

CONFERENCE PROGRAM

*Rumi Hotel, 10 M. Tursunzoda str., Balkh and Hofiz
Conference Hall Dushanbe, Republic of Tajikistan*



JUNE
24 - 26
2024

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GOOD AFTERNOON, DEAR COLLEAGUES AND CONFERENCE PARTICIPANTS



On behalf of the Ministry of Energy and Water Resources of the Republic of Tajikistan, I am pleased to welcome you to the Regional Conference: "Prospects for the Development of renewable Energy in Central Asian countries". I am convinced that this conference will serve as an effective and productive platform for discussing topical issues and tasks that will promote the widespread development of renewable energy sources in the region. In the world in its own way Tajikistan has the sixth largest hydropower potential in the world, and the first in Central Asia.

More than 95 percent of Tajikistan's energy is based on hydropower.

Tajikistan's hydropower potential is three times higher than the current electricity consumption across the country. Central Asia. I would like to emphasize that in recent years we have been facing new challenges in the energy sector, which are mainly related to hydrological problems. Hydrological characteristics of the main rivers They play an important role in Tajikistan's energy sector and thus make this sector vulnerable to the negative effects of climate change, since the bulk of water for hydroelectric power plants is accumulated due to glaciers, the melting of which is observed at a rapid pace. Therefore, special attention is paid to the widespread use of renewable energy sources as a resource for diversifying generation sources. In the National Development Strategy of the Republic of Tajikistan until 2030, in the energy sector development section, the main indicators aimed at diversifying generation sources by 10% and additional generation of more The United Energy System of Central Asia". The completion of these projects will allow the transfer of green and clean energy from Tajikistan to the countries of the region, making a huge contribution to reducing harmful emissions, which fully corresponds to the latest climate trends. I express my gratitude to the organizers of the conference for the opportunity to meet with colleagues and wish all participants interesting and useful communication, new business contacts, jointly found solutions and successful projects!

REGIONAL CONFERENCE: «Prospects for Renewable Energy Development in the Republic of Tajikistan»

THE CONFERENCE PROGRAM MONDAY, June 24, 2024

Opening of the conference

Session I - CURRENT STATUS OF RENEWABLE ENERGY DEVELOPMENT IN CENTRAL ASIA AND ONGOING INITIATIVES TOWARDS GREEN ECONOMY (Conference Hall – Balkh)

Session II – CENTRAL ASIAN COUNTRIES RE DEVELOPMENT, STATUS AND CHALLENGES (Conference Hall – Balkh)

Session III – ESTABLISHING A GENDER COMMITTEE UNDER THE MINISTRY OF ENERGY AND WATER RESOURCES OF TAJIKISTAN (Conference Hall – Balkh)

THE CONFERENCE PROGRAM TUESDAY, JUNE 25, 2024

BALKH CONFERENCE HALL

Session IV–A. Prospects for the development of rooftop solar installations in Central Asian countries

Session IV-B. Implementation of solar initiatives by development partners in Tajikistan

Session V - Challenges and opportunities for integrating RES into the energy system. Moderator – Mr. Umarkhon Madvaliev, President of ARET

HOFIZ CONFERENCE HALL

Session VI- Regional Scientific Conference "Contribution of Scientists and Scientific Research to Promotion of Renewable Energy Sources in the Region".

CONFERENCE ROOM
HOFIZ

CONFERENCE PROGRAM
WEDNESDAY, JUNE 26, 2024

Session VI- International Scientific Conference “Status and prospects for the development of renewable energy in Tajikistan” (Conference Hall – Hofiz)



Agenda of the Regional Conference: “Prospects for Renewable Energy Development in the Republic of Tajikistan”

Day 1 – 24th
June 2024, Monday

Time	Session	Speakers
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09:00 - 09 :30 Registration and coffee break

Event Opening (Conference Hall - Balkh)

09:30 - 10 :15	Opening remarks Mr. Daler Jum’a - Minister of Energy and Water Resources of the Republic of Tajikistan Mr. Khushvakhtzoda Qobiljon – Professor, President of National Academy of Sciences of Tajikistan Mission Director, USAID/ Tajikistan (TBD) Group Photo	Moderator: M. Safarzoda, Deputy Minister of Energy and Water Resources of the Republic of Tajikistan
10:30 - 11:00	Coffee Break	

