



BLUE PLANET

Berlin Water Dialogues

Driving Energy and Resource Efficiency in the Water Sector

29 November 2017, 10:00 -16:30

Berliner Medizinhistorisches Museum
der Charité – Hörsaalruine
Campus Charité Mitte, Charitéplatz 1,
10117 Berlin

The participation is free of charge
www.blueplanetberlin.de

keynotes · short presentations · panel discussions

Cooperation partners



Federal Ministry for the
Environment, Nature Conservation,
Building and Nuclear Safety

Senate Department for
Economics, Energy
and Public Enterprises

be  **Berlin**



**WASSER BERLIN
INTERNATIONAL**

Project office



German Water
Partnership

PROGRAMME

Registration and Networking Snack start at 9:30

Moderation

Prof. Dr Manuela Wimmer, Programme Director, Institute for Water and Energy Management at University of Applied Science Hof

10:00

Opening

Welcoming Words

H.E. Iyad Dahiyat, Secretary General, Ministry of Water and Irrigation, Jordan

Thomas Stratenwerth, Head of Division General, Fundamental, International and European Aspects of Water Management, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Keynote

Prof. Dr Uwe Tröger, Dean of Water Engineering, Technical University of Berlin, Campus El Gouna

11:00

The Necessary Regulatory, Political and Technical Framework for an Holistic Transition

Panel Discussion

Introductory Words

Christophe Hug, Managing Director, Tilia GmbH

Participants

H.E. Iyad Dahiyat, Secretary General, Ministry of Water and Irrigation, Jordan

Klaus Gihl, Head of Division Urban Development & Natural Resources, KfW Development Bank

Christophe Hug, Managing Director, Tilia GmbH

Prof. Dr Dr Karl-Ulrich Rudolph, CEO, Institute of Environmental Engineering & Management at the Witten/Herdecke University gGmbH

Dr Alexander Sperlich, Research and Development, Berliner Wasserbetriebe

12:30

Networking Lunch

13:30

German Success Stories Abroad

Presentations followed by Q&A

Linking Climate Change Mitigation and Resource Efficiency: A Case Study from Jordan (Water and Wastewater Companies for Climate Mitigation (WaCCliM))

Dr Astrid Michels, WaCCliM Project Manager, Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH

Dr Bassam Hayek, Project Manager, Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH Jordan

Tubli Water Pollution Control Centre – Expansion of Sewage Treatment Plant with First Sludge to Energy Concept in the Middle East

Hubertus Schrage, Regional Director, p2m berlin GmbH

Water Reuse in Industrial Parks

Prof. Dr Hans Joachim Linke, Specialist Land Management, Technical University of Darmstadt

Solar Driven Water Treatment for Rural Areas, based on Anodic Oxidation

Alexander Goldmaier, CEO, AUTARCON GmbH

15:30

Closing Remarks

Julia Braune, General Manager, German Water Partnership e.V.

15:45

Networking

Conference will be held in English



SPEAKER

1

Prof. Dr. Manuela Wimmer

Programme Director of Research, Institute for Water and Energy Management at University of Applied Science Hof

Prof. Dr. Wimmer is hydrogeologist and professor for environmental technology and water management at University of Applied Science Hof. Her research focus includes digitalization and water management.

2

H.E. Iyad Dahiyat

Secretary General, Ministry for Water and Irrigation, Jordan

Mr. Dahiyat has more than 16 years of experience in the water sector of the Hashemite Kingdom of Jordan. As PMU Director in the Ministry, he managed a diverse set of strategic infrastructure projects.

3

Prof. Dr. Uwe Tröger

Dean of Water Engineering, Technical University of Berlin, Campus El Gouna

After industrial experience in the water business in Europe and Africa, Mr. Tröger occupied the chair of Hydrogeology at TU Berlin. Since 2012 he is Dean of Water Engineering at Campus El Gouna, Egypt.

4

Thomas Stratenwerth

Head of Division General, Fundamental, International and European Aspects of Water Management, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Thomas Stratenwerth is working in the Federal Ministry since 1987. Since 1999 he is Head of Unit for 'Water Management'. Since 2005 Mr. Stratenwerth is working in his current position.

5

Julia Braune

General Manager, German Water Partnership e.V.

Julia Braune assumed the leadership of German Water Partnership e.V. in July 2017. Before as a qualified lawyer she was General Manager and Head of Corporate Development within Eurawasser Group.

PANEL DISCUSSION PARTICIPANTS

The Necessary
Regulatory, Political
and Technical
Framework
for an Holistic
Transition



1

H.E. Iyad Dahiyat*Secretary General, Ministry for Water and Irrigation, Jordan*

Mr. Dahiyat has more than 16 years of experience in the water sector of the Hashemite Kingdom of Jordan. Whilst working as PMU Director in the Ministry, he managed a diverse set of strategic infrastructure projects. One of his important achievements was the establishment and implementation of a comprehensive benchmarking and performance monitoring system to regulate the performance of public distribution companies.

