

تحت رعاية سمو الشيخ خالد بن محمد بن زايد آل نهيان ولي عهد أبوظبي رئيس المجلس التنفيذي لإمارة أبوظبي
UNDER THE PATRONAGE OF HIS HIGHNESS SHEIKH KHALED BIN MOHAMED BIN ZAYED AL NAHYAN CROWN PRINCE OF ABU DHABI AND CHAIRMAN OF THE ABU DHABI EXECUTIVE COUNCIL



World Utilities Congress



16 - 18 SEPTEMBER 2024 | ABU DHABI, UNITED ARAB EMIRATES

TECHNICAL CONFERENCE BROCHURE

Supported By



Co-located with



Exclusive Cooling Partner



Clean Energy Partner



Strategic Conference Headline Sponsor



Quality Strategic Partner



Meeting Suite Sponsor



Silver Sponsor



Associate Sponsors



Global B2B Meetings Partner



Strategic Insights Partner



Knowledge Partners



Official English News Partner



Official Radio Partner



Host City



Destination Partner



Venue Partner



Brought To You By



ABOUT WORLD UTILITIES CONGRESS

In a world where electricity and water play critical roles, the power and water utilities industry faces numerous significant challenges. As we navigate the complexities of a rapidly changing landscape, it is essential to confront these obstacles directly and pave the way towards a resilient and sustainable future.

The World Utilities Congress, taking place in Abu Dhabi from 16 - 18 September 2024, serves as an unrivalled platform that brings together global energy leaders, policymakers, innovators and

industry professionals from across the power & water utilities value chain to discuss the major trends and challenges shaping the industry as utilities worldwide work to deliver on paths to a sustainable and resilient tomorrow.

The exhibition and congress will provide a vital platform for the sector to engage in discussions about the role and pace of decarbonisation in the utility industry's future. It will also showcase the latest innovations and solutions aimed at establishing a sustainable utilities sector.



WORLD UTILITIES CONGRESS 2024 IN NUMBERS



12,000+

UTILITIES PROFESSIONALS



90+

PARTICIPATING COUNTRIES



180+

GLOBAL EXHIBITORS



280+

EXPERT SPEAKERS



110+

CONFERENCE SESSIONS



1,400+

CONFERENCE DELEGATES

CONFERENCES OVERVIEW

The conferences at World Utilities Congress foster the strategic insights and technical expertise needed for power and water utilities to deliver the low-carbon systems of tomorrow. Across 3 days, the conferences will convene Ministers, CEOs, academics, and industry influencers to address the critical challenges and discuss the possibilities and opportunities for a net-zero utilities sector of the future.



STRATEGIC CONFERENCE

From the big questions to practical challenges, gain unparalleled insights and applied intelligence from 100+ international speakers from government, IGOs, utilities, academia, and industry on navigating the evolving energy landscape.



LEADERSHIP ROUNDTABLES

Anchored within the World Utilities Congress, the invitation-only Leadership Roundtables gather stakeholders - from Ministers and policymakers to CEOs and scientists - to collectively address the challenges and explore solutions that can shape the future of the utilities sector.



TECHNICAL CONFERENCE

The Technical Conference offers utilities professionals access to the latest industry knowledge and research findings, technical expertise, new project developments, and industry best practices required to ensure future operational and technical resilience in the industry.



ABOUT THE TECHNICAL CONFERENCE

Energy transition and digital transformation are the key drivers in the water and power sector, shaping the future of the industry, highlighting a clear direction for success and opening doors to new industry players.

The Technical Conference offers utilities industry professionals unprecedented access to the latest industry knowledge and research findings, technical expertise, new project developments, state of the art technologies and industry best practices.

Spanning the entire power and water value chain, the World Utilities Congress 2024 Technical Conference has been created after a thorough two-stage review by the Technical Committee, comprising 53 industry specialists. The conference features 100 industry experts speaking at 24 sessions across three days and covers power generation, transmission and distribution, water management, water sewage, district cooling and customer engagement.

Do not miss this unrivalled opportunity to meet face-to-face with your existing and new clients, learn the latest technology trends and developments and identify new market opportunities within the power and water industry.

TECHNICAL CONFERENCE IN NUMBERS

 **391**
ABSTRACTS
SUBMITTED

 **12**
TECHNICAL
CATEGORIES

 **53**
TECHNICAL
COMMITTEE
MEMBERS

 **3,245**
ABSTRACT
REVIEWS

 **24**
TECHNICAL
SESSIONS

 **100**
TECHNICAL
SPEAKERS

 **45**
COUNTRIES
REPRESENTED

 **3**
DAYS OF NETWORKING
AND KNOWLEDGE
EXCHANGE

GAIN CPD ACCREDITATION

The World Utilities Congress Technical Conference has been accredited by the CPD Certification Service, which provides recognised independent accreditation compatible with global requirements for energy professionals. Additional benefits include:

- Engaging in Continuing Professional Development ensures that your professional qualifications do not become outdated or obsolete
- Earning CPD points allows you to 'up skill' or 're-skill' yourself, thereby complementing your career aspirations. CPD accredited programs, such as the World Utilities Congress Technical Conference, enable you to identify knowledge gaps and gain insights into the latest developments, showing a clear commitment to self-development and professionalism
- Receive your CPD accreditation certificate after the World Utilities Congress Technical Conference
- 1 CPD point is equivalent to 1 CPD hour. Each 30-minute session counts as 0.5 CPD hour (12.5 hours max can be claimed)



A WORD FROM THE TECHNICAL COMMITTEE CHAIRMAN



“ It gives me great pleasure to chair the 2024 Technical Committee for the World Utilities Congress and contribute to shaping the technical sessions that will support the industry’s energy transition.