Session I - Current Status of Renewable Energy Development in Central Asia and Ongoing Initiatives Towards Green Economy (Conference Hall – Balkh)

11:00 - 11:15	Country presentations: H. Badalov - Deputy Head of Investment	Moderator: M. Safarzoda - Deputy Minister of Energy and Water
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Time	Speakers	Moderators
	Department of the Ministry of Energy and Water	Resources of the Republic of Tajikistan
11:15 - 11:30	Representative of Kazakhstan	
11:30 - 11:45	Representative of Kyrgyz Republic	
11:45 - 12:00	Representative of Uzbekistan	
12:00 - 13:00	Lunch	
Session II – (Conference Hall – Balkh) Central Asian countries RE development, status and challenges.		
	Panel session facilitated by UNDP Tajikistan	UNDP representatives
13:00 - 13:20	Mahinakhon Suleymanova - Executive Director, Neksigol Mushovir	Moderator: Parvin Muminov – Project Manager, UNDP
	Topic - experience in biogas projects development in Tajikistan	
13:20 - 13:35	Aziz Kembayev – Commercial Director «Elcomtel», Kazakhstan	
	Topic – experience on installation of small scale RE technologies in Kazakhstan and Uzbekistan	
13:35 - 13:55	Parvin Muminov – Project Manager UNDP Tajikistan GE Project	
	Topic – GE Project's results	
13:55 - 14:15	Yerlan Dairbekov – Project Manager UNDP Kazakhstan	

Time	Speakers	Moderators
	Topic - Kazakhstan RE energy project, in particular development small scale RE development: financial instruments and by-laws development	
14:15 - 14:30	Representative of GIZ - Renewable Energy and Energy Efficiency in Central Asia (REEE-CAS)	
	Topic –First project GIZ in Energy Sector	
14:30 - 14:45	Dilovar Mamurov – Executive Director ARET Tajikistan	
	Topic – insights of RE market in Tajikistan	
14:45 - 15:00	Hokim Ghayurzod – Director CPO Bargi Sabz	
	Topic – activities completed under the GE Project	
15:00 - 15:30	Coffee Break	

Session III – USAID Power Central Asia Activity - RE development support in Tajikistan

15:30 - 17:30	<p>Meeting opening and welcoming statements</p> <p>Kholikzoda Mavjuda - former Deputy Minister of Energy and Industry of the Republic of Tajikistan, former Head of the State Energy Supervision Authority of the Republic of Tajikistan</p> <p>Bayan Abylkairova - Deputy Chief of Party, the USAID Power Central Asia Activity. Development of the draft of Bankable PPA in Tajikistan</p> <p>Galiya Daniyarova - Communication and GESI Specialist, the USAID Power Central Asia Activity</p> <p>USAID Power Central Asia Activity: Gender Equality and Social Inclusion Activities and Plans</p> <p>Kudusov Mansur - Renewable Energy Zones identification in Sugd region. Installation of the LIDAR for wind measurement.</p> <p>Nazira Haydarova - Association of Renewable Energy of Tajikistan, Pamir Energy Company</p>	<p>Moderator:</p> <p>Sharifa Khudobakhsh - Deputy Minister of Energy and Water Resources of the Republic of Tajikistan</p>
18:30	Dinner	

Day 2 - 25th June 2024, Tuesday

Session IV – Prospects for the development of rooftop solar installations in Central Asian countries (Conference Hall – Balkh)

Panel Session facilitated by SECCA, EU

09:00 09:20

Sorbon Kholmukhammadzoda, Deputy

Mayor of Dushanbe city.

Plans of the city of Dushanbe to provide alternative energy to residential buildings, commercial and industrial facilities of the city.

Moderator: **Paata Janelidze**, Head of the of the SECCA Project (Sustainable Energy Connections in Central Asia).

09:20 09:40

Ulugbek Umarov, Deputy Chairman of the Committee on Architecture and Construction under the Government of the Republic of Tajikistan.
Order of the Committee on Architecture and Construction “on the use of solar electrical systems in buildings and structures”

09:40 10:00

Qurbonali Khayrullozoda, Head of the Energy Department, Ministry of Energy and Water Resources.