2

Klaus Gihl*Head of Division Urban Development & Natural Resources, KfW Development Bank*

Mr. Gihl heads the team within KfW Development Bank's Sector Policy Department since early 2014. Prior to that he was in charge for the infrastructure operations in SSA and predominantly involved in transport, telecoms and power sector projects in Africa. After joining KfW in early 1993 he was project manager for water and sanitation projects in South and Central Asia and for the power sector in South Eastern Europe.

3

Christophe Hug*Managing Director, Tilia GmbH*

Christophe Hug is Managing Director of Tilia, a young company with their headquarters in Leipzig. Tilia is a partner of cities, utilities and industrial businesses, who seek to develop new projects, make new investments, improve their operations, redefine their strategy and manage increasingly complex challenges in the fields of energy, water and environmental services.

4

Prof. Dr Dr Karl-Ulrich Rudolph*CEO, Institute of Environmental Engineering & Management at the Witten/Herdecke University gGmbH*

Dr Rudolph has doctoral degrees in water engineering and in environmental economics and Dr-of-honours from the Vietnam National Economic University. He is Director of the IEEM and shareholding CEO of CEEM-Consultants/GWFA-German Water Franchise Agency. Before Prof. Rudolph operated a large sewage treatment plant and worked at Deutsche Bank Advisory-Board and Berlin-Water Supervisory-Board.

5

Dr Alexander Sperlich*Research and Development, Berliner Wasserbetriebe*

Dr. Alexander Sperlich is an engineer at the R&D department of Berliner Wasserbetriebe, the utility providing water and wastewater services for 3.7 Mio people in Berlin. Since joining Berliner Wasserbetriebe in 2010, Dr. Sperlich has been leading several research activities in the field of advanced nutrient removal, removal of trace organic chemicals and energy efficiency in advanced water and wastewater treatment.

PROJECT PRESENTATIONS

FOUR GERMAN SUCCESS STORIES ABROAD

1

WATER AND WASTEWATER COMPANIES FOR CLIMATE MITIGATION

The Water and Wastewater Companies for Climate Mitigation (WaCCliM) project supports climate change mitigation efforts in the water sector using a cross-sectoral approach that links water, energy and food security. WaCCliM, funded by the International Climate Initiative, guides utilities in Jordan, Mexico, Peru and Thailand towards carbon neutrality. It provides technical support to policymakers to improve the regulatory and institutional framework and develop emission reduction strategies to reduce the water sectors' carbon footprint. Utilities working with WaCCliM are becoming sector leaders, and are seizing the opportunity to become more efficient and effective in an uncertain future.

***Dr Astrid Michels** is a project manager with GIZ, and currently manages the WaCCliM programme. Astrid is an aquatic ecologist by training and has specialized in climate change science and policy. She has more than 20 years of experience working on water and climate projects in Canada, Latin America, Asia and the Mena region.*

***Dr Bassam Ossama Hayek** has more than 20 years of experience in water and environmental resources management. He has been working with GIZ since 2013 and is in charge of projects dealing with improving the eco-efficiency of water utilities such as in terms of sludge management and in reducing carbon emissions of the water utilities.*



2

TUBLI STP EXPANSION

The major sewage treatment plant in Bahrain is the Tubli Water Pollution Control Centre (WPCC). In 2011 funding for a large scale expansion could be secured from GCC funding and p2m was hired to design a complete expansion to 400,000m³/d. As part of this expansion project energy efficiency and energy recovery were some of the main priorities of the local government. Tubli STP Expansion Phase 4 is the first project in the Middle East that provides full energy recovery from municipal sewage sludge incineration.

***Hubertus Schrage** – After completing his Masters Degree in Civil Engineering at Kassel University Mr. Schrage has spend 8 years in the USA working for local consulting firm in Northern California. He has worked in Bahrain since 2008. Mr. Schrage has more than 20 years of professional experience mainly in water supply and sanitary engineering.*



3

WATER REUSE IN INDUSTRIAL PARKS

Industrial parks usually rely on the availability of water and therefore – especially in times of climate change, shortage of (water) resources and the increasing importance of environmentalism – it is crucial to ensure a sustainable water management. The research group is developing a system of sustainable and economically feasible treatment and reuse of wastewater streams in industrial parks to reduce the demand for drinking and ground water.



Prof. Dr Hans Joachim Linke and Prof. Wagner (Wastewater Technology)

are the leader of the research group (Leibniz Universität Hannover (ISAH), Universität Witten Herdecke (IEEM gGmbH), EnviroChemie, Kocks Consult, Endress + Hauser Conducta, Tongji University Shanghai, Technological University Qingdao, Hanoi University of Civil Engineering).

