel we will address : Big data, education, market access & economical model, block chain and compensation...



**Ludovic Centonze,**  
Orange, Orange4Development





# Innovate 4 Water

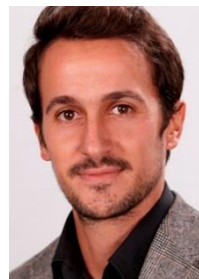


## Challenge:

Digital technology and data management are becoming central to these water businesses; however developing, selecting, implementing such technology is neither their core competence nor business focus. Such technology experts would provide insights, implements fit for purpose solutions and saves costs by avoiding mistakes.

## Question to / Need from the audience

How can we support more digital technology specialists/ventures to partner with water organisations?



**Michael Nique**  
GSMA, Senior Manager



# Innovate 4 Water



## Challenge

We are working hard to reduce the quantities of fresh water we use. Our recycle targets are aggressive but achievable.

Recycle water can contain salts, organics and other contaminants that can interfere with our mineral recovery.

How can we monitor these in *real time* and develop low cost, robust treatment systems?

## Question to / Need from the audience

Low cost, real-time sensors (on pipe and remote) for FOG, nitrates, COD, TDS, TSS, SO4 etc., focus on frequency over accuracy.



**Phil Newman**  
Head of Innovation,  
Anglo American



# Innovate 4 Water



## Challenge:

Safe Water Network is integrating digital finance and mobile money into Small Water Enterprise operations to reduce reliance on cash transactions. We project that digital finance will substantially improve the financial viability of our water stations and livelihoods of our consumers. However, consumers need to be able to accept and adapt, or else these digital improvements will become setbacks.

## Question to / Need from the audience:

How do we address consumer knowledge gaps to increase adoption and realize the full benefits of digital finance?



**Sandy Hwang**  
Safe Water Network, VP –  
Business Analytics &  
Development



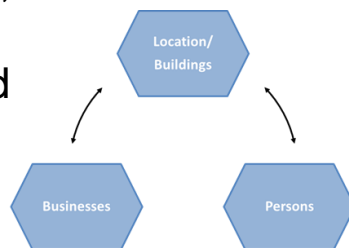
# Innovate 4 Water



## Challenge:

### A (Public) Data Revolution

Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.



## Question to / Need from the audience:

How do we to promote the idea that data is an asset and, that public data, is an essential element of national infrastructure?



**Steve MacFeely**  
UNCTAD, Chief Statistician





# Innovate 4 Water



## Challenge

Today a plethora of new technologies exist for expansion and incorporation in daily water management, planning and decision making. These include earth observation, smart phones and sensors, drones and innovative learning platforms. The challenge is how to bridge the digital divide, develop competent water knowledge societies in developing economies.

## Question to / Need from the audience

How can we promote the use and adoption of new technologies for improved water management and productivity?



**Themba Gumbo,**  
Cap-Net UNDP, Director



# Innovate 4 Water



**CONTRACTS11**

## Project description

The means for monitoring water ecosystems and the behavior of their users, processing and analysing gathered data and effectuating compensation of impacts are often inefficient, not enabling sustainability projects, and investments therein, to reach their (environmental) targets. TUPIX, as a 'sensor-to-wallet' solution allows for the secure and transparent optimization of projects with performance based environmental targets, maximizing results whilst reducing costs

## Challenge:

We need access to relevant use-cases and their actors (impact investors, international organizations, NGO's, tech-suppliers etc.) for their non-IT competence, input and feedback, jointly customizing and deploying TUPIX for evaluation.



**Daniel Lipschits**  
CONTRACTS11, Strategic  
Production



# Innovate 4 Water



## Challenge:

### **Producing More Sugar From Less Water**

- One litre of an average bottled beverage requires as much as 250 litres of 'blue' water to produce the sugar that is used as an ingredient. New technologies with sensors, high precision irrigation, optimising harvesting time, etc. create a cost-effective opportunity to increase productivity and resilient value chains.

## Question to / Need from the audience:

Given the selection of sugar in Pakistan / Asia, what do you recommend are the best technologies, specific locations and value chain partners to work with?



**Chris Perceval**  
South Pole Group, Director  
Sustainability Solutions





# INNOVATE 4 WATER

## TOPIC 4: SUSTAINABLE ECOSYSTEM FOR WATER ENTREPRENEURS

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# Innovate 4 Water



## **SUSTAINABLE ECOSYSTEM FOR WATER ENTREPRENEURS**

A number of organisations support water entrepreneurs in different ways in the various phases of their growth (idea-seed-scale-up-growth-maturity). These specificities can be confusing and laborious for entrepreneurs looking for help.

