

## Workshop

# Innovative solutions for achieving 100% renewable power systems by mid-century

## 17<sup>th</sup> July 2019, Montevideo, Uruguay

## Agenda

Time		Session
08:30	09:00	Registration open
09:00	09:30	<ul> <li>Welcome address</li> <li>Vanessa Interiano, Senior Adviser, Country Support and Partnerships (CSP), IRENA</li> <li>Mr Alfonso Blanco, Executive Secretary, Organización Latinoamericana de Energía (OLADE)</li> <li>Ms Hanna Ek-Fälth, Renewable Energy Analyst, Swedish Energy Agency, Sweden</li> <li>Mrs Olga Otegui, Interim Minister of Industry, Energy and Mining</li> </ul>
09:30	10:30	Session I: Challenges and opportunities in the implementation of ambitious policy targets to achieve power systems with high shares of renewable power by midcentury  This session focused on short-, medium- and long-term challenges, emphasizing the technical challenges (expected or experienced) arising once a power system is entirely renewable-based (e.g. how to make use of the surplus electricity to avoid curtailment - by trading with neighboring countries, having long-term storage solutions, electrifying end-user sectors, etc.).  5 presentations of 8 minutes, followed by an interactive discussion with the workshop participants:  • Ms Elena Ocenic, Programme Officer, Innovation Networks, IITC, IRENA  • Ms Hanna Ek-Fälth, Renewable Energy Analyst, Swedish Energy Agency, Sweden  • Mr Ruben Garcia, National Director of Energy, MIEM, Uruguay  • Mr Edison Chicaiza, Ministro de Energía y Recursos Naturales No Renovables, Ecuador  • Mr Deon Kelly, Energy Officer, Energy Unit, Ministry of Public Service, Energy and Public Utilities, Belize
10:30	11:00	Coffee break
10.50	11.00	Confec break





11:00	12:30	Session II: Technical feasibility of a 100% renewable power system by 2050
		This session focused on the technical requirements to enable a 100% renewable power system by 2050 and will discuss generation adequacy assessments, transmission capacity requirements, stability-related operational constraints and flexibility solutions to be adopted.
		5 presentations of 8 minutes, followed by an interactive discussion with the workshop participants:
		Ms Elena Ocenic, Programme Officer, Innovation Networks, IITC, IRENA
		<ul> <li>Dr Ing Gonzalo Casaravilla, President, National Administration of Power Plants and Electrical Transmissions (UTE), Uruguay</li> </ul>
		<ul> <li>Dr Victorio Oxilia, Professor and Director of Research, Universidad Nacional de Asuncion, Facultad Politécnica, Paraguay</li> </ul>
		<ul> <li>Ms Alexandra Arias, Comisión de Integración Energética Regional (CIER), Uruguay</li> </ul>
		Mr Gonzalo Bravo, Researcher/Analyst, Fundacion Bariloche, Argentina
12:30 14:00	14:00 15:30	Lunch break  Session III: Showcase of experiences from leading countries operating power system
		This session focused on experiences and lessons learned from leading countries that have already relatively high or very high penetration rates of renewables in their national power system, including high shares of VRE, which could benefit other member countries, including challenges faced in the process and measures taken to address those challenges.
		6 presentations of 8 minutes, followed by an interactive discussion with the workshop participants:
		<ul> <li>Ms Hanna Ek-Fälth, Renewable Energy Analyst, Swedish Energy Agency, Sweden</li> </ul>
		<ul> <li>Ing. Andrés Tozzo, National Administration of Power Plants and Electrical Transmissions (UTE), Uruguay</li> </ul>
		<ul> <li>HE Dr Ingo von Voss, Ambassador, German Embassy in Uruguay</li> <li>Ms Laura Lizano, Director of the Energy Planning Secretariat, Ministry of Environment and Energy, Costa Rica</li> </ul>
		<ul> <li>Ms Ada Cerna, Ingeniero de Planificacion, ODS (Operador del Sistema Electrico Nacional), Honduras</li> </ul>
		<ul> <li>Ms Nadia Zelaya, Analista Economico - Financiero en sistema de energia electrica, Ministry of Energy and Mining, Department of Electricity and RE, Nicaragua</li> </ul>
12		<ul> <li>Ing Andrés González, Jefe Dpto Energía Eléctrica, Dirección de Recursos Energeticos, Viceministerio de Minas y Energía, Paraguay</li> </ul>
15:30	16:00	Coffee break





16:00	17:00	Session IV: Innovative solutions for 100% renewable power systems
		<ul> <li>This session focused on decentralization, digitalization and electrification being the main innovation drivers enabling the rapid uptake of a high share of renewables in the power system of the participating countries by mid-century. Topics covered by the speakers include: <ul> <li>Decentralization: market-integration of distributed energy resources (e.g. distributed energy resