

**JUNE 28–JULY 1, 2026  
BURGAS, BULGARIA**

HOME

ORGANIZERS &  
COMMITTEES

PRACTICAL INFO

FAQ

SCOPE

## PROGRAMME

Programme

PROGRAMME

Note! This is a preliminary list of **currently accepted abstracts**. When the submissions are closed, they will be created and posted also on this page.

INVITED LECTURES

## PLENARY LECTURES

- SEE.SDEWES2026-0022 **Integrated Risk Management of Water, Energy, and Natural Hazard in Southeast Europe**

SIDE EVENTS

No session defined

CALL FOR PAPERS

### Track: Sustainable resilience of systems

#### *Subtrack: resilience of energy systems*

- SEE.SDEWES2026-0084 **Extreme weather events and the electricity grid in Bulgaria - impact options for increasing resilience**

#### *Subtrack: No subtrack*

- SEE.SDEWES2026-0006 **DEMETRA – Domino Effect: A Simulation-Based Approach for the Protection and Resilience of Critical Infrastructures**

DATES

CONFERENCE FEE

CONFERENCE RULES

#### Deadlines coming up

February 27th, 2026

\*Request for reduced fee

February 28th, 2026

Archival manuscript upload

March 18th, 2026

Reduced fee for all papers (obligatory to request)\*

March 18th, 2026

Full fee for archival papers

April 2nd, 2026

Visa fee settlement

April 2nd, 2026

Visa request

### Track: Agricultural policy

#### *Subtrack: energy and water use in agriculture and food processing*

- SEE.SDEWES2026-0042 **Modelling Integrated PV Battery Storage and Heat Pump Systems for Carbon Aquaculture Hatcheries**
- SEE.SDEWES2026-0071 **Central Asia agriculture face on water depletion.**

#### *Subtrack: No subtrack*

"History teaches us that men and nations behave wisely once they have exhausted all other alternatives"

Abba Eban

JOIN US IN BURGAS!

- SEE.SDEWES2026-0066 **Research of Catechins and Caffeine in Camellia formosensis from Di Populations in Taiwan (poster)**

## Track: Environmental policy and management

### *Subtrack: eco management and audit schemes*

- SEE.SDEWES2026-0089 **Transition from ESG towards rational sustainability - A review on ESG evaluation process**

### *Subtrack: biomass management*

- SEE.SDEWES2026-0015 **Modeling Fish Ascending Behavior in a Pool-and-Weir Fishway Using Individual-Based Approach**
- SEE.SDEWES2026-0058 **Sustainability Analysis of Converting Agricultural Residues to Aviation alcohol to jetfuel (ATJ) pathway in Taiwan**

### *Subtrack: air pollution policy*

- SEE.SDEWES2026-0067 **Spatial and Temporal Variability of PM2.5 in Tirana: Implications for Quality Management**

### *Subtrack: climate change mitigation*

- SEE.SDEWES2026-0056 **Reframing Wetland Carbon Sequestration: A State-Dependent Assessment Based on Long-Term Remote Sensing**

### *Subtrack: wastewater management*

- SEE.SDEWES2026-0018 **The Recast of EU's Wastewater Treatment Directive - Challenges and Approaches for the Wastewater Sector in Kosovo**

### *Subtrack: waste management*

- SEE.SDEWES2026-0007 **Designing a National EPR System for Cigarette Butts: Case Study from India**
- SEE.SDEWES2026-0090 **Mitigating Nickel Ore Depletion Through Urban Mining: The Role of Industrial Batteries and Electronic Waste in Indonesia**

## Track: Water-energy nexus

### *Subtrack: river basin management*

- SEE.SDEWES2026-0001 **Unlocking Scarcity, Risk of Water Security Using Entropy Assessment: A Case of India**

### *Subtrack: water-renewables integration, water resources*

- SEE.SDEWES2026-0049 **Renewable-Driven Pump Scheduling for Enhancing Water-Energy Nexus Resilience in Island Water Supply Systems**

### *Subtrack: water desalination*

- SEE.SDEWES2026-0045 **A Modeling Framework for Integrating Renewable-Driven Hydrogen Production with Desalination Systems**

### *Subtrack: climate change adaptation*

- SEE.SDEWES2026-0037 **Real-time Energy and Water Use Profiling of a Freshwater Green Hat**

### *Subtrack: No subtrack*

- SEE.SDEWES2026-0077 **Enhanced Hydrogen Production through Thermochemical Water Splitting Using Multiple Perovskites**

