

INDUSTRIAL PATHWAYS IN A CIRCULAR ECONOMY

INTERNATIONAL

The AIWW ILF 2015 aims to facilitate discussion and debate amongst C-Level executives around the theme of the Circular Economy leading to the development of 'Industrial Water Pathways in a Circular Economy' framework. This framework will aim to establish a roadmap for Industrial water and wastewater to understand, influence, engage and benefit in the transition to the circular economy. The Keynote Speaker will be: Geoff Gage, Partner McKinsey & Company and leader of McKinsey's Global Water Service Line.

The recent report of McKinsey on "Rethinking the water cycle" refers to the to the global situation and risks related to the thematic focus of the ILF.









AMSTERDAM INTERNATIONAL WATER WEEK

MCKINSEY REPORT: RETHINKING THE WATER CYCLE

The summary of the latest McKinsey report mentions that three billion people will join the global consumer class over the next two decades, accelerating the degradation of natural resources and escalating competition for them. Nowhere is this growing imbalance playing out more acutely than the water sector. Already, scarcity is so pronounced that we cannot reach many of our desired economic, social, and environmental goals. If we continue business as usual, global demand for water will exceed viable resources by 40 percent by 2030.

Many experts have claimed that wasteful treatment of water results from dysfunctional political or economic systems and ill-defined markets. But the real issue is that water has been pushed into a linear model in which it becomes successively more polluted as it travels through the system, rendering future use impossible. This practice transforms our most valuable and universal resource into a worthless trickle, creating high costs for subsequent users and society at large. Since the linear model is economically and environmentally unsustainable, we must instead view water as part of a circular economy, where it retains full value after each use and eventually returns to the system. And rather than focus solely on purification, we should attempt to prevent contamination or create a system in which water circulates in closed loops, allowing repeated use. These shifts will require radical solutions grounded in a complete mind-set change, but they must happen immediately, given the urgency of the situation.

A NEW CIRCULAR PERSPECTIVE

How moving to a circular economy can preserve our most vital resource water:

Three different views

1. **Water as a product**: considering the potential and ability to extract energy, nutrients and reuse water.

2. **Water as a resource:** managing the water balance of a river basin in a rigorous and integrated fashion in order to preserve the minimum environmental flow

3. **Water as an infrastructure system:** maximizing the benefits over deployed assets of global water networks and treatment plants. Different levels of service, pricing and convenience and optimizing resource efficiency

Moves to: next generation water-system management

McKinsey&Company

WORKING TOGETHER

Worldwide more and more governments – in collaboration with their societal partners from business, academic community and NGO's have the ambition and take steps towards more water management in industry, matching long term planning with short term investments. The comprehensive approach of combining water management and industrial planning is essential for this ambition, aligned with inclusive processes of collaboration and innovation. Collaboration across counties, regions of expertise and stakeholder groups is necessary to effectively address global risks, provide strategic guidance and advice on the methodology of comprehensive water management and climate resilience into industry.

There is a clear demand for comprehensive industrial strategies that integrate water technology into industrial comprehensive planning. Inclusive processes for development and implementation must include all stakeholders from the start to ensure capacity building, local buy in and awareness as well as investment opportunities across all sectors. Partnerships based on strong global networks and 'blue growth' are key for unlocking the potential of water assets in industries across the globe.

INTEGRATED SOLUTIONS FOR A CIRCULAR ECONOMY

The 2015 Amsterdam International Water Week (AIWW) has the theme of 'Integrated Solutions for a Circular Economy and Resilient Cities' will be the central theme, enabling the global delegates to build on new alliances and launch fresh ideas on connecting industry, science, business, policy and technology. The AIWW crosses borders between water and sanitation, urban resilience, city development, industrial water use, finance and governance. Thus bringing together a unique mix of professionals conducive to the transition to a circular economy and resilient cities.