The Technical Conference focuses on discussing both the obstacles and prospects within the utilities sector, emphasising innovative approaches to transition towards cleaner and more sustainable energy solutions. ”

DR AFIF SAIF AL YAFEI

CEO

ABU DHABI TRANSMISSION AND
DESPATCH COMPANY (TRANSCO)

BOOK YOUR TECHNICAL CONFERENCE PASS

☎ +971 4 438 0355

✉ delegate@worldutilitiescongress.com

🌐 www.worldutilitiescongress.com/confreg

TECHNICAL COMMITTEE MEMBERS



Dr. Afif Saif Al Yafei
CEO
Abu Dhabi Transmission
and Despatch Company
(TRANSCO)
CHAIRMAN



Hebah Abbas
Chairwoman
Kuwait Water
Association



Dr. Yacine Addad
Associate Professor
Nuclear Engineering &
Chairman
Khalifa University



Dr. Corrado Sommariva
CEO
Sustainable Water &
Power Consultants
(SWPC)



Randheer Singh
Founder and CEO
ForeSee Advisors



Eng. Doreb Ebrahim
CEO
Enertech Middleast FZ
LLC



Simon Bartmann
Founder & Co-CEO
Bullfinch Asset AG



Aftab Raza
CEO
FynValue Inc



Ferdinand Varga
Managing Director &
Senior Partner
Boston Consulting Group
(BCG)



Imteyaz Ahmad
Managing Director -
Power and Water
Future Water and Power
Consulting (FWPC)



Khalid Oumejjoud
Managing Director
PSM Thomassen Gulf



Suleiman Turki
Chief Strategy &
Development Officer
Company
Saudi Water Partnership
Company, KSA



Antonio Di Cecca
Chief Operating Officer
Tabreed



Daxita Rajcoomar
Chief Sustainability
Officer
ENGIE



Moinak Banerjee
Co-founder and Head of
Products
Solinas Integrity Pvt Ltd



Thomas Altmann
Executive Vice President,
Innovation & New
Technology
ACWA Power



Giampietro Sanna
Senior Director – Digital
Transformation Solutions
INJAZAT



Peter Elder
Vice-President and Chief
Science Officer
Canadian Nuclear Safety
Commission



Secil Torun
Vice President -
Engineering and
Technical Project
Management
ENGIE



Sabooh Asghar
Vice President - HSEQ
National Central Cooling
Company (Tabreed)



Maarten Ter Keurst
Managing Partner
Natural Ventures



**Katarina Uherova
Hasbani**
Partner and Global
Director of Strategy and
Advisor
AESG



Serge Braz
Business Development
ME
EDF



Anes Dallagi
Abu Dhabi Manager
Power System &
Transmission Engineering
EDF CIST



Chris Larsen
Senior Director - Clean
Energy
Dynapower



Nada Abubakr
Middle East Lead – Global
Water Practice
Ricardo PLC



Dr. Amber Bullen
Technical Director –
Wastewater, Engineering
Services
AtkinsRéalis



Cedric Carretero
Technical Director
Dalkia Middle East



Julio De La Rosa Jurado
Regional Director
Acciona



Imad Saket
Director, Engineering
and Construction, MEA
& APAC
Jinko Power (HK)
Company Limited

TECHNICAL COMMITTEE MEMBERS



Dr. Mohamed Dawoud
Advisor for Water Resources, Environment Quality
Abu Dhabi Environment Agency



Biren Gandhi
Global Energy and Utilities Practice Leader
IBM Consulting



Dr. Satish Balantrapu
Principal Consultant
Infosys



Siddharth Saboo
Energy Lead, EMEA
AWS



Ian Rodgers
Solutions Architect
Xylem Inc



Anousha Khan
Energy Sustainability Consultant
Insight Plum



Joseph Elbasha
Water and Waste Water Segment Consultant, MEA
Schneider Electric



Rui De Sousa
Principal, Industry & Value Advisor, Middle East & Africa South
SAP



Mohamed Sayed Taha
Projects & Technical Consulting Manager
Enppi



Antonio Valentin Diaz
Head of Project Delivery
EDF Renewables Middle East



Christopher Sagar
Head of Middle East Nuclear & Net Zero Energy
WS Atkins & Partners Overseas - Abu Dhabi Branch



Khaled Gamal
Head of Sales, Digital Grid, MEA
Schneider Electric



Ismail Serhan
Head of Heat Exchanger Business MEA
Danfoss



Malik Benameur
Head of Energy & Smart Solutions
Dalkia Middle East



Hervé de Trémiolles
International Development Manager
EDF/CSFN



Nathan Paterson
Senior Programme Lead – Supply Chain
World Nuclear Association



Buket Guner
Investment Manager
EDF, UAE



Milton Dasgupta
Project Manager - Middle East & Asia
Wärtsilä Energy



Lina Hijazi
Proposal Manager
Masdar



Ines Dassonville
District Cooling Manager
Dalkia Middle East



Veronique Verrier
Data Scientist & Project Manager
ENEDIS



Giriraj Rathore
General Manager – Europe, Middle East and Asia
Wärtsilä Energy



Dr. Bouhadjar Ahemed Seddik
Electrical Engineering Lead
Siemens Energy

WHY SHOULD YOU ATTEND?

GROW PROFESSIONALLY



by learning industry best practices, technological innovations and research findings and staying up to date with the latest power and water industry developments

GAIN A COMPETITIVE ADVANTAGE



by learning first-hand about the business needs of your current and potential clients

IDENTIFY NEW MARKET OPPORTUNITIES



by learning how other businesses are operating, tackling industry-specific challenges and creating resilience

NETWORK FACE-TO-FACE



and discuss how you might collaborate and work together in the future with key project owners and decision-makers from the entire power and water value chain to achieve net-zero goals