## Track: Climate change modelling and analysis

- SEE.SDEWES2026-0028 **Integration of Nature-Based Solutions in the Danube-Black Sea Region**

## Track: Smart transport systems and policy

### *Subtrack: transport electrification*

- SEE.SDEWES2026-0046 **Optimizing Infrastructure Sizing and Distribution for Resilient PV-Po Drone Logistics Networks**

## Track: Political aspects of sustainable development

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### *Subtrack: Sustainable Development Goals*

- SEE.SDEWES2026-0063 **Modeling electric vehicle deployment in Chile's residential sector: A simulation approach**

## Track: Energy markets

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### *Subtrack: retail markets*

- SEE.SDEWES2026-0053 **Fair Pricing of Power Network Services for Peer-to-Peer and Peer-to-Trading in Energy Communities: A Privacy-Preserving Decentralized Fra**

### *Subtrack: demand response*

- SEE.SDEWES2026-0023 **OPTIMIZATION OF RENEWABLE ENERGY AGGREGATORS FOR MARKET PARTICIPATION**

### *Subtrack: modelling*

- SEE.SDEWES2026-0020 **Linear Programming Framework for Multi-Sector Energy Planning with Energy, Reserve, and Flexibility Co-Optimization**

## Track: Buildings

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### *Subtrack: green buildings*

- SEE.SDEWES2026-0052 **Capital efficient planning of multi energy office retrofits under cove constraints: a Sydney CBD and Parramatta case study**

## Track: Energy and water decarbonisation and efficiency in industry and mini

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### *Subtrack: carbon capture and utilisation*

- SEE.SDEWES2026-0021 **Integration of Blast Furnace and Chemical Looping Reforming Towai Steelmaking**
- SEE.SDEWES2026-0027 **Assessment of Flexible Post-Combustion CO2 Capture Through Rich-Storage**

### *Subtrack: construction materials*

- SEE.SDEWES2026-0065 **Comparison of the physical-mechanical and insulation properties of pressed seaweed boards with those wood span boards**

### *Subtrack: No subtrack*

- SEE.SDEWES2026-0055 **Experimental analysis of a cascade high temperature heat pump pr for 150 °C heating production**

## Track: Energy and climate policy

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### *Subtrack: climate change mitigation*

- SEE.SDEWES2026-0019 **Can Economic Growth Thrive Without Increasing Emissions in the En sector?**

## Track: Storage

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### *Subtrack: batteries*

- SEE.SDEWES2026-0040 **Assessment of Potentials for Autonomous Operation of a Water Pun Station Microgrid with Solar Photovoltaic Powerplant and Battery Energ**

### *Subtrack: compressed air energy storage*

- SEE.SDEWES2026-0083 **Comparison of Working Fluids in Terms of Their Use as Cooling and Heat Agents in Isothermal Compressed Air Energy Storage Systems**

***Subtrack: thermal energy storage***

- SEE.SDEWES2026-0029 **High-Temperature Thermal Energy Storage as a Decarbonization Path for the Steel Industry**

**Track: Cogeneration, trigeneration, polygeneration**

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***Subtrack: water and power***

- SEE.SDEWES2026-0064 **Heat Cascading in an Integrated Oxy-Combustion, Ammonia, and Desalination System for Low-Emissions Water and Energy Production**

**Track: Modelling for pollution avoidance and energy efficiency**

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***Subtrack: heat and mass transfer modelling***

- SEE.SDEWES2026-0047 **A Cooling Strategy to Suppress Thermal Runaway in Lithium-Ion Battery Systems**

***Subtrack: No subtrack***

- SEE.SDEWES2026-0009 **Modeling the spread of pollutants in soil**

**Track: Waste and wastewater treatment and reuse**

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***Subtrack: resource recovery from wastewater***

- SEE.SDEWES2026-0075 **Aluminium and Phosphorus Recovery from Gasification Sewage Sludge via a Multi-Step Wet-Extraction System**

***Subtrack: gasification***

- SEE.SDEWES2026-0074 **Transforming Heterogeneous Solid Waste Streams into Slag for Construction Applications via High-Temperature Gasification**

***Subtrack: waste to energy***

- SEE.SDEWES2026-0073 **Advancing Sustainable Urbanization: A Synergistic Framework for Circular Capture and Resource Recovery**

***Subtrack: recycling***

- SEE.SDEWES2026-0012 **Turning PE-Al into Fertilizer**
- SEE.SDEWES2026-0076 **Chicken manure ash as a bioresource-based material for efficient carbon dioxide capture**