## **Question to Panel**

How to unlock silos to achieve a more transversal approach to support impactful entrepreneurs, fully respecting human rights?



**Violette Ruppanner**  
Strategos/Swiss Bluetec Bridge,  
Partner/Manager

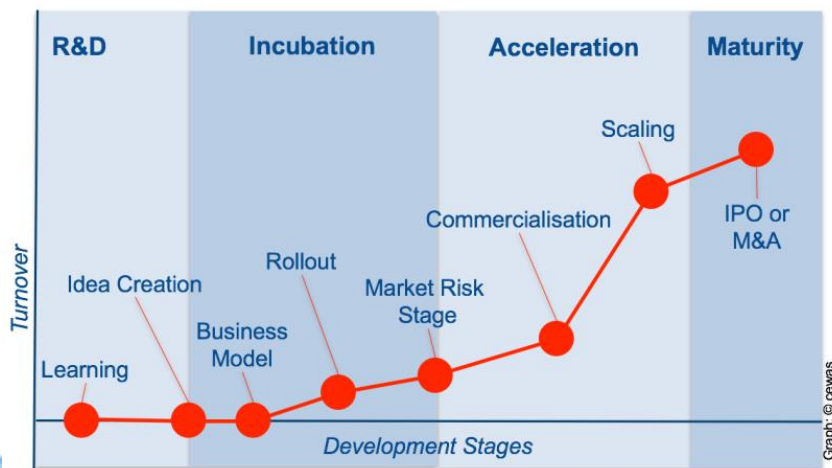


# Innovate 4 Water

## cewas

### Challenge:

Incubation phase for small-scale start-ups from developing countries not on radar of financiers.



### Question to / Need from the audience

How to leverage funds/ unlock risk capital to support early stage entrepreneurs in the incubation phase?



**Leonellha Barreto Dillon**  
Trainer and Coach of the Start-up Program, cewas

# Innovate 4 Water



## Challenge:

The required investment in the sanitation sector is too substantial, to be raised by traditional ODA money. Required investment: US\$ 1.7 trillion – current aid commitment p.a. US\$ 10.9 billion. Private sector engagement is imperative. Entrepreneurs require support in an enabling environment, access to finance and managerial capabilities training.

## Question to/need from the audience

What are appropriate partnerships to collaboratively ensure that entrepreneurs are enabled to develop the sanitation sector?



**Sören Brosch**  
BORDA e.V., Advisor



# Innovate 4 Water

# IRC

**Agenda**  
For **Change**

## Challenge:

To achieve SDG's and deliver sustainable WASH by 2030 we need systems, not just more holes in the ground. Technical solutions alone aren't enough. We need **joint action** and harmonised approaches to support **national systems** change, learning and knowledge share along with **CapManEx** investment. We need an **Agenda for Change**...

## Question to / Need from the audience:

How to effectively engage with stakeholders – government, engineers and other NGO's to promote the necessity of systems thinking and help donors see beyond binary 'numbers reached' as sole success indicators?



**Bryony Stentiford**  
IRC (WASH), Head of Strategic Partnerships





# Innovate 4 Water



## Challenge:

SMART Centres currently face two challenges, one external and the other internal. The external challenge entails the acceptance of low cost technologies to reduce the costs of rural and peri-urban communal water supply and support for (supported) Self-supply from NGOs and governments, which is still limited. The other challenge is internal, namely the SMART Centres' need for increasing their income through their training products, services and other channels.

## Question to the audience:

How can we increase the acceptance of simple, low-cost technologies and convince Governments, NGOs and other actors to recognize and thus invest in these low-cost, simple technologies and the concept of Self-supply as valid means to reach SDG 6? How can SMART Centres increase their income generating mechanism to become more financially independent?



**Jasmina van Driel**  
MetaMeta/ SMART Centre  
Group. Coordinator.



# Innovate 4 Water



## Challenge – Social Entrepreneur Academy, SEA

The current version of SEA is based on a model where trainer trainings and material customization has been done by Accenture volunteers. Until today we have reached +900 entrepreneurs, but to reach wider audiences SEA needs to be developed into a fully digitized learning platform. To reach that target we have analysed the social enterprise ecosystem and identified a large pool of players with potential interest to join the SEA partnership.