12 TECHNICAL CATEGORIES



Power generation



Alternative fuels



Water desalination



Water management, supply & distribution network



Wastewater recycling, reusing & reclaiming



District cooling



Digital transformation



Energy transition decarbonisation ESG & sustainability



Power transmission, distribution & storage



Smart cities & communities



























Health, safety & security across the utilities industry



Operational excellence & workforce development

TECHNICAL SESSIONS AT A GLANCE

	TIME	SESSION	CAPITAL SUITE 8	SESSION	CAPITAL SUITE 9
MONDAY 16 SEPTEMBER	10:00-11:30	1	 Smart grids - enhancing resilience and efficiency	2	 Exploring new energy systems
	11:30-13:10	3	 Advancements in power generation R&D	4	 Advances in desalination and water treatment strategies
	14:00-15:40	5	 Building sustainable smart communities and intelligent infrastructure	6	 Hydrogen production and infrastructure: from innovation to implementation
	15:00-17:20	7	 Empowering utilities through AI, data analytics, and emerging technologies	8	 Enhancing asset performance and management
TUESDAY 17 SEPTEMBER	10:00-11:40	9	 Unlocking the potential of energy storage and EMS	10	 Pathways for decarbonisation
	11:40-13:10	11	 Unveiling the power of digital twins, IoT, and connected performance	12	 Utilisation of hydrogen for power gen and automotive
	14:00-15:40	13	 Water treatment and resource management	14	 Modernisation strategies and innovations in power systems
	15:40 - 17:00	15	 Operational excellence 4.0	16	 Integrated safety culture
WEDNESDAY 18 SEPTEMBER	10:00-11:30	17	 Advancing transmission and distribution networks	18	 Sustainable solutions for wastewater management and resource recovery
	11:30-13:10	19	 Balancing compliance, innovation and securing critical infrastructure	20	 Grid integration and demand side management strategies
	14:00-15:40	21	 Maximising energy efficiency and innovations in cooling systems	22	 Workforce of the future
	15:40-17:20	23	 Innovations powering the energy sector	24	 Enabling a sustainable energy transition

 Capital Suite 8

 Capital Suite 9

SESSION 1



SMART GRIDS - ENHANCING RESILIENCE AND EFFICIENCY

CHAIRS

Eng. Doreb Ebrahim
CEO
Enertech Middleast FZ LLC

Rui De Sousa
Principal, Industry & Value Advisor,
Middle East & Africa South
SAP

PRESENTATIONS

10:00-10:20 **Optimising approaches to grid balancing under varying output of large scale photovoltaic plants**

Harry Apostoleris
Researcher
DEWA R&D, United Arab Emirates

10:20-10:40 **Voltage regulating distribution transformers as the new standard in public grids for economically integrating renewable energy and new loads at distribution level**

Waqas Hussain
Business Development Manager
Maschinenfabrik Reinhausen, United Arab Emirates

10:40-11:00 **An AMI solution developed and operated by a DSO, to unlock the full potential of smart meters**

Fabian Nilsson
Commercial Director
EDF IN, France

11:00-11:20 **Advancing grid stability and efficiency: An extensive examination of the Volt-VAR Management System (VVMS)**

Ayşegül Kutlay
Vice President
inavitas, Turkey

SESSION 2



EXPLORING NEW ENERGY SYSTEMS

CHAIRS

Dr. Corrado Sommariva
CEO
Sustainable Water and Power Consultants (SWPC)

Malik Benameur
Head of Energy & Smart Solutions
Dalkia Middle East, Saudi Arabia

PRESENTATIONS

10:00-10:20 **Beyond surface: exploring KSA's geothermal opportunities and challenges**

Mohamed A Alemam
Manager, Business Development
EDF, Saudi Arabia

10:20-10:40 **PV recycling and solar waste management in Dubai**

Krishiv Gandhi
Researcher - Energy Systems
DEWA, United Arab Emirates

10:40-11:00 **Evaluating grid technologies for utility net-zero**

Abhishek Kar
Head- Strategy & Sustainability
Siemens, United Arab Emirates

11:00-11:20 **The H2 battery by water stuff & sun paving the way for a quantum leap in the hydrogen eco-system**

Lukas Kalt
Head of Development
Water stuff & sun GmbH, Germany

 Capital Suite 8

 Capital Suite 9

SESSION 3



ADVANCEMENTS IN POWER GENERATION R&D

CHAIRS

Dr. Yacine Addad
Deputy Director
Emirates Nuclear Technology Center
Associate Professor, Mechanical & Nuclear Engineering
Khalifa University

Milton Dasgupta
Project Manager - Energy Business
Wartsila

PRESENTATIONS

11:30-11:50 **Hybrid machine learning forecasting for grid-connected solar power plant**

Ameera Almarzooqi
Power Protection Engineer
TRANSCO, United Arab Emirates

11:50-12:10 **Deposits in steam turbines and GT's compressors – unwanted expensive factor. Full restoration of steam and gas turbines efficiency by removing deposits with deep chemical foam cleaning**

Wojciech Majka
CEO, President of the Board
Ecol Sp. z o.o., Poland

12:10-12:30 **Integrating multiple renewable energy sources with machine learning and deep learning for enhanced efficiency and profitability**

Kevin Williams
Co-Founder and CEO
K.M. Williams and Associates LLC, India

12:30-12:50 **Path of construction of light water reactor based nuclear power plant in india – a case study**

R S Prasad
General Manager
ENGINEERS INDIA LTD, India

12:50-13:10 **Nuclear power plant lifetime extension : using R&D and digital twin to model reinforced concrete and evaluate mechanical phenomena**

Miquel Huguet Aguilera
Civil Engineering Project Manager
Egis, France

SESSION 4



ADVANCES IN DESALINATION AND WATER TREATMENT STRATEGIES

CHAIRS

Nada Abubakr
Middle East Director - Global Water Practice
Ricardo PLC

Dr Mohamed A. Dawoud
Senior Water Advisor
Environment Agency – Abu Dhabi

PRESENTATIONS

11:30-11:50 **BFP filtration - a replacement for chlorination/dechlorination in RO pre-treatment**

Martin Stahl
Area Manager
E+B Umwelttechnik GmbH, United Arab Emirates

11:50-12:10 **Navigating the technology shift from thermal desalination to reverse osmosis to decarbonise the water sector while ensuring the security of supply in UAE**

Asim Khan
Water Production Planning Lead
EWEK, United Arab Emirates

12:10-12:30 **Decoupling of water production and electricity generation from GDP and population in the Gulf Cooperation Council (GCC) countries**

