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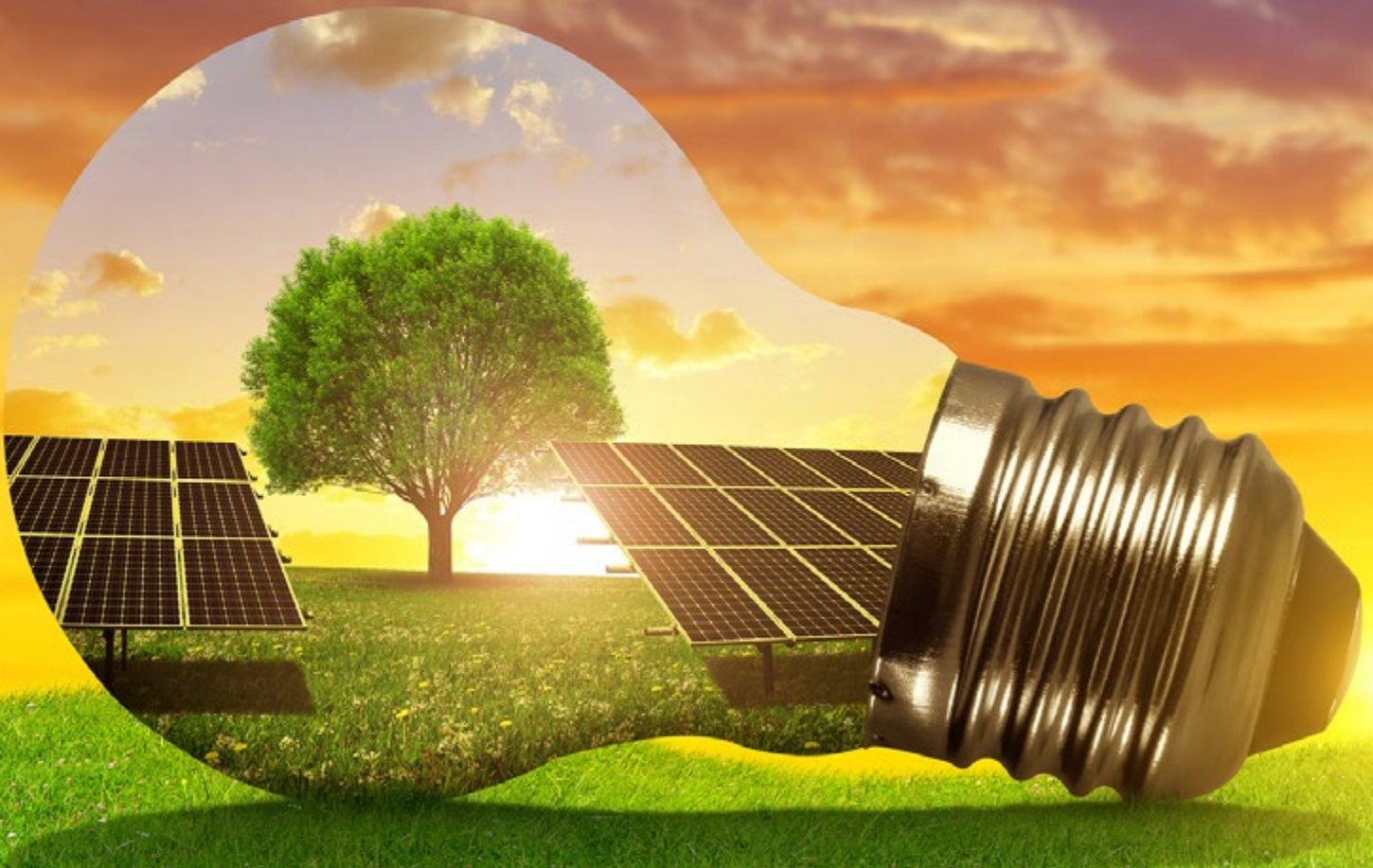


شركة معارض الرياض المحدودة
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Saudi Sustainable Energy and Technology Forum