SCOPE, PURPOSE AND FORMAT

AIWW Industrial Leaders Forum (ILF) 2015 aims to facilitate discussion and debate amongst C-Level executives around the theme of the Circular Economy leading to the development of 'Industrial Water Pathways in a Circular Economy' framework. This framework will aim to establish a roadmap for Industrial water and wastewater to understand, influence, engage and benefit in the transition to the circular economy. This will be done on the basis of concrete cases presented by the industrial leaders and will focus around the following themes:

- Product-design partnerships for Resource positive utilities
- Management for yield
- Basin management
- Local organic nutrient cycles
- Finance, assets & insurance

INDUSTRIAL LEADERS FORUM

CONTENT

This year's Industrial Leaders Forum will be hosting a series of keynotes and round table discussions where cross sector professionals and disciplines from finance, consultancy, technology providers, utilities, NGO's and industrial sector will forward a new 'circular' perspective on water management.

The ILF chairman will first summarise the outcomes from the ILF's in 2011 and 2013. This will then be followed by the keynotes which will highlight the framework of "Industrial Water Pathways in a Circular Economy". The keynote speakers are financial institutes and, of course, our honoured consultancy partner, McKinsey & Company.

The input received from the keynote speakers will set the stage for discussion and enable to delegations to have active and strategic involvement in the round table sessions.

ROUND TABLE SESSIONS

The topics of the round table sessions will be introduced by table moderators. There will be 2 rounds of round table discussions, each taking 50 minutes. This will enable the invitees to attend two sessions within this ILF program. There will be five round tables in total, where each table will discuss a pre-selected topic influencing design and rethinking rules for a circular economy in water management. In the role as an industrial expert, the delegation can contribute to this upcoming important issue ad to reach the new sustainable development goals.

Output of each session:

- Definition of the next steps for the presented case.
- Desired achievements before the next International Water Week in 2017.
- Conclusions of the day, important lessons for the plenary final keynote.

ATTENDEES: UPON INVITATION ONLY

The attendees for the ILF 2015 will be 50 – 75 high level executives from the various industries, as well as invitees from relevant global networks. The invitees will come from following target groups:

- Technology providers
- Utilitie
- NGO's
- Researchers
- Government Officials
- Multinationals

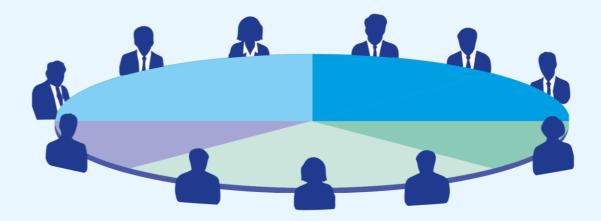
INDUSTRIAL LEADERS TOPICS

PRESENTED BY THE ROUND TABLE MODERATOR

FOCUSSING ON ONE MORE OF THE FIVE THEME'S

PRODUCT-DESIGN PARTNERSHIPS FOR RESOURCE POSITIVE UTILITIES	MANAGEMENT FOR YIELD	BAS MANAG
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LEADERS FROM ALL INVOLVED SECTORS AT THE ROUND TABLE SESSIONS



INDUSTRIAL LEADERS FORUM

SIN EMENT LOCAL ORGANIC NUTRIENT CYCLES

FINANCE, ASSETS & INSURANCE

MODERATOR INTRODUCING THE TOPIC

- GOVERNMENT
- FINANCE / INSURANCE
- NON GOVERNMENTAL ORGANIZATIONS
- KNOWLEDGE INSTITUTES / CONSULTANTS

INTERNATIONAL WATER WEEK

1. PRODUCT-DESIGN PARTNERSHIPS

Success in the development of a circular economy dynamic will require individuals, organizations and companies to go beyond their traditional silos and develop more partnerships and interactions. What if wastewater operators help by offering their expertise to producers and initiate product-design partnerships to ensure that water stays pure after use? They could soon become energy positive and resource positive utilities thanks to technical advantages. The aim of this roundtable is to discuss product-design partnerships to convert water systems to energy suppliers from waste, integrated grids and nutrient recovery sites.

3. BASIN MANAGEMENT

Water-system management requires questioning water allocation: how much can we use, to which purposes, what are reasonable amounts, who finally benefits and what are global dependences? Within this perspective environmental sustainability, economic efficiency and social equity are in the lead. The intent of sustainable water management is water stewardship by understanding the geographic river catchment, tailored catchment site action plan, collaboration and transparency. This roundtable is dedicated to form sophisticated multiparty contracts and minimize the bureaucracy associated with basin-management agreement.