Dr. Shayma AlBannay
Grid Sustainability Section Manager
ADDC, United Arab Emirates

12:30-12:50 **Alternative sustainable water resources for district cooling plants**

Husam Al Smadi
General Manager
Cooltech Gulf, Tabreed, United Arab Emirates

 Capital Suite 8

 Capital Suite 9

SESSION 5



BUILDING SUSTAINABLE SMART COMMUNITIES AND INTELLIGENT INFRASTRUCTURE

CHAIRS

Randheer Singh
 Founder & CEO
ForeSee Advisors

Lina Hijazi
 Proposal Manager
Masdar

PRESENTATIONS

14:00-14:20 **Transforming industrial cities into smart hubs: a case study of modon's smart industrial cities program**

Mohammed Eldaly
 Head of Business Innovation
Giza Systems, Saudi Arabia

14:20-14:40 **Strategic vision for electric vehicle infrastructure in a fast-changing landscape**

Maher Aboujaoude
 Tech Lead of Innovative Analytics
ENEDIS, France

14:40-15:00 **The road not taken? the role of behaviour in the energy transition**

Dr. Malek Al-Chalabi
 Continuing Member
University of Oxford, United Kingdom

15:00-15:20 **Transformative innovations in sanitary waste management: the promise of sanitary waste recycling destruction technology (SWRDT)**

Iram Maimuna
 CEO
E Waste Social Pvt Ltd, India

15:20-15:40 **Evaluating the role of grid interactive buildings for clean energy transition from energy trilemma perspective**

Dr. Satish Balantrapu
 Principal Consultant, SUREDCG
Infosys, India

SESSION 6



HYDROGEN PRODUCTION AND INFRASTRUCTURE: FROM INNOVATION TO IMPLEMENTATION

CHAIRS

Secil Torun
 Vice President - Engineering and Technical Project Management
ENGIE

Khalid Oumejjoud
 Managing Director
PSM Thomassen Gulf LLC

PRESENTATIONS

14:00-14:20 **Assessing the financial viability of green hydrogen projects in the GCC**

David Robertson
 Vice President Solutions EMEA
Energy Exemplar, United Arab Emirates

14:20-14:40 **Ansaldo green tech's contribution to energy transition: a comprehensive look at AEM electrolyzer technology deployment**

Luca Rofi
 Hydrogen Program Manager
Ansaldo Green Tech, Italy

14:40-15:00 **Hydrogen storage using LOHCs systems**

Mohamed Nasser
 Senior Chemist
ETHYDCO, Egypt

15:00-15:20 **Re-evaluating economics and performance metrics in the context of circular business models and decarbonisation endeavours**

Cornelia-Oana Toropoc
 Senior Advisor Economics MEA
OMV, Australia

SESSION 7



EMPOWERING UTILITIES THROUGH AI, DATA ANALYTICS, AND EMERGING TECHNOLOGIES

CHAIRS

Dr. Yacine Addad
Deputy Director
Emirates Nuclear Technology Center
Associate Professor, Mechanical & Nuclear Engineering
Khalifa University

Siddharth Saboo
Energy Lead, EMEA
AWS

PRESENTATIONS

15:40-16:00 **A decade of digital transformation from electro-centric to data-centric distribution company**

Véronique Verrier
Project Manager
ENEDIS, France

16:00-16:20 **Optimising gas storage portfolios via deep reinforcement learning**

Alex Gardner
Senior Risk Quantification Specialist
Emirates Water and Electricity Company (EWEC), United Arab Emirates

16:20-16:40 **Leveraging artificial intelligence for industrial process design optimisation in power generation and green e-fuel synthesis**

Islam Haji Process
Digital Control Systems & Commissioning
Department Lead
Electricité de France (EDF), France

16:40-17:00 **Tackling OT cyber threats in the era of generative AI**

Tahir Saleem
Sr. Specialist - OT Security
IBM, United Arab Emirates

17:00 - 17:20 **Deployment of Augmented Reality & Virtual Reality technologies for engineering use cases within Egis**

Wissam Jarmak
Associate Director - Infrastructure
Egis, France

SESSION 8



ENHANCING ASSET PERFORMANCE AND MANAGEMENT

CHAIR

Ian Rodgers
Product Manager Assessment Services -
Digital Solutions
Xylem Inc

Katarina Uherova Hasbani
Partner and Global Director of Strategy and Advisory
AESG

PRESENTATIONS

15:40-16:00 **Determination of asset useful life and efficient maintenance decision making for better asset performance management**

Balasubramanian Nainar
Specialist / Operation Technology
Transco, United Arab Emirates

16:00-16:20 **A DSO-oriented tool for optimised network planning**

Pierre Achaichia
Communication Systems and Networks Engineer
ENEDIS, France

16:20-16:40 **Cable differential protection scheme for 11/22/33kV cable feeders by using one differential relay (instead of 2 relays) with the help of CT merging unit only at the remote**

Sajid Ahmed Mohamed Abdul Kader
Senior Studies and Protection Engineer
ADDC, United Arab Emirates

16:40-17:00 **Transformation journey towards operational excellence and enhanced efficiency**

Atef Al Braiki
Senior Vice President – Operations and Maintenance
Tabreed, United Arab Emirates

 Capital Suite 8

 Capital Suite 9

SESSION 9



UNLOCKING THE POTENTIAL OF ENERGY STORAGE AND EMS

CHAIRS

Giriraj Rathore
General Manager – Europe, Middle East and Asia
Wärtsilä Energy

Simon Bartmann
Co-CEO
Bullfinch Asset AG

PRESENTATIONS

10:00-10:20 **Evaluating renewable energy - storage systems for green hydrogen production**

Israa Alshaer
Project Engineer
ILF Consulting Engineers, United Arab Emirates

10:20-10:40 **Potential and feasibility of large scale pumped storage in Middle East**

Thomas Pinchard
Senior Hydropower Specialist
EDF, France

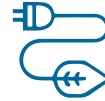
10:40-11:00 **Large scale energy storage using gaseous hydrogen**