29 April – 1 May 2019 | Riyadh, Kingdom of Saudi Arabia
Riyadh International Convention & Exhibition Center

Held concurrently with



Energy Storage, Energy Diversification, Project Financing and Technologies that are Catalyzing the Clean Energy Revolution

FORUM OVERVIEW

The Saudi SET Forum will be held concurrently with Saudi Elenex 2019 at the Riyadh International Convention & Exhibition Center (RICEC), Riyadh, Saudi Arabia

Showcasing state-of-the-art innovation in the dynamic field of power and energy, Saudi Elenex 2019 marks the 22nd edition of the International Show for Electricity, Alternative Energy, Water Technology, Lighting & HVAC in Saudi Arabia which is held concurrently with Saudi Aircon 2019. The International Show for Heating, Ventilation & Air Conditioning (HVAC) from 29 April to 01 May 2019.

The Sustainable Energy and Technology Forum will be held from 30 April to 01 May 2019. The Saudi SET Forum will also host an Exhibition Pavilion which will feature an exclusive platform enabling Alternative and Renewable Energy solution providers to showcase their products, for all three days from 29 April to 01 May 2019.

The Saudi Sustainable Energy and Technology Forum takes into account the current renewable energy landscape, bringing together senior stakeholders, policy makers, influencers and solution providers driving the renewable energy eco-system in the Kingdom.

The Kingdom of Saudi Arabia is transitioning from an oil-based economy and reducing their carbon footprint. This is a strategic objective of the Saudi Vision 2030 programme, a road map to achieving economic resilience.

The National Renewable Energy Program (NREP) is a strategic initiative under Vision 2030 and the King Salman Renewable Energy Initiative that aims to substantially increase the share of renewable energy capacity in the total energy mix within the Kingdom to 27.3 GW by 2024 and 58.7 GW by 2030. The program sets out a systematic and targeted road map to rapidly diversify the domestic power supply, catalyse economic development and support long-term prosperity in line with Vision 2030's goals which include creating a new renewable industry and support the build-up of this promising sector.

The engaging dialogues at the Saudi Sustainable Energy and Technology Forum will:



PROVIDE perspectives on energy sustainability strategies from across Middle East.



LEARN from different case studies presented on financing and business models.



ADDRESS challenges faced by the renewables sector.



IDENTIFY renewable energy investment opportunities in the Kingdom.



EVALUATE local funding instruments and opportunities for solar and energy storage projects.



FIND regional partners, business matchmaking through 1-1 business meetings.



WHY SAUDI ARABIA

- ▶ The Kingdom of Saudi Arabia aims to substantially increase the share of renewable energy in the total energy mix, 27.3 GW by 2024 and 58.7 GW by 2030.
- ▶ The Kingdom of Saudi Arabia recently awarded a 400-megawatt (MW) wind farm, following an award earlier in the year to build a 300-MW solar plant.
- ▶ The Kingdom of Saudi Arabia has announced plans to develop a \$2 billion solar and carbon black integrated complex in the heart of the Kingdom.
- ▶ The Kingdom of Saudi Arabia is fast moving away from fossil fuels, adopting renewable energy with the goal of generating at least 30% of its power from renewables by 2030.
- ▶ The Kingdom of Saudi Arabia recently announced round 2 of its renewable energy programme, by inviting expressions of interest for seven solar PV projects, with combined generation capacity of 1.51 GW worth an investment value of \$ 1.5 Billion
- ▶ The Kingdom of Saudi Arabia ranks 6th in the world for Solar Energy potential and 13th in the world for wind energy potential
- ▶ The Kingdom of Saudi Arabia boasts electricity generation figures of 330 B KWh per year
- ▶ Over 20 mega projects involving \$50 Billion worth of investments
- ▶ The water sector in the Kingdom of Saudi Arabia will see over \$50 Billion in investments by 2020

NOTABLE SESSIONS AT THE FORUM

- ✓ An Insight into the Saudi National Renewable Energy Programme
- ✓ The current sustainable energy regulatory and policy landscape
- ✓ Renewable Energy project financing
- ✓ The impact of the 4th Industrial Revolution on Sustainable Energy
- ✓ Emerging trends in Sustainable Energy in the Kingdom
- ✓ Advances and challenges in Energy Storage
- ✓ Applications for Blockchain in Energy