## Question to/need from the audience

Who would be the right partners with complementing capabilities and a shared vision to bring SEA to the next level with us?



**Tomi Nummi**  
Accenture Development  
Partnerships, Nordic Lead



# Innovate 4 Water

VIA Water

## Challenge:

Talking business models, financing mechanisms, revenue models, is one thing, but what about the soft side of innovation; the competencies and capacities an innovator needs to be successful. VIA Waters' challenge is to enforce those capacities to help realise the innovators' dream.

## Question to/need from the audience

What would be needed to enhance the capacities of innovators to help them go beyond piloting and into lasting solutions that are not (or less) donor driven?



**Titia Wouters**  
VIA Water, Programme  
Manager



# Innovate 4 Water



## Challenge:

A social venture needs to manage numerous bottlenecks all along the stages of their journey to accessing adequate funding to scale up. How to setup the right governance, practices and impact measurement framework, that bring transparency on their capabilities and capacities. Does it will really increase the confidence of the strategy effectiveness in the eyes of interested funders..

## Question to / Need from the audience:

Does an independent certification would benefit the social ventures in their due diligence process and culture of transparency?



**Jonathan Normand**  
Codethic / B LAB Switzerland,  
Director





# Innovate 4 Water



## Challenge:

Africa will add an 1 billion people in the next 20 years, and current models for basic services are unlikely to meet the need. Market-based distributed water models have significant potential to improve access for this growing population. However, a more robust ecosystem of funders and service providers is needed to catalyze the growth of this model.

## Question to/need from the audience

How do we engage water utilities and public policy makers to integrate this model into long-term planning in developing countries?



**Jim Chu**  
UNTAPPED, CEO



# Innovate 4 Water



## Challenge:

We have worked with entrepreneurs across sanitation and health to develop and operationalise scalable business models. However, to date we have been unable to share and apply our learnings to water entrepreneurs. It may be that there are no water entrepreneurs with scalable business models or, more likely, there is a lack of visibility and integration across the water ecosystem.

## Question to / Need from the audience:

Do water entrepreneurs with scalable business models exist and, if so, how do we unlock silos to identify and support them?



**Jessie Coates**

EY, Head of Operations at Enterprise Growth Services



# Innovate 4 Water

## Queisser & Cie

### Challenge:

To meet the 2030 SDG goals it is imperative to develop novel financial instruments and investment strategies to scale up best-in-class impact solutions (technological, financial and/or business models), or alternatively shift investors' and consumers' investment / consumption behavior, to meet those goals by 2030.

### Question to/need from the audience

Help identify best-in-class impact solutions to scale up : financial instruments or investment strategies, new technologies and public-private collaborations.



**Derek Queisser**

Queisser & Cie, Managing Partner



# Innovate 4 Water



## Challenge:

Today, there is a huge gap between the desire of government to supply safe drinking water to all people, the budget for doing this, and the regulatory controls for utilising the private sector, which is currently neither well recognised nor not well regulated. The private sector could be a fast track option for providing this service, provided that it meets human rights criteria. In order to activate this opportunity, there needs to be a framework in place to safeguard people's human rights, particularly for vulnerable people, and particularly with respect to what they can afford to pay, and the quality of the water.

## Question to/need from the audience

We would like to be introduced to organisations that are already working in Uttar Pradesh, Odisha, and Telangana, and who would like to help us with field verification of our research results, in order to recommend a strategy to government for progressive realisation of these human rights.



**Amanda Loeffen**  
WaterLex, Director  
General







# **INNOVATE 4 WATER**

## **TOPIC 5: HYBRID BUSINESS MODELS**

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# Innovate 4 Water

## **Our theme: market-based solutions to provide safe water**

There are many innovative technologies and business models to provide safe water in remote areas on a paying basis. However, all these operations struggle with willingness to pay and overall profitability. This limits their ability to scale and replicate and scale.

## **What the 7 pitches will be about**

What are the most promising avenues to solve these barriers: diversify product lines, work on behavior change, increase the price, cross-subsidize and alternative payment scheme, or decrease the costs (to make it even cheaper)?