Wietse ter Veld Green
Hydrogen Subject Matter Expert (ME)
AtkinsRéalis, United Arab Emirates

11:00-11:20 **Economically complying with grid codes for PV plants by enhancing inverter capability**

Waqas Hussain
Business Development Manager
Maschinenfabrik Reinhausen, United Arab Emirates

SESSION 10



PATHWAYS FOR DECARBONISATION

CHAIRS

Daxita Rajcoomar
Chief Sustainability Officer - Asia, Middle East, Africa
ENGIE

Antonio Valentin Diaz
Head of Project Delivery – Middle East
EDF Renewables Middle East

PRESENTATIONS

10:00-10:20 **An update on the role of gas-turbines in a net-zero energy system**

Cristopher Sagar
Chief Engineer
AtkinsRéalis, United Arab Emirates

10:20-10:40 **UAE net-zero pathway**

Omar Hatoum
Lead Energy Analyst
GE Vernova Consulting Services, United Arab Emirates

10:40-11:00 **Decarbonising existing gas turbine power generation infrastructure - combustion system retrofits for clean hydrogen utilisation and carbon footprint reduction**

Jeffrey Benoit
VP - Global Clean Energy Solutions
PSM - a Hanwha Company, United States

11:00-11:20 **Balancing plants with the power of green engines**

Jihad Aoun
Head of Sales, Africa
MAN Energy Solutions, Germany

11:20-11:40 **Long-duration energy storage & cloud energy management platform for empowering energy transition and energy cost optimisation**

Dr. Satish Balantrapu
Principal Consultant, SUREDCG
Infosys, India

 Capital Suite 8

 Capital Suite 9

SESSION 11



UNVEILING THE POWER OF DIGITAL TWINS, IOT, AND CONNECTED PERFORMANCE

CHAIRS

Ian Rodgers
General Manager – Europe, Middle East and Asia
Xylem Inc

Mohamed Sayed Taha
Projects & Technical Consulting Manager
Enppi

PRESENTATIONS

11:40-12:00 **Using edge analytics & digital twin to optimise pump system performance & efficiency**

Matt Rolls
Vice President Business Development
Specific Energy, United Kingdom

12:00-12:20 **Digital twin for the water industry: how an interoperable tool landscape paves the way for a sustainable future**

Bora Helvaci
Water Industry Development Manager
Siemens Industrial LLC, United Arab Emirate

12:20-12:40 **Digital twin & internet of things (IoT) application for connected performance in brownfield EPC projects**

Abdus Samad
Sr. Process Designer
NMDC Energy, United Arab Emirates

12:40-13:00 **A pioneer implementation of industrial internet of things**

Abdullah Abaoud
Digital Transformation Officer
Saudi Aramco, Saudi Arabia

13:00-13:10 **Automate quality and safety process in Marafiq through vintelligence digital platform**

Majdi Alharbi
Superintendent - Power Operation, Power Generation
Marafiq, Saudi Arabia

SESSION 12



UTILISATION OF HYDROGEN FOR POWER GEN AND AUTOMOTIVE

CHAIRS

Chris Larsen
Senior Director - Clean Energy
Dynapower

Christopher Sagar
Chief Engineer
Atkins

PRESENTATIONS

11:40-12:00 **Gas pipelines – the pathway to make hydrogen accessible and affordable**

Mohit Raj
Business Advisor - MD & CEO Office
Pipeline Infrastructure Limited, India

12:00-12:20 **100% hydrogen gas turbine full scale validation test outcomes and results**

Serena Gabriele
Turbomachinery Hydrogen Platform Manager
Baker Hughes, Italy




12:20-12:40 **The path to decarbonisation through re-electrification of green hydrogen: focus on green hydrogen production**

Daniel Schwappach
Head of Sustainable Energy Systems, Middle East & Africa
Siemens Energy, United Arab Emirates

12:40-13:00 **PtX products**

Grigorios Iatropoulos
Head of Business Development, MEA Region
MAN Energy Solutions, Germany

BOOK YOUR TECHNICAL CONFERENCE PASS

 +971 4 438 0355
 delegate@worldutilitiescongress.com
 worldutilitiescongress.com/confreg

SESSION 13



WATER TREATMENT AND RESOURCE MANAGEMENT

CHAIRS

- Dr. Amber Bullen**
Technical Director – Wastewater, Engineering Services
AtkinsRéalis
- Hebah Abbas**
Chairwoman
Kuwait Water Association

PRESENTATIONS

- 14:00-14:20 **Dynamic criticality assessment method for secure short-term operational plans in water systems**
Abdallah Elbashahtli
Water Operations - Planning Engineer
EWEC, United Arab Emirates
- 14:20-14:40 **Improving water security – insights from testing Australia’s town and city water security framework**
Huw Pohlner
Associate Director
Ricardo, Australia
- 14:40-15:00 **Strategic pipeline alliance (SPA)- transmission main - Anglian water UK - deliberately delivering differently**
Mark Jones
Chief Engineer
AtkinsRéalis, UK
- 15:00-15:20 **A strategic water reserve for emergency water supplies in Abu Dhabi**
Dr. Mohamed Dawoud
Senior Water Advisor
Environment Agency - Abu Dhabi, United Arab Emirates
- 15:20-15:40 **Enhanced integrated network planning (eINP): a strategic framework for optimising utility operations**
Omar Al Ameri
Manager, Water Network Development & Investment
TAQA Arabia - Power Group, United Arab Emirates

SESSION 14



MODERNISATION STRATEGIES AND INNOVATIONS IN POWER SYSTEMS

CHAIR

- Lina Hijazi**
Proposal Manager
Masdar
- Imteyaz Ahmad**
Managing Director – Power and Water
Future Water and Power Consulting (FWPC)