***Subtrack: composting***

- SEE.SDEWES2026-0036 **Influence of Different Grape Stalk Proportion on the Composting Process of Grape Marc with Food Waste and Poultry Manure**

**Track: Water desalination**

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***Subtrack: energy recovery***

- SEE.SDEWES2026-0003 **Desiccant-Assisted HDH Desalination Using Low-Temperature Heat Recovery**

**Track: Water treatment**

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***Subtrack: drinking water***

- SEE.SDEWES2026-0016 **Tracing Microplastics from Seawater to Drinking Water: Insights from a Large-Scale Desalination Plant in Southern Spain**

**Track: Alternative fuels**

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***Subtrack: ammonia***

- SEE.SDEWES2026-0057 **Design and Numerical Investigation of a distributed Power-to-X system for distributed green hydrogen and ammonia production**

## Track: Smart energy systems

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### *Subtrack: GIS*

- SEE.SDEWES2026-0032 **Geospatial Identification of High-Temperature Industrial Clusters for Electrification Pathways and Integration with H2RES**

### *Subtrack: artificial intelligence*

- SEE.SDEWES2026-0054 **Spatiotemporal Topology-Aware Dispatch for Distribution Networks with Heterogeneous EV Loads Using GNN-Enhanced Deep Reinforcement Learning**

### *Subtrack: integration of power, heating/cooling, transport, water and waste sectors*

- SEE.SDEWES2026-0013 **How Industrial Demand Patterns Govern the Design of High-Temperature Electrothermal Storage**
- SEE.SDEWES2026-0031 **Integrated Optimization Framework for 100% Renewable University Energy Systems**

## Track: Biofuels and biorefineries

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### *Subtrack: anaerobic digestion*

- SEE.SDEWES2026-0080 **Enhancing Short-Chain Fatty Acid Production from Agro-Industrial Wastes through Enzymatic Pretreatment**

## Track: Renewable heat systems

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### *Subtrack: biofuels*

- SEE.SDEWES2026-0068 **Worm Substrate as a Multipurpose Material for Thermochemical Conversion and Energy Generation**

### *Subtrack: biomass*

- SEE.SDEWES2026-0051 **Two-Phase Mathematical Model for Air-Steam Biomass Gasification in a Small-Scale Bubbling Fluidized Bed Reactor**
- SEE.SDEWES2026-0060 **Research on the Effects of Vinegar from Thermal Treatment of Biomass Waste on Tea Tree Growth**

## Track: Advanced sustainable energy conversion systems

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### *Subtrack: electrolyzers*

- SEE.SDEWES2026-0038 **Evaluation of Power-to-Methane Production Pathways: A Comparison of PEM Electrolyzer Technologies Coupled with CO<sub>2</sub> Methanation**

### *Subtrack: thermoacoustic*

- SEE.SDEWES2026-0048 **Electrical Power Generation through a Cascade Thermoacoustic Engine: Design and Analysis**

### *Subtrack: No subtrack*

- SEE.SDEWES2026-0078 **Catalyst-Driven Enhancement of Hydrothermal Liquefaction of Microalgae and Seaweed Blends for Biofuel Production ([poster](#))**
- SEE.SDEWES2026-0079 **Data-Driven Neural Network-Assisted RSM-BBD Framework for Enhancing Biofuel Production from Algal Biomass ([poster](#))**

## Track: Nano and micro technologies and science for sustainable development, energy, water, and environment systems

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- SEE.SDEWES2026-0081 **Investigations of thermal efficiency in the shape-optimized chamber with gold nanorods for water decontamination processes**

## Track: District heating and/or cooling

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***Subtrack: integration of renewable heat***

- SEE.SDEWES2026-0033 Hybrid multicriteria evaluation and selection of model investment p for district heating

***Subtrack: No subtrack***

- SEE.SDEWES2026-0002 FOUR PRONGS OF EXERGY-BASED OPTIMIZATION OF SUSTAINABLE DI ENERGY SYSTEMS FOR 100% RENEWABLE SLOW CITIES

**Track: Renewable electricity conversion systems*****Subtrack: photovoltaic***

- SEE.SDEWES2026-0017 A Fuzzy Modeling Approach for Roof-Integrated Photovoltaic System Electric Vehicles

**Track: Renewable energy resources*****Subtrack: adaptation***

- SEE.SDEWES2026-0072 Between Market Rules and Social Safeguards: Legal Certainty in Libe Wholesale Electricity Markets
- SEE.SDEWES2026-0086 A Comparative Assessment of Thermal Plasma Gasification of High-M Sewage Sludge against Conventional Thermochemical Treatment Route