ATTENDEE PROFILE



Heads of
Government and State



Utilities and Power
Producers



Institutional Investors,
Project Financers and
Banks



Large Energy Users
and Real Estate
Developers



Legal, Risk and
Advisory Services



Renewable Energy
Project Developers



Engineering,
Procurement and
Construction (EPCs)



Start ups

By Function and Role

- Chief Operating Officer
- Chief Technical Officer
- General Manager
- Energy Manager
- Project Manager
- Operations Manager
- Municipal Manager
- Executive Director
- Head of Electricity
- Head of Energy
- Director - Energy Sector
- Deputy Director
- Chief Engineer
- Head of Strategy
- Head of Renewable Energy
- Head of Sustainability
- Head of Generation
- Head of Legal
- Head of Procurement
- Head of PPA

WHO WILL SPONSOR OR EXHIBIT

PV Cells & Modules

- Cells
- Modules
- Thin-Film

Operations & Maintenance

- Inspection
- Testing
- Certification
- Cleaning Equipment
- Condition Monitoring
- Drones
- IoT
- Repair Services
- Spare Parts
- Wireless Monitoring Solutions
- Tracking

EPC, Developers & Engineering Services

- EPCs
- Project Developers
- Planning, Permitting & Siting
- Installation & Turnkey Suppliers
- Technical Consultants
- Consulting Engineers
- Free-standing PV Installations

Solar thermal & water heating

Financial services, law firms & advisory

Distributors and resellers

Consulting engineers

PV Balance of Systems

- Inverters
- Monitoring, Measurement & Control Technology
- Energy Management
- Building Integrated Solutions (BIV)



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ADVISORY BOARD



Eng. Abdullah Al Subiae
General Director
Saudi Renewable Energy Association
Kingdom of Saudi Arabia



Dr. Pieter Smeets
Sr. Sustainability Engineer
SABIC
Kingdom of Saudi Arabia



SPEAKER PANEL



Amin Bin Mohammed Al-Shibani

Advisor to the Minister of Energy, Industry and Mineral Resources, General Supervisor of the National Renewable Energy Programme
Ministry of Energy, Industry and Mineral Resources, Kingdom of Saudi Arabia



Hisham Alfouzan

Energy Segment Director
**Saudi Arabian General Investment Authority
Kingdom of Saudi Arabia**



Dr. Ahmed Mohina

Undersecretary of State
**Ministry Of Electricity and Renewable Energy
Egypt**



Faisal Rashid

Director
Demand Side Management
**Dubai Supreme Council of Energy
UAE**



Eng. Mohammed Dabbas

Senior Advisor Arab Renewable Energy Commission, Executive Member of the
World Renewable Energy Council UK (WREC/ WREN), Jordan



Dr. Osamah Alsayegh

Executive Director
Energy & Building Research Center
**Kuwait Institute for Scientific Research
Kuwait**



Dr. Amin Al Yaquob

CEO
**GCC Association for Renewable Energy and Sustainability (Green Gulf)
Kingdom of Saudi Arabia**



Bruce Anderson

CEO
**247 Solar Inc.
United States of America**



Dr. Mani Sarathy

Associate Director
Clean Combustion Research Center
King Abdullah University of Science and Technology, Kingdom of Saudi Arabia



Dr. Juergen Braunstein

Fellow, Geopolitics of Energy Project
Belfer Center
**Harvard Kennedy School
United States of America**



Dr. Christian Kurz

Head of Data Analytics Department
**Meteocontrol
Germany**



Sylvain Cote

Senior Research Fellow
Energy & Macroeconomics
**KAPSARC
Kingdom of Saudi Arabia**



Abdullah Hassan Al-Khaldi

Manager
Business Development Department
**Saudi Industrial Development Fund
Kingdom Of Saudi Arabia**