PRESENTATIONS

- 14:00-14:20 **Design criteria for the conventional power island of small modular reactors**
Marco Cioffi
Product Manager
Ansaldo Energia, Italy
- 14:20-14:40 **Research update on engineering and construction innovations**
Hasan Charkas
Senior Principal Manager (Advanced Reactors Engineering)
EPRI, United States
- 14:40-15:00 **Optimal design of hybrid solar power systems: a case study in the chinese industry**
Fabian Gross
R&D Lead
sbp sonne, Germany
- 15:00-15:20 **Development of a cloud-based fleet-wide settlement solution for SEC**
Josef Petek
Manager Commercial Operations
ENEXSA GmbH, Austria
- 15:20-15:40 **Leveraging IoT, AI/ML, and cloud technologies for accelerating global energy transition through virtual power plants and flexibility services platforms**
Siddharth Saboo
Head of Energy / O&G (EMEA)
Amazon Web Services, United Arab Emirates

 **Capital Suite 8**

 **Capital Suite 9**

SESSION 15

SESSION 16



OPERATIONAL EXCELLENCE 4.0



INTEGRATED SAFETY CULTURE

CHAIRS

CHAIRS

Hervé de Trémolles
International Development Manager
EDF / CSFN

Siddharth Saboo
Energy Lead, EMEA
AWS

Saboo Asghar
VP-HSEQ
Tabreed

Eng. Doreb Ebrahim
CEO
Enertech Middleast FZ LLC

PRESENTATIONS

PRESENTATIONS

15:40-16:00 **AI-driven transformation: shaping the future of operational excellence, workforce management, and cost efficiency**

Kevin Williams
Co-Founder and CEO
K.M. Williams and Associates LLC, India

15:40-16:00 **Perspectives for senior power & utilities leaders on the imperative to rapidly transform their management of critical operational risks**

Mathieu Leduc
Director
dss+, United Arab Emirates

16:00-16:20 **Smart maintenance of high voltage underground cables**

Sultan Al Katiri
Senior Cables Engineer
TRANSCO, United Arab Emirates

16:00-16:20 **Chemical free & environmentally friendly technique to eliminate the interference of dissolved oil from produced water chemical analysis**

Faisal Al Shehri
Technical Advisor
Saudi Aramco, Saudi Arabia

16:20-16:40 **Operational excellence - a path for sustainable and continuous refinement**

Praveen Ashokan
Manager - Global Fleet Management
ENGIE, United Arab Emirates

16:20-16:40 **Safety by design engineering of transformers with embracing new concepts in utility specifications**

Himanshu Shah
Application Engineer - Power Transformers & Renewables
Hitachi Energy India Ltd, India

16:40-17:00 **Enhancing production facilities productivity through Overall Equipment Effectiveness (OEE) approach**

Mohamed Hamdallah
Power Generation Manager
TAQA Arabia - Power Group, Egypt

16:40-17:00 **The future of civil defense: embracing AI responders for enhanced emergency management**

Khaled Al Atrash
Technical Operation Expert
Civil defence, United Arab Emirates

 Capital Suite 8

 Capital Suite 9

SESSION 17



ADVANCING TRANSMISSION AND DISTRIBUTION NETWORKS

CHAIR

Dr. Bouhadjar Ahemed Seddik
Electrical Engineering Lead
Siemens Energy

Imteyaz Ahmad
Managing Director – Power and Water
Future Water and Power Consulting (FWPC)

PRESENTATIONS

10:00-10:20 **Utilities require a paradigm shift in managing their supply chains for building the electricity grids for the energy transition**

Martin Hoegel
Partner & Director
Boston Consulting Group, United Kingdom

10:20-10:40 **Statnett’s initiative to implement digital substations in the Norwegian power grid**

Nargis Hurzuk
Technology Responsible Substation/ Project Manager- R&D and Innovation
STATNETT, Norway

10:40-11:00 **A proposed framework for lifecycle management of legacy substation protection and control systems: a case study of transmission substations in UAE**

Vinay Sardana
Senior Power System Engineer
TRANSCO, United Arab Emirates

11:00-11:20 **Technical feasibility and dynamic stability assessment of fully-islanded power networks for large-scale green hydrogen production**

Shahzaib Anjum
Power Systems Engineer
Blake Clough Consulting Middle East LLC-FZ
United Arab Emirates

11:20-11:40 **Automatic FLISR in decentralised ADMS systems**

Francisco Arroyo
Smart Grid Manager
Minsait, Spain

SESSION 18



SUSTAINABLE SOLUTIONS FOR WASTEWATER MANAGEMENT AND RESOURCE RECOVERY

CHAIRS

Hebah Abbas
Chairwoman
Kuwait Water Association

Julio De La Rosa Jurado
Regional Director
Acciona

PRESENTATIONS

10:00-10:20 **Carbon net-zero wastewater treatment**

Amber Bullen
Technical Director
AtkinsRéalis, UK

10:20-10:40 **Onunda technology converts bioresources into three valuable products: syngas, phosphorous-rich biochar, and nutrient-rich liquor**

Dr. James Meyer
Chief Technology Officer
Onunda, United Arab Emirates

10:40-11:00 **Water demand management based on water consumption data analysis in the emirate of Abu Dhabi**

Dr. Shayma AlBannay
Grid Sustainability Section Manager
ADDC, United Arab Emirates

11:00-11:20 **Knowledge, attitudes, skills, and aspirations of farmers in Abu Dhabi and western Australia on groundwater management: a comparison study**

Yusri Algaarbi
Senior Water Sustainability Engineer
ADDC, United Arab Emirates

 **Capital Suite 8**

 **Capital Suite 9**

SESSION 19



**BALANCING COMPLIANCE,
INNOVATION AND SECURING
CRITICAL INFRASTRUCTURE**

CHAIRS

Biren Gandhi

Global Energy and Utilities Practice Leader
IBM Consulting

Khaled Gamal

Head of Sales - Digital Grid, MEA
Schneider Electric

PRESENTATIONS

11:30-11:50 **Navigating the regulatory landscape: impact of cybersecurity regulations on the utility business**

Mohamed Fahmy

Cyber & Protective Security Section Manager
TRANSCO, United Arab Emirates

11:50-12:10 **Sustainable and smart water and power - reducing waste and CO2 in field maintenance**