4

SOLAR DRIVEN WATER TREATMENT FOR RURAL AREAS, BASED ON ANODIC OXIDATION

AUTARCON was founded in 2010 as Spin-off from Kassel University with the vision to supply drinking water to regions, where other available technologies and entrepreneurs have failed. AUTARCON stations neither require an external supply of energy nor chemicals. The core feature of the technology developed is the inline electrolytic production of oxidants and a patented sensor setting for water quality control.

AUTARCONs edge, compared to its competitors, is its extensive and broad field experience.

Currently 40 stations supply around 50.000 users with safe water. The company has and still is learning and identifying new challenges that require adapted solutions.

Alexander Goldmaier is expert in business leadership and education. As creative engineer in automation and system control, he founded AUTARCON in 2010. Furthermore he is working as lecturer for decentralized autonomous power supply systems and for the “European Master in Renewable Energy” (EUREC) at the University of Kassel since 2008.



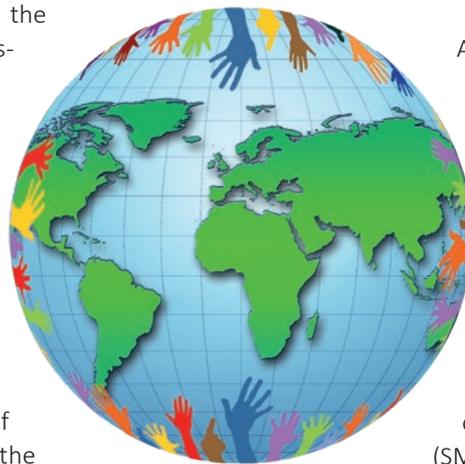
ABOUT BLUE PLANET

Using water in an environmentally compatible and innovative way is one of the key geopolitical tasks of the 21st century and simultaneously a significant economic challenge.

In 2015 the United Nations called on governments, the private sector and civil society to participate in the implementation of the Agenda 2030 for Sustainable Development. Given the importance of water for successfully implementing the objectives of other policy areas, such as health, agricultural or energy policy, there are several respects in which the sustainability goal for water plays an important role in this round of tasks. As a result, the issue of water is rightly gaining worldwide attention and is increasingly present on the global agendas of the World Economic Forum and the World Business Council for Sustainable Development. A growing market that is charged with solving the complex challenges has developed around the whole task field of water. The investment required globally is estimated at EUR 400 to 500 billion a year.

The German water industry has the expertise, qualifications and skills for the technologies and services that are needed to solve these tasks. It wants to contribute its share and, by making a commitment on the global markets, it also wants to take advantage of the opportunity to generate new jobs and strengthen the competitiveness and growth of the industry in Germany.

The BLUE PLANET Berlin Water Dialogues platform serves the goal of bringing together the demand that exists worldwide with the solutions and implementation skills of the German water industry. Based on analysis of the water industry's political framework at home and abroad, it presents specific technological approaches and provides a forum for solution-oriented discussion.



As an internationally acknowledged location of expertise in the water sector, the capital Berlin is ideal, within the framework of the BLUE PLANET Berlin Water Dialogues, for the exchange of knowledge, ideas, concepts and experience between politicians, the private sector, scientists and non-governmental organisations. Germany's largest water supplier, a significant number of small and medium-sized enterprises (SMEs) in the industry, some also operating globally, universities and research establishments, networks and, last but not least, the WATER BERLIN INTERNATIONAL trade fair are at home here. As a result, the water industry is among the top performers within the German economy.

With the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, the Berlin Senate Department for Economics, Energy and Public Enterprises, and Messe Berlin GmbH as supporters and partners, the BLUE PLANET Berlin Water Dialogues offer an international "marketplace" where global water management issues are analysed and, based on best practice examples, are brought together with the expertise and problem-solving skills of the German water industry at round table meetings, presentations and discussions.



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WATER – HUGE CHALLENGES, SMART SOLUTIONS

Water management worldwide is facing enormous challenges: In coming decades there will be a sharp increase in the pressure on both the availability of water and also on the demand for water. The reasons for this development and the factors influencing it are diverse and differ widely in their importance depending on region. Thus, in addition to natural requirements and conditions, such as economic structures and their changes, it is the political conditions, existing infrastructures and technological progress that decide on the resource's availability. The impact exerted on the water resources by advancing globalization and climate change, increasing population figures, particularly in megacities, and the growing demand for food and energy can also be felt all over the world. The result is an increase in the economic significance of water as a resource evidenced by the billion-dollar market that has grown up around it in recent years.