Moderator



**Jessica Graf**

Founder and Managing Director  
of LeFil Consulting and Hystra  
Network Partner,



# Innovate 4 Water

## Challenge:

We have been incorporating elements of behavior change in our villages to increase adoption & consumption. We would like to accelerate our penetration to atleast 80% of the population from the current 20% & increase the per household consumption from 5.5 Ltrs per day to 10 Ltrs per day.

## Question to / Need from the audience:

How do we bring about the behavior change that is necessary to achieve this at a low cost.



**Kishan Nanavati**  
Spring Health Water India Pvt  
Ltd, CEO



# Innovate 4 Water



## Challenge

Namibians need access to sustainable borehole systems. There are three main barriers that need to be overcome :

- **Financial** - adequate business models to recover costs and ensure systems continue to operate effectively;
- **Environmental** – sustainable water abstraction and access to clean, effective water pumping solutions (e.g. solar PV pumps);
- **Technical** - local capacity to maintain and rehabilitate boreholes (e.g. pump maintenance);



## Question to / Need from the audience:

- What business models have worked in other countries to solve these challenges?
- How can Namibia successfully implement a mobile water payment scheme for users not used to paying for access to water?



**Oliver Richards**  
Carbon Trust, Analyst





# Innovate 4 Water



**Challenge:** Our recent study shows that Water Kiosks are credible, modular, complementary providers of safe drinking water to communities in a financially sustainable way.

**Water kiosks have the potential to serve up to 2 billion people** that are lacking access to safe drinking water.

To untap this potential, **ensure long term sustainability of Water Kiosks solution will pass through financial viability** (Opex & Capex) **to attract private entrepreneurs & investors.** And be no more dependent on subsidies.

In the meantime creating hybrid models, mixing entities & finance solutions (public/private, grants/capital/loans, ...) is critical.

## Question to/need from the audience

To scale, we need to optimise our solution to achieve both our social & economical objectives : How could you help us maximise consumers penetration & loyalty ? How could you help us improve our operational efficiency to reduce costs ?



**Nicolas Schmitt**

Danone Communities, Business Development Manager Water



# Innovate 4 Water



## Challenge

Water kiosks are demonstrably an effective solution commercially and operationally. The challenge is to scale from 100,000x to 10mx to effectively resolve the market gap. To do this, we need a financial solution that works for private investors to invest profitably and generate the social impacts. Philanthropic capital will not be enough to scale.



## Question to / Need from the audience:

How to mix sources of finance to accelerate this solution, de-risk start-up costs for young women entrepreneurs/franchisees?



**Cyrille Antignac**  
UBERIS Capital, Founder



# Innovate 4 Water



## Challenge:

We are pricing people out of the market, but cannot reduce prices and maintain financial viability. Without financial viability, sustainable operations are not achievable. We continually optimize the model but are unable to reduce the unit costs. Subsidies are a promising option, but they are rarely sustainable and frequently mis-directed to serve the wealthier populations.

## Question to / Need from the audience

How to develop a subsidy program that a) is sustainable and b) reaches the targeted group?



**Nat Paynter**  
Safe Water Network, VP –  
Strategic Partnerships



# Innovate 4 Water



## Challenge:

We sell the water at an affordable price to the BoP and that is just enough to cover operational costs but we cannot recover the CAPEX and international technical assistance. Local government and companies are reluctant towards co-financing. We are looking for other products and services we could offer to make the business more sustainable.

## Question to / Need from the audience

Which additional services could make the water shops business model more sustainable?



**Gerdien Seegers**  
Smart Water Solutions,  
Business developer





# Innovate 4 Water



## Challenge:

Antenna Foundation designed several approaches with development organisations such as schools, communities or hospitals projects. To adapt WATA technology for armed conflict areas also, Antenna Foundation needs to involve an other type of partners.

## Question to / Need from the audience

How to find partners willing to deploy and implement the WATA technology in water utilities in the middle east region?



**Jérôme Voillat**  
Antenna Foundation  
(Switzerland), Project manager





# **INNOVATE 4 WATER**

## **TOPIC 6: BLENDED FINANCE**

**June 7 – 9, 2017 | Geneva, Switzerland**



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# Innovate 4 Water



## Challenge:

The impact investing space has grown to multi-billion figures, USD 11 billion in the last microfinance investment survey alone. From private banks to pension funds, including private individual, governments and corporates, interest is there to put capital at work into SDGs 2030, including into water and sanitation, yet little money is flowing to projects today.

## Question to / Need from the audience

How can we build a life cycle investment infrastructure for “Water Enterprises”, from venture capital to mature growth financing?