4. LOCAL ORGANIC NUTRIENCT CYCLES

To aggregate local organic waste water flows could help communities deal with their problem while also creating vibrant local markets for fertilizer components. A process of engagement in legislative and regulatory activities, proper industry communication and industry standard formulation for quality, safety and compliance. Who will create and manage the local organic nutrient cycle of the future? Who will handle low-quality sludge and fragmented, contaminated streams of organic waste coming from households and businesses.

2. MANAGEMENT FOR YIELD

industrial process and the extraction of raw materials. Watersystem management is a hedge against upstream risks including raw material availability and price volatility, and it contributes to answering consumers' expectations. The time has come to create and share value, rather than compete and create value independently. This roundtable is dedicated in finding value within the supply chain process by using the benefits of water in increasing yield(s), productivity, reduced heat or nutrient loss and ultimately bottom line benefits by a circular perspective of water-system management.

5. FINANCE

Over the next decades, there will be a considerable shift in attitude towards the definition of value of water. A new perspective on prosperity, value and growth where social, ecological and economic sustainability go hand in hand. Finance will be the facilitator of the new circular perspective on water management and change. After all, absence of change will represent a cost. It potentially turns into an exposed risk such as higher commodity prices and supply chain disruptions. This roundtable hosts a new perspective on water assets, water risks and financial models for innovation and progressive water management projects. Initiated with new market setup, transformations, business models and innovative

PROGRAMME

DATE: WEDNESDAY NOVEMBER 4TH 2015 TIME: FROM 09.00 – 18.00 HRS. **LOCATION: RAI AMSTERDAM**

09:00 - 10:00	AIWW CONFERENCE KEYNOTES ON INDUSTRIAL RESPONSE: REDUCE
10:30 - 12:30	INDUSTRIAL TOUR AT AQUATECH (H
13:05 - 14:25	LUNCH (BALCONIES OF THE EUROPA
14:25	OFFICIAL START OF INDUSTRIAL LI ROOM G102
14:25 - 14:30	WELCOME & INTRODUCTION
	BY MENNO M. HOLTERMAN, CHAIR
	INDUSTRIES, THE NETHERLANDS
14:30 - 14:45	KEYNOTE: INDUSTRIAL WATER PA
	BY GEOFF GAGE, LEADER GLOBAL V
14:45 - 15:00	KEYNOTE: ACCELERATING SUSTAIN FINANCING IN THE WATER SECTOR
	BY AMBIKA JINDAL, ING COMMERO
15:00 - 15:15	KEYNOTE: CREATING VALUE FOR II
	BY USHA RAO-MONARI, CEO GLOB/ PORTFOLIO COMPANY)
15:15 - 16:05	HIGH LEVEL ROUND TABLE SESSIO
16:05 - 16:20	SHORT BREAK AND SWITCH TABLES
16:20 - 17:10	HIGH LEVEL ROUND TABLE SESSIO
17:10 - 17:20	CLOSING INDUSTRIAL LEADERS FO
17:25 - 18:00	PLENARY CLOSING OF XLF'S AND AI

INDUSTRIAL LEADERS FORUM

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NABLE TRANSACTIONS AND MAINSTREAM DR

CIAL BANKING AND SUSTAINABLE FINANCE

INVESTORS IN WATER

BAL WATER DEVELOPMENT PARTNERS (BLACKSTONE

DNS (ROUND 1)

NS (ROUND 2)

ORUM

AIWW 2015

INDUSTRIAL LEADERS FORUM

INDUSTRIAL LEADERS FORUM

Disclaimer:

The Industrial Leaders Forum is part of the 2015 Amsterdam International Water Week (AIWW), held from November 2th till November 6th 2015.

This year's AIWW theme is:

Comprehensive Solutions for a Circular Economy and Resilient Cities.

AIWW has a full program of high level meetings, debates and dedicated sessions for Industries.

Colophon:

Amsterdam International Water Week 'Industrial Leaders Forum' - Brochure

Event Partners:

RAI Amsterdam Netherlands Water Partnership (NWP) International Water Association

Content:

Xander de Bruine – Water Footprint Network Annelies Schenk – RAI Amsterdam McKinsey

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www.internationalwaterweek.com

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