According to a study by Deutsche Bank Research, the investment required in the water sector is estimated at EUR 400 to 500 billion a year worldwide. The German water industry sees huge business

potential in this market and therefore the opportunity to generate new jobs and economic growth in Germany and throughout the world. At the same time, there is the issue of making a German contribution to solving the global challenges and, in countries where water represents a potential for conflict between competing interests, of contributing to a preventive foreign policy. The expertise, qualifications and skills for the sought-after technologies and services are available.

The BLUE PLANET Berlin Water Dialogues provide a policy-oriented platform for the broad international networking required and for intensifying the dialogue between political and economic fields. Both for the experts and the decision-makers of major water users from industry, large cities and agriculture and also for the decision-makers of foreign and economic policy, the events of the BLUE PLANET Berlin Water Dialogues are an appropriate forum for discussing specific options for and solutions to the worldwide challenges of global water management. They are a platform with a broad international impact – also, and above all, for presenting and marketing the German water industry's expertise.



STRONG OBJECTIVES, CONSISTENT IMPLEMENTATION

Since BLUE PLANET Berlin Water Dialogues were launched in 2011, the platform has evolved and adapted in its orientation to both the issues and needs of the target groups and to the changed global water markets.



BLUE PLANET Berlin Water Dialogues see themselves in the long term as the leading political forum of the water industry in Germany. This is typified by the internationality of the participants from governments, non-governmental organizations, research and science, by the participation of the decision-makers of international water users from industry, energy and agriculture and also from the major cities, and by the benefits associated with Berlin as a location of trade fairs and as an internationally acknowledged site of expertise in the water sector.



INTERNATIONAL – PLATFORM AND MOTIVATOR

BLUE PLANET Berlin Water Dialogues are a platform and motivator for exchanging potential solutions to improving the global water situation. The various event formats closely link the water industry with major water users. On the one hand this is achieved by including them in the major Berlin trade fairs (e.g. WASSER BERLIN INTERNATIONAL, Internationale Grüne Woche Berlin) or international conferences (e.g. Asia-Pacific Weeks Berlin), on the other hand formats such as direct dialogue, lecture series/panel discussions, round table meetings or workshops provide attractive opportunities for a direct exchange of ideas and opinions. The platform provides users with easy access to the topic by simultaneously presenting new solutions from water management, technology, operation, capacity development and financing.



INTEGRATIVE – WATER SECURITY AND FOOD SECURITY

BLUE PLANET Berlin Water Dialogues make a contribution to networking water security and food security. The nexus idea of linking water and food security is just one of the many topics offered at the BLUE PLANET Berlin Water Dialogues, the aim of this approach being to supplement the content/topics dealt with by well-known major water events. It follows therefore that the fulfilment of tasks in agriculture is closely linked to the use of water. Inclusion in the appropriate Berlin trade fairs and conferences (e.g. Global Forum for Food and Agriculture, GFFA) has proven successful for dealing with relevant issues. Partnerships and collaborations in the agricultural sector are set up within the framework of events aimed at broader networking of the platform.





INNOVATIVE – EXPORT OF GERMAN EXPERTISE

BLUE PLANET Berlin Water Dialogues provide the forum for promoting the export of German expertise worldwide. The fast growing international water markets offer huge opportunities for engineering companies, manufacturers, operators, research and science – the need for investment is huge. The platform, which also places emphasis on introducing and discussing novel, innovative measures and “fresh” projects as part of its events, facilitates the presentation and positioning of German expertise in these markets. The “Innovative Strength of Start-ups in the International Water Sector” and the “Design of the City of the Future” are examples of such forward-looking themes. Carefully considered integration of the various event formats into the Berlin trade fairs and conferences offered also plays an important role.



INTERNATIONAL – COLLABORATION AND PARTNERSHIPS

BLUE PLANET Berlin Water Dialogues see themselves as a platform for promoting collaboration and partnerships. Collaborations and partnerships between the energy, agriculture and industrial production sectors and with the fields of politics, administration and research are indispensable for achieving broad international networking and for exerting a far-reaching effect. Stable relationships such as these form a good basis for working on and exchanging options for solutions. The linking of water, energy and food security is a key issue in the Agenda 2030 and therefore belongs firmly on the program schedule of the BLUE PLANET Berlin Water Dialogues. The event formats that have proven successful include workshops and round-table discussions.

HOST CITY BERLIN

All events of the BLUE PLANET Berlin Water Dialogues take place regularly and exclusively in Berlin and – depending on the event format – are incorporated in relevant leading Berlin trade fairs or international conferences. Berlin as the host city combines the strengths of the capital, as the seat of government and with its close contacts to domestic and foreign decision-makers from politics and the water industry, with the advantages of Berlin as an internationally acknowledged location for trade fairs and expertise.





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Further information about the
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is available from:

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German Water
Partnership