**Roland Dominicé**  
CEO, Symbiotics



# Innovate 4 Water



## Challenge:

**Providing early equity and expertise to develop small-scale private or PPP infrastructure in Africa -**

I&P Africa Infrastructure's objective is to contribute to faster, more inclusive, and sustainable African growth. IPAI's ambition is to address the missing link between grant-funded very small projects and the large, nation-wide infrastructure programmes on which DFIs and purely commercial investment funds focus through direct participation.

## Question to / Need from the audience

Economic history shows that increasing a country's infrastructure in a financially sustainable manner is a chicken-and-egg challenge : Financially sustainable infrastructure requires creditworthy users, enterprises and individuals, which only exist once operational and affordable infrastructure is in place



**Pierre Carpentier**  
Investisseurs et Partenaires





# Innovate 4 Water



## Challenge:

The rural water sector is traditionally 100% financed by public funds through competitive bidding, leading to low quality of the pumps, numerous breakdowns and donors fatigue towards the rural water sector. However, the Uduma concept, which is one answer to this problem, is facing a huge challenge as it requires a blending of donors' and private funds.

## Question to / Need from the audience

Any suggestions to attract public funding in this venture, taking into account that it should take place out of the usual competitive bidding ?



**Christophe Guillemain**  
UDUMA Board Member



# Innovate 4 Water

## Challenge:

Although water service providers understand the need to diversify sources of capital, they struggle to demonstrate creditworthiness and project financial viability. WASH-FIN seeks to bridge the gap between sources of capital (development and commercial banks, impact and institutional investors) and the seekers of capital in the water sector.

## Question to / Need from the audience

With which water service providers, and with which sources of capital would WASH-FIN have the largest impact?



**Jeremy Gorelick**  
USAID WASH-FIN, Senior  
Infrastructure Finance Advisor



# Innovate 4 Water



## Challenge:

The challenge has been to ensure that our target groups have access to suitable financial products and services that meet their source of livelihoods. Impact investment has the potential for making relevant and quality financial products and services available to some 2.7 billion adults, constituting almost 70 percent of the population in developing economies.

## Question to / Need from the audience

How can we attract Impact Investors to ensure financial products & services meet needs of poor / disadvantaged population ?



**Siham Boukhali**  
HELVETAS, Advisor



# Innovate 4 Water



## Challenge:

Traditional valuation methodologies often provide a less convincing business case for sustainable assets than for conventional infrastructure, due to higher upfront capital costs and prominent technology risks. The problem lies in the inadequate identification and pricing of risks leading to inaccurate asset valuation and feasibility assessments.

## Question to / Need from the audience

Would the understanding of the financial impact of climate and other ESG risks make sustainable infrastructure more attractive?



**David Uzsoki**  
IISD, Infrastructure Finance  
Specialist





# Innovate 4 Water



## Challenge:

We identified the possible roles SWP and its members could play in the (impact) investing field: Labelling of projects, deal originator, capacity building, de-risking, and the setting up of an impact fund.

As a fund catalyzes the other roles, SWP plans to conduct a feasibility study to test and further develop the idea of a SWP Impact Fund.

## Question to / Need from the audience

What you would recommend to pay particular attention in the feasibility study?



**Philippe Spicher**  
Amos Advisory, consultant for  
SWP



# Innovate 4 Water



## Challenge:

**Safe Water Enterprises** can cover their OPEX from revenues but need support on CAPEX funding. SWE's fit into governmental drinking water strategies. Blended finance is synonym to win-win for grantors and financiers, mitigating RISKS and strengthening the business ecosystem, in theory, not yet full scale practice. An untapped potential for SWE's is ready for scale.

## Question to / Need from the audience

What blocks us creating innovative finance structures by blending grants, loans & equity, as outcome payer, investor or NGO? Time that funders invite funders rather than business looking for money?



**Sjef Ernes**

Aqua for All, managing director



# Innovate 4 Water



## Challenge:

The greatest challenge facing Impact and Sustainable entrepreneurs and funds is the inability to find a capital solution effectively. On average, it can take 18-36 months to find investments. This is far too long to keep a team together who are not receiving any income.

Most entrepreneurs don't have money to hire advisors to raise the capital needed to execute the business plan. Intermediaries are constantly asked to work on commission, which is impossible due to long period of time fund raising takes. With no income coming in, it is not possible for these advisors to carry out the task at hand. The same is true for fund raising for funds.