Eng. Hani Balfass

Lab Manager
**Gulf Renewable Laboratory
Kingdom of Saudi Arabia**

SPEAKER PANEL



Robert Pfatischer
Managing Director
Meteocontrol
Germany



Dr. Muhammad Wakil Shahzad
Research Scientist
Water Desalination and Reuse Center
**King Abdullah University of Science and
Technology, Kingdom Of Saudi Arabia**



FORUM DAY-1

30th APRIL 2019

08:00 Registration & Networking

08:45 Inauguration by Chief Guest followed by Expo Tour

08:50 Welcome Note – White Paper Summits

09:00 Opening Speech by

Amin Bin Mohammed Al-Shibani, Advisor to the Minister of Energy, Industry and Mineral Resources,
General Supervisor of the National Renewable Energy Programme
Ministry of Energy, Industry and Mineral Resources, Kingdom of Saudi Arabia

SESSION 1: MIDDLE EAST ENERGY SECTOR OUTLOOK

09:20 Opportunities in the energy sector of the Kingdom of Saudi Arabia

Hisham Alfouzan, Energy Segment Director, SAGIA, Kingdom of Saudi Arabia

09:40 Egypt's strategy for sustainable development 2030 and Egypt's integrated sustainable energy strategy for 2035

Dr. Ahmed Mohina, Undersecretary of State
Ministry of Electricity and Renewable Energy, Egypt

10:00 Dubai's overall energy strategy 2030 and perspectives on demand side management

Faisal Rashid, Director, Demand Side Management
Dubai Supreme Council of Energy, United Arab Emirates

10:20 Coffee Break and Networking Session

11:00 An overview of the Kuwait national energy outlook

Dr. Osamah Alsayegh, Executive Director, Energy & Building Research Center
Kuwait Institute for Scientific Research, Kuwait

11:20 Development opportunities in the renewable energy sector for Jordan

Eng. Mohammed Dabbas, Senior Advisor Arab Renewable Energy Commission, Executive Member of the
World Renewable Energy Council UK (WREC/WREN), Jordan

SESSION 2: CORPORATE SUSTAINABILITY AND FINANCING

11:40 Renewable energy and corporate sustainability perspectives from SABIC

- Sustainability at SABIC
- Energy efficiency and CCU
- An insight into SABIC's renewable energy strategy

Dr. Pieter Smeets, Sr. Sustainability Engineer, SABIC, Kingdom of Saudi Arabia

FORUM DAY-1

30th APRIL 2019

12:00 Dhuhr Prayer and Networking Coffee Break

12:40 Financing programmes to enable Industrial Digital Transformation

Abdullah Hassan Al-Khaldi, Business Development Manager
Saudi Industrial Development Fund, Kingdom of Saudi Arabia

13:00 PANEL DISCUSSION: Assessing the impact of renewable energy in the Middle East



- Energy planning in the Middle East
- Current and future renewable energy policies
- Measures undertaken to bring down CO2 emissions and GHG

MODERATOR:

Dr. Amin Al Yaquob, CEO, GCC Association for Renewable Energy and Sustainability
Kingdom of Saudi Arabia

PANELISTS:

Faisal Rashid, Director, Demand Side Management
Dubai Supreme Council of Energy, United Arab Emirates

Eng. Mohammed Dabbas, Senior Advisor Arab Renewable Energy Commission, Executive Member of the
World Renewable Energy Council UK (WREC/WREN), Jordan

Dr. Osamah Alsayegh, Executive Director, Energy & Building Research Center
Kuwait Institute for Scientific Research, Kuwait

Hisham Alfouzan, Energy Segment Director, SAGIA, Kingdom of Saudi Arabia

13:40 Awards and Recognition

13:45 Closing remarks by the Forum Chairperson

13:50 Lunch and Networking Session

End of Forum Day 1

FORUM DAY-2

1st MAY 2019

08:00 Registration & Networking

08:50 Opening Remarks by White Paper Summits

SESSION 3: THE CLEAN ENERGY TRANSITION

09:00 **Low carbon fuels; A sustainable energy source**

- Reduced co2 and greenhouse gas emissions by utilising clean fuels
- Low carbon fuels for clean electricity generation
- Decarbonising the transportation sector and reduced environmental impact