- RTS in Tajikistan. Solar energy development goals.

Time	Speakers	Moderators
10:00 - 10:20	Representative of the Ministry of Energy of Kazakhstan (TBD) Development of rooftop solar installations in Kazakhstan	
10:20 - 10:40	Representative of the Ministry of Energy of Uzbekistan (TBD) Development of rooftop solar installations in Uzbekistan	
10:40 - 11:10	Coffee Break	
Session IV. Implementation of solar initiatives by development partners in Tajikistan (Conference Hall – Balkh)		
	Session facilitated by SECCA, EU	
11:00 - 11:20	Kudusov Mansur, SECCA Expert Potential of rooftop solar installations in Dushanbe	
11:20 - 11:40	Darius Trauchiunas , SECCA Expert on Financing Solar Installation Projects in Tajikistan	Moderator: Usmonov Furugzod, SECCA Project Coordinator in Tajikistan
11:40 - 12:00	Khokim Gayurzod , UNDP Expert, “UNDP experience in financing rooftop solar installations in Tajikistan”	
12:00 - 12:20	Khairullo Nazarzoda, Rector of the Tajik State University of Commerce. "Universities' experience in integrating renewable energy sources in academic building."	

Time	Speakers	Moderators
12:20 - 14:00	Lunch	
Session V – Challenges and opportunities for integrating RES into the energy system (Conference Hall – Balkh). Moderator – Mr. Umarkhon Madvaliev, President of ARET		
14:00 - 14:15	Jamshed Sirojev – Representative of Open Joint Stock Company “Shabakahoi Intiqoli Barq”	
14:15 - 14:30	Rumyantsev S. Yu. , New principles of energy systems management: key provisions of the concept for the development of the market for electricity storage systems in the Russian Federation	
14:30 - 14:45	Mozheiko N. M. , New principles of energy systems management: Calculation of options for technical solutions to problems of power quality and reliability of power supply	
14:45 - 15:05	Mr. David Wedepohl, German Federal Solar Association	
15:05 - 15:25	Mr. Christoph Urbschat, Director of Eclareon GmbH	
15:25 - 15:55	Coffee Break	
	Kazakhstan, Tajikistan ESR, ARET 50MW Solar PV plant	
16:00 - 16:15	Presentation of the ESR Company, USAID Subcontractor. Development of the PFS of 50 MW solar station in Sughd region, Tajikistan.	
16:15 - 16:45	Goran Majstrović, European experience in power grid development to integrate large scale RE (online)	
18:00	Dinner	

Session VI- International Scientific Conference “Status and prospects for the development of renewable energy in Tajikistan” (Conference Hall – Hofiz)

Panel Session facilitated by ARET

Moderator – **Madvaliev U.**

9:00 - 09:20 - Open scientific conference and welcome words about the participant

09:20 - 09:40 Vice-President of the National Academy of Sciences of Tajikistan

Amonzoda Ilkhom Temur

09:30 - 09:50 **-Akhatov J.S.** Research of the physicochemical properties of a porous material based on CeO₂ for producing hydrogen using the solar thermochemical cycle

09:50 - 10:10 **Madvaliev U.** Current state and prospects for the use of renewable energy sources in Tajikistan

10:10 - 10:30 **Obozov A. J.** RES in the development of the fuel and energy complex of the Kyrgyz Republic

10:30 - 10:50 **Saryev K. A.** Scientific and technical substantiation of the method of uninterrupted power supply to decentralized consumers, with connection to the central power system using combined renewable energy sources