## Question to / Need from the audience

How can you fund start up entrepreneurs who have no money to raise money and create large money flows?



**Robert Rubinstein**  
TBLI Group, Chairman and  
Founder



# Innovate 4 Water



## Challenge:

We are developing a Trust to raise \$60M of capital to scale Small Water Enterprises and address the safe water access gap in Ghana. To achieve this target, we need to reduce sector reliance on donors and attract a more diverse group funders (e.g. governments, multilaterals) to ensure long term sustainability of funding. However, SWEs must balance affordability to consumers with the providing a financial return.

## Question to /

## Need from the audience

How to design investment products that will attract the right mix of funders and investors to ensure long term sustainability?



**Sandy Hwang**

Safe Water Network, VP –  
Business Analytics &  
Development





# Innovate 4 Water



## Challenge:

All the States of the world are committed to achieving very ambitious objectives in 2030 with the 17 SDG's. ODA of developed countries is an important source of funding for projects in developing countries. Climate change requires many investments over the next few years, with priority being given to adaptation. The developed countries committed through the Paris COP21 to bring them 100 billion US dollars each year from 2020.

## Question to / Need from the audience

Given the very significant fundings that developing countries will have to incur as soon as possible to meet these two challenges, new innovative financing methods will have to be implemented combining public and private funding. How to succeed in this challenge?



**Ph Guettier**  
French Water Partnership -  
General Director



# Innovate 4 Water



## Challenge:

In the water and sanitation sectors, smart sensors and mobile money are important tools that help make water provision financially and operationally sustainable. From large utilities collecting e-payments through mobile wallets to smaller organisations moving from paper-based reporting to digital monitoring, we are seeing more evidence of the impact of mobile across urban and rural water models. However in order to fully digitize the sector and see the true impact of mobile, more capital is needed to support the emergence of new models.

## Question to /

## Need from the audience

How can we further unlock early-stage capital to pilot more mobile-enabled water models and support such data-oriented organisations in their growth?



**Michael Nique**  
GSMA, Senior Manager



# Innovate 4 Water

## KOIS INVEST

### Challenge:

Innovative finance complements traditional approaches to funding international development by facilitating investments from the private sector. For example, the Humanitarian Impact Bond raises new sources of funds to finance rehabilitation centers in Africa, engaging social investors to tackle humanitarian issues.

### Question to / Need from the audience

What are the most effective ways for different sources of capital (private, public, philanthropic) to work together?



**Serena Guarnaschelli**  
KOIS Invest, Partner





# INNOVATE 4 WATER

## NOT PRESENTED CHALLENGES

June 7 – 9, 2017 | Geneva, Switzerland



#Innovate4Water | #WIPOGREEN | @WIPO | @Waterpreneurs | @watervent



# Innovate 4 Water



## Challenge

The costs of works to transform plants in order to reduce the water footprint can be high in comparison with the cost of water. Some plants are facing difficulties for finding investments in such works. But if you look at the total cost of operation on water it can be 4 to 10 times higher than the price of water. The business case is unambiguous.

## Question to / Need from the audience

How can we facilitate the financing of works to improve the water use in plants, even with a long ROI ?



**Annabelle PRIN-COJAN,**  
Head of Environment, EpE



# Innovate 4 Water



## Challenge:

Developing and promoting affordable advanced technologies to enhance food security, improve livelihoods and reverse the current degradation of natural resources (water, biodiversity and land) and cope with the serious implications of climate change, particularly in developing world. To do that it is essential to consider the nexus perspective interlinking water, energy, food and health. Such consideration is essential to achieve the Sustainable Development Goals (SDGs).

## Question to / Need from the audience

How to convince policy makers to invest more in science and technology and provide incentives to stakeholders including public and private sector, civil societies to work together to develop and promote advanced technologies.



**Mahmoud El Solh**  
Former ICARDA Director  
General



# Innovate 4 Water



## Challenge:

In order to develop sustainable projects, it is key to rely on local entrepreneurs. Since few years, we observe in Africa the emergence of business incubators. These incubators are organising themselves in cross boundary network to work together in order to share best practice but also to help entrepreneurs to expand their business in multiple markets.

## Question to / Need from the audience

How to take into consideration this new entrepreneurship wave in your projects to foster the local business creation in Africa ?