***Subtrack: biomass***

- SEE.SDEWES2026-0059 Saccharification Efficiencies of Maleic Acid Pretreated Agricultural a Residues ([poster](#))
- SEE.SDEWES2026-0087 Biomass Gasification Technologies: Pathways for Energy Transition i Industrial Sector ([poster](#))
- SEE.SDEWES2026-0091 Valorization of Wine Industry Waste for Energy Sector - Off-grid Pelle Gasification Pathway

**Track: Transport management*****Subtrack: transport system analysis, dynamic road pricing***

- SEE.SDEWES2026-0035 Road Transport Emissions from Tourism-Related Traffic: A Seasonal Assessment

**Track: Energy system analysis*****Subtrack: hydrogen valleys***

- SEE.SDEWES2026-0050 From CO2 to Crop: Comparative Costing of Green Fertilizer Productio for Ghana's Agricultural Sector

***Subtrack: long term demand planning***

- SEE.SDEWES2026-0041 Offshore Wind Integration through Energy Vectors Coordination and to-X Pathways

***Subtrack: electrification of transport***

- SEE.SDEWES2026-0039 Performance Analysis of Mobile Systems Powered by Renewable Ene Polar Environments
- SEE.SDEWES2026-0043 Electric Vehicles Charging Infrastructure in the Western Balkans Co Review on Current Situation in Comparison to the EU

***Subtrack: development of energy planning tools***

- SEE.SDEWES2026-0034 Scaling H2RES to a Continental European Model Using Open Energy S Data
- SEE.SDEWES2026-0044 Energy Planning Data Pipeline: From Open Data to Model-Ready Inpu
- SEE.SDEWES2026-0092 New Automated Method for Interconnection Constraints Detection Linked Framework for National Energy Planning

***Subtrack: island energy systems***

- SEE.SDEWES2026-0026 Future Energy Scenarios and Decarbonization Strategies for Mediter Islands

*Subtrack: power system planning*

- SEE.SDEWES2026-0030 Renewable Profile Uncertainty and Its Impact on Zero Emissions Pov System Investments

*Subtrack: energy planning*

- SEE.SDEWES2026-0004 Simulating Household Energy Use and Pricing Policies with an Agent Model

**Track: Research, innovation and development**

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*Subtrack: industry-academia partnership*

- SEE.SDEWES2026-0025 Solar Energy Integration to Energy-Intensive Industrial Cold-Storage and Beverage Sector
- SEE.SDEWES2026-0088 "Explosion Behavior of Metal Hydrides: Implications for Hydrogen Er Safety"

**Track: Urbanism**

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*Subtrack: sustainable energy and climate action plans*

- SEE.SDEWES2026-0024 Integrating the Assessment of Local Renewable Energy Availability a Flexibility Considerations for Electrified Public Transport in Sustainable Mobility Planning

*Subtrack: transport*

- SEE.SDEWES2026-0008 The Role of Public Transportation in Promoting Urban Sustainability City of Buraidah

**Track: Sustainability comparisons and measurements**

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*Subtrack: life cycle analysis*

- SEE.SDEWES2026-0005 Artificial Intelligence and Data Technologies for Next-Generation Lif Assessment: A State-of-the-Art Review and Roadmap with Insights from Fisheries Sector
- SEE.SDEWES2026-0010 Exploring the Environmental Performance of Beef Production in Nor Spain - A Life Cycle Sustainability Approach
- SEE.SDEWES2026-0011 Advancing Environmental Assessment Through Nutritional Multifun Metrics: Building a Nutrient Profiling Model for Agrifood Systems
- SEE.SDEWES2026-0070 The end-of-life of renewables: from environmental impacts of photo waste to environmental sustainability of recycling.
- SEE.SDEWES2026-0095 Environmental and Economic Assessment of Integrated Salt and Wa Production by Thermal Desalination and Various Salt Production Techni

*Subtrack: multi-criteria analysis*

- SEE.SDEWES2026-0014 An Activity-Based Framework for Assessing Industrial Symbiosis Decarbonisation Benefits

S P O N S O R S



## SDEWES INDEX

BENCHMARKING THE PERFORMANCE OF CITIES ACROSS ENERGY, WATER AND ENVIRONMENT SYSTEMS related metrics presents an opportunity to trigger policy learning, action, and cooperation to bring cities closer to sustainable development.



### Contacts:

EML: [see.sdewes2026@sdewes.org](mailto:see.sdewes2026@sdewes.org)

### Gallery



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