Dr. Mani Sarathy, Associate Director, Clean Combustion Research Center
King Abdullah University of Science and Technology, Kingdom of Saudi Arabia

09:20 **Mass produced, cost-competitive 247Solar Plants™**
“...a dream come true for the 21st century”

Bruce Anderson, CEO, 247 Solar Inc., United States of America

09:30 **Renewable Energy and Employment: Prospects for Saudi Arabia**

Sylvain Cote, Senior Research Fellow, Energy & Macroeconomics
KAPSARC, Kingdom of Saudi Arabia

09:50 Coffee Break and Networking Session

10:30 **The advantages of renewable energy localisation in the Kingdom of Saudi Arabia**

Dr. Amin Al Yaquob, CEO, The GCC Association for Renewable Energy and Sustainability (Green Gulf),
Kingdom of Saudi Arabia

SESSION 4: TECHNOLOGIES CATALYSING GREEN ENERGY REVOLUTION AND THE IMPACT OF MARKET FORCES

10:50 **Energy Storage and Desalination: An Innovative sustainable water Solution**

Dr. Muhammad Wakil Shahzad, Research Scientist, Water Desalination and Reuse Center, King Abdullah
University of Science and Technology, Kingdom of Saudi Arabia

11:00 **Precise yield forecast based on machine learning algorithm**

Dr. Christian Kurz, Head of Data Analytics Department, Meteocontrol, Germany

11:20 **Performance and Safety aspects in PV modules in KSA**

Eng. Hani Balfass, Lab Manager, Gulf Renewable Laboratory, Kingdom of Saudi Arabia

11:40 Dhuhr Prayer and Networking coffee break

FORUM DAY-2

1st MAY 2019

12:40 Energy storage in the Middle East

- Battery storage systems for large solar power plants
- Achieving energy independence through energy storage
- Emerging development and trends in energy storage

Eng. Abdullah Al Subiae, General Director, **Saudi Renewable Energy Association**, Kingdom of Saudi Arabia

13:00 The US-China trade war and its implications for Saudi Arabia's renewable energy prospects

Dr. Juergen Braunstein, Fellow, Geopolitics of Energy Project, Belfer Center, Harvard Kennedy School, United States of America

13:20 **PANEL DISCUSSION:** Challenges in renewable energy asset management and how digitalization can help



- Common standards in development markets
- Challenges and solutions
- Future outlook on new technologies

MODERATOR:

Robert Pfatischer, Managing Director, **Meteocontrol**, Germany

PANELLISTS:

Dr. Pieter Smeets, Sr. Manager Industrial Sustainability
SABIC, Kingdom of Saudi Arabia

Abdullah Al-Khalid, Manager, Business Development Department
SIDF, Kingdom of Saudi Arabia

14:00 Awards and Recognition

14:05 Closing Remarks by White Paper Summits

14:10 Lunch and Networking Session

End of Forum Day 2

14:40 Site Visit to SABIC Home of Innovation

SITE VISIT

The Home of Innovation™ is a SABIC growth initiative that combines marketing, innovation and technology to create demand and grow business on a local, regional and global level.

The Home of Innovation™ is a focal point for those committed to innovation and growth, bringing together the best minds and organizations interested in the future of the Middle East and North Africa (MENA) region.

The initiative connects SABIC with industry-leading companies to identify market needs and develop the innovative solutions that answer them.



PROGRAM PARTICIPANT

Home of
Innovation™

A SABIC growth initiative





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Riyadh Exhibitions Company Ltd.

P.O. Box 56010, Riyadh 11554,
Kingdom of Saudi Arabia
Tel: +966 11 2295604
Fax: +966 11 2295612
E-mail: info@recexpo.com

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P. O. Box 1406, P.C. 133, Al Khuwair,
Sultanate of Oman
Tel: +968 24 788 476
Fax: +968 24 788 676
E-mail: info@wpsummits.com