**Ludovic Centonze,**  
Orange, Orange4Development



# Innovate 4 Water



## Challenge:

Telco operators have now capacity to release anonymised mobility data based on the cell phone usage. These data can nourish algorithm models to monitor, view/discover or evaluate projects or public policies. Data 4 Development challenges launched by Orange in Ivory Coast and Senegal explored a large variety of subjects to help the socio economic development effort.

## Question to / Need from the audience

How accelerate telco to make the proper investments to be able to release on demand such data by creating a business demand?



**Ludovic Centonze,**  
Orange, Orange4Development





# Innovate 4 Water



## Challenge:

In a growing number of areas, improved sanitation has been achieved at the household level, but no services exist for transport and safe disposal of fecal wastes. In the absence of large municipal wastewater treatment systems to provide these services, there is a need for economically viable, decentralized models to provide these critical services.

## Question to / Need from the audience

How do we develop viable business models for small & medium sized enterprises, which are profitable and offer sustainability for future growth without external subsidies?



**Tom Wildman**  
Oxfam GB, WASH Advisor for  
Sustainable Market  
Development



# Innovate 4 Water



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

## Challenge:

Social water and sanitation entrepreneurs use to operate in the South under many external constraints and often without any framework of collaboration with host government, though they offer complementary solutions to centralized water systems

## Question to / Need from the audience

Through what kind of collective action and under which collaborative framework can we create a market for safe water with SE



**Olivier Magnin**  
SDC, Program manager



# Innovate 4 Water



## Challenge:

seif supports teams seeking to apply innovative business ideas to respond to social and/or environmental challenges. seif offers non-financial & financial support services from the founding phase until the first financial round of the start-ups. seif acts as an intermediary between stakeholders by connecting actors from the financial sector, corporate world, universities and foundations.

## Question to / Need from the audience

Promote Social Entrepreneurship in Switzerland



**Viola Zoller**

seif – Driving social Innovation,  
Project manager



# Innovate 4 Water



A healthy life for all.

## Challenge:

NGOs are not always perceived as a crucial partner needed for developing successful business cases. This is a missed chance, as NGOs can play a vital role in 'going beyond regular sales' and play a crucial role in sustainable business ecosystems.

## Question to / Need from the audience

How do we realise the potential of NGOs to create meaningful and successful partnerships with the corporate sector?



**Selma Hilgersom**  
Simavi, Programme Officer  
WASH





# Innovate 4 Water



## Project description:

The Ground\_Up Project is a deal-sourcing platform for sustainability. A financial technology company and a leading platform for environmental ventures under \$10M. We scan, screen and filter sustainable ventures through strategic partnerships, user-generated content and digital channels. Proprietary tools match investor requirements and enable deal flow selection and analytics.

## Challenge

Are you ready for investment? Join <http://www.groundupproject.net> and find out about your Value Compass



**Brindusa Burrows (Fidanza),**  
Founder & CEO, The  
Ground\_Up Project



# Innovate 4 Water



## Challenge:

We envisage a world in which the safe re-use of toilet resources (human waste) is the norm, providing different types of products. This raises certain questions, namely around standards and perception, particularly with anything going into the human food chain. Yet sanitation can solve problems for the food sector as it provides higher performing nutrients, creating high value for toilet resources.

## Question to / Need from the audience

Beyond reaching the levels of safety standards, how can we make sanitation appeal to the food sector?



**Claire Balbo**  
Toilet Board Coalition,  
Accelerator & Pipeline Manager



# Innovate 4 Water



## Challenge:

Despite a doubling of ODA to the water sector in the last 20 years, there is still a significant shortfall in the amount required to meet the Africa Water Vision targets and the SDGs. Estimates of the investment required to meet the AWF targets stand at approx. US\$ 64 billion per year. The current financial flows of about US\$ 10.5 billion per year. The message is clear – the investments to meet Africa's water infrastructure needs are huge, hence the role of the AWF to catalyse investments through project preparation and investment promotion activities.

## Question to / Need from the audience

Is your Water business in Africa struggling in attracting the required funding and looking for how to be investment ready? or looking for where to identify investment ready water business in Africa.

How to involve Water sector enterprises in the Investment Promotion Platform under establishment by AWF?



**M. Ossete Jean Michel**  
Ag Coordinator,  
African Water Facility



# Innovate 4 Water



## Challenge:

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**M. Ossete Jean Michel**  
Ag Coordinator, African Water  
Facility









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