Mehryar Entezari

Strategic Value Advisor
SAP, United Arab Emirates

12:10-12:30 **New cyber-attack, data security and OT/IT convergence challenges for transmission and distribution system operators (TSOs and DSOs)**

Florian Kolb

CCO & General Manager Energy
Intertrust technologies, United States

12:30-12:50 **Autonomous flying robots for sewer digitalisation**

Fran Espada

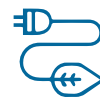
CEO
Hovering Solutions, Spain

12:50-13:10 **Powering energy transition: securing OT transformation in power and utilities through cloud enabled edge computing and network modernisation**

Deependra Singh Shekhawat

Energy Industry Specialist
Amazon Web Services, Australia

SESSION 20



**GRID INTEGRATION AND DEMAND
SIDE MANAGEMENT STRATEGIES**

CHAIRS

Dr. Satish Balantrapu

Principal Consultant
Infosys

Anousha Khan

Energy Sustainability Consultant
Insight Plum

PRESENTATIONS

11:30-11:50 **Towards carbon-neutral cities: a framework for integrating building retrofitting, microclimate design, and progressive urban energy policies**

Hamsah Khalil

Climate Change and Sustainability Senior Manager
ESAC Group, United Arab Emirates

11:50-12:10 **Driving energy efficiency in Abu Dhabi's industrial sector: a journey towards decarbonisation through collaborative energy management**

Jonathan Churchman

Industrial energy and water efficiency lead
ADDC, United Arab Emirates

12:10-12:30 **Identification of major power interconnections to valorise untapped RES potential around Middle-East**

Nicolas Chamollet

Power System and Energy Markets Expert
Electricité de France (EDF), France


12:30-12:50 **Empowering rural Kenya? navigating the future of PAYGo solar systems and IoT integration for sustainable development**

Laura Hellqvist

Doctoral Student SOAS
University of London, United Arab Emirates

BOOK YOUR TECHNICAL CONFERENCE PASS

 +971 4 438 0355

 delegate@worldutilitiescongress.com

 worldutilitiescongress.com/confreg

SESSION 21



MAXIMISING ENERGY EFFICIENCY AND INNOVATIONS IN COOLING SYSTEMS

CHAIRS

Antonio Di Cecca
Chief Operating Officer
Tabreed

Cedric Carretero
Technical Director
Dalkia

PRESENTATIONS

14:00-14:20 **Smarter pricing unlocks customer & system benefits**

Jodi Amy
Director - Energy, Sustainability & Infrastructure
Guidehouse, United Arab Emirates

14:20-14:40 **Enhancing efficiency and operational excellence in district cooling systems: performance measurement and optimisation strategies**

Marc Hager
CTO
Nautilus GmbH, Germany

14:40-15:00 **Phase changing material (PCM) application in cooling related energy saving & energy efficiency**

Balazs Kovacs
International Sales
Heatventors, Hungary

15:00 - 15:20 **District cooling: the optimal solution for the progress of sustainable communities**

Atef Al Braiki
Senior Vice President – Operations and Maintenance
Tabreed, United Arab Emirates

SESSION 22



WORKFORCE OF THE FUTURE

CHAIRS

Biren Gandhi
Global Energy and Utilities Practice Leader
IBM Consulting

Rui De Sousa
Principal, Industry & Value Advisor,
Middle East & Africa South
SAP

PRESENTATIONS

14:00-14:20 **Digital asset management - cultural shift required to maximise impact**

Ramez Haddadin
Principal – Operational Excellence Leader
dss+, United Arab Emirates

14:20-14:40 **Empowering workforce for operational excellence: cultivating communication, engagement, and growth for streamlined success in business expansion**

Rubab Irshad,
Operations Engineer
Engro Powergen Qadirpur Ltd, Pakistan

14:40-15:00 **The tailor-made transition and handover process: enhancing organisational agility**

Ankit Bisht
Engineer
Emaar, United Arab Emirates

15:00-15:20 **Assessment of the African network of centers of excellence in electricity**

Alexis Rechain
Managing Director
Stratec Arc, Cote d'Ivoire

15:20-15:40 **Enhancing Operational Excellence and Workforce Management through AI-Driven Labor Management**

Kevin Williams
Co-Founder and CEO
K.M. Williams and Associates LLC, India

SESSION 23



INNOVATIONS POWERING THE ENERGY SECTOR

CHAIR

Peter Ondko
Associate Director
Boston Consulting Group (BCG)

Buket Guner
Investment Manager
EDF, UAE

PRESENTATIONS

15:40-16:00 **Revolutionising power generation: harnessing the winds of change with innovative turbine technology**

Aafaque Bhatti
AM Operations
Engro Powergen Qadirpur Ltd, Pakistan

16:00-16:20 **Bespoke Solution For Treatment, Conditioning And Handling Of Radioactive Wast**

Francesca Maggini
Technical Sales Manager, Business Development & Sales
Ansaldo Nucleare, Italy

16:20-16:40 **Energy storage valuation framework: to be utilised before adoption of storage for grid**

Avanthika Satheesh
Director - Emerging Tech MENA
Customized Energy Solution, United Arab Emirates

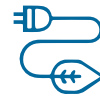
16:40-17:00 **A novel prototype of water lifting pump to save energy and improve efficiency of power utilisation**

Mohammed Abdelhafez
Engineer
Atlas, Egypt

17:00-17:20 **Power plant intelligent controller (PIC)**

Rudy Skaff
Performance Optimisation Manager
Siemens Energy, United Arab Emirates

SESSION 24



ENABLING A SUSTAINABLE ENERGY TRANSITION

CHAIRS

Mohamed Sayed Taha
Projects & Technical Consulting Manager
Enppi

Ismail Serhan
Head of Heat Exchanger Business - MEA
Danfoss

PRESENTATIONS

15:40-16:00 **Carbon credit trading scheme and its applicability in energy intensive industries**