Time	Speakers	Moderators
10:50 - 11:10	Ilolov M. Maximum power point tracking using adaptive NEURO-FUZZY inference systems for the photovoltaic modules	
11:10 - 11:30	Coffee Break	
Technologies and methods for increasing the efficiency of solar energy systems		
11:30 - 11:50	Komilov A.G., Nasrullayev Y.Z., Ahmadow Kh.S. Thermal and flow dynamics of facade-mounted PV panels system: a height-dependent CFD analysis	Moderator - Akhatov J. S.
11:50 - 12:10	Akhmadow Kh.S., Akhatov J.S. Heat and porous analysis for cerium dioxide in thermochemical hydrogen production	
12:10 - 12:30	Abdulkhaev O.A., Komilov A.G. Novel Technique for Precise Efficiency Evaluation of Emerging Solar Cells	
12:30 - 13:30	Lunch	
13:30 - 13:50	Asanova S.K., Halimov A.S., Akhatov J.S. Analysis of Cosine Similarity in Renewable Energy Integration and Optimization for Nearly Zero Energy Buildings (nZEBs)	
13:50 - 14:10	Orazberdieva M.R. Opportunities for using microalgae in alternative energy	

Time	Speakers	Moderators
14:10 - 14:30	Jalilov D.Y., Juraev T.I., Halimov A.S., Akhatov J.S. Enhancing thermal performance of parabolic trough collectors using MWCNT-based nanofluids in Uzbekistan's climate	
14:30 - 14:50	Jalilov D.Y., Juraev T.I., Halimov A.S., Akhatov J.S. The impact of volumetric flow rate adjustments on heat gain and temperature control in parabolic trough collectors	
15:00 - 15:30	Coffee Break	
Sectional session "Renewable energy sources and their integration"		
15:30 - 15:50	Khaitmukhamedov A.E., Abdulkhaev O.A., Samiev K.A., Avezova N.R. Assessment of energy efficiency of parabolic trough solar concentrator in Tashkent: technical and climatic aspects	Moderator – Obozov A. J.
15:50 - 16:10	Juraev T.I., Jalilov D.Y., Halimov A.S., Akhatov J.S. Enhancement of thermal performance of polymer-based solar collectors using nanofluid	
16:10 - 18:30	Free time for discussions	
18:30	Dinner	

Day 3 - 26th June 2024, Wednesday

Session VI (continue)- International Scientific Conference “Status and prospects for the development of renewable energy in Tajikistan” (Conference Hall – Hofiz)

Panel Session facilitated by ARET

Moderator – **Makhsudov B. I.**

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| 9:10 - 9:30 | Makhsudov B. I. Increasing the coefficient of CdTe neutron absorption irradiation |
| 9:13 - 9:50 | Juraev Sh.J. Methodology for selecting a source of electrical energy using RES for power supply to consumers in decentralized networks |
| 9:50 - 10:10 | Kholov A. Creation of sensitized dye based on silicon carbide nanopowder synthesized by the method zol-gel |
| 11:00 - 11:30 | Coffee Break |

Sectional session “Technical and economic aspects and innovative approaches”

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| 11:30 - 11:50 | Nazirov Kh. B. Method for selection of optimal installed capacities of power stations of the energy complex (WPP, SPP and SHPP) | Moderator – Nazirov Kh. B. |
| 11:50 - 12:10 | Sharifov B. N. Research of the possibilities of artificial intelligence for the control of photovoltaic installations | |
| 12:20 - 13:30 | Lunch | |

Time	Speakers	Moderators
13:30 - 13:50	Kudusov M. A. Technical and economic justification of the use of solar energy when installing panels on roofs of buildings in Dushanbe	Moderator – Kholov A.
13:50 - 14:10	Bakhromzod R. Assessment of Tajikistan's solar and wind energy potential based on satellite data	
14:10 - 14:30	Domullojonov A. Solar dryer with heat pump online	
14:30 - 14:50	Makhmudov Bekhruz. Analize of LIDAR datas of Tajikistan	
15:00 - 15:30	Coffee Break	
15:30 - 15:50	Obidjoni Shakhobiddini Kuvatzoda. Energy efficiency of renewable heat extraction using a vertical ground heat exchanger	Moderator – Kholov A.
15:50 - 16:10	-	
18:00	Dinner	



MINISTRY OF ENERGY AND
WATER RESOURCES OF THE
REPUBLIC OF TAJIKISTAN



Organizers

The conference is organized by the Ministry of Energy and Water Resources of the Republic of Tajikistan, National Academic of Science of the Republic of Tajikistan and Association of Renewable Energy of Tajikistan

Partners

The United Nations Development Programme (UNDP)

The European Union

The United States Agency for International Development (USAID)

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