Geetali Kalita
Head-ESG
Numaligarh Refinery, India

16:00-16:20 **Exploring the role of transformers in the circular economy**

Mohamed Elfayoumy
Application Engineer
Hitachi Energy LLC, United Arab Emirates

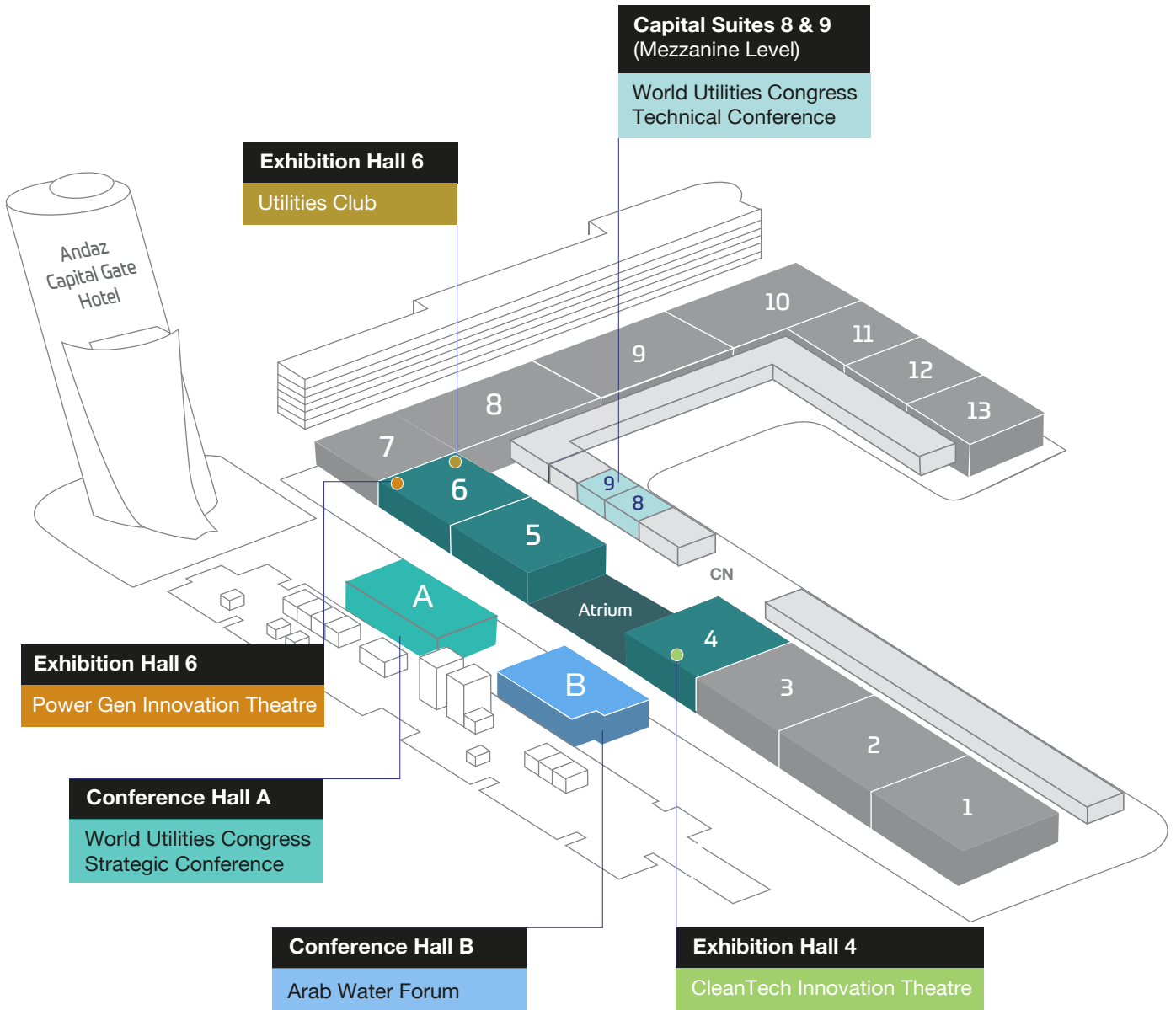
16:20-16:40 **Regulatory challenges, strategies and measures support implementation of utilities net-zero ambitions**

Alex Oeser
Vice President
TAQA, United Arab Emirates

16:40-17:00 **A comprehensive analysis of global energy transformation and its utility industry implications**

Manas Joshi
Manager
TATA Power-DDL, India

VENUE MAP



ADNEC CENTRE ABU DHABI, UAE

World Utilities Congress & Arab Water Forum Exhibition
Halls 4-6 and Atrium

Technical Conference
Capital Suites 8 and 9
(Mezzanine Level)

Utilities Club
Hall 6

World Utilities Congress Strategic Conference
Conference Hall A

Arab Water Forum
Conference Hall B

Power Gen Innovation Theatre
Hall 6

CleanTech Innovation Theatre
Hall 4

A SELECTION OF CONFIRMED EXHIBITORS INCLUDE:



GET INVOLVED TODAY:

FOR EXHIBITION STAND SPACE ENQUIRIES
sales@worldutilitiescongress.com

FOR SPONSORSHIP ENQUIRIES
sponsorship@worldutilitiescongress.com

FOR SPEAKER AND CONFERENCE DELEGATE ENQUIRIES
conferences@worldutilitiescongress.com

www.worldutilitiescongress.com

REGISTER TO ATTEND FOR FREE  worldutilitiescongress.com/register



World Utilities
Congress



16 - 18 SEPTEMBER 2024 | ABU DHABI, UNITED ARAB EMIRATES

REGISTER FOR YOUR TECHNICAL CONFERENCE PASS

+971 4 438 0355

delegate@worldutilitiescongress.com

www.worldutilitiescongress.com/confreg

Follow us on:

f @ X v in #worldutilitiescongress

Abu Dhabi

Yas Creative Hub, Yas Island Tower 4, Level 6, Office C40-L06-10, PO Box 769256, Abu Dhabi, UAE +971 2 444 4909

Dubai

3rd Floor, The Palladium Tower, Cluster C, Jumeirah Lake Towers, PO Box 33817, Dubai, UAE +971 4 438 0355

Brought To You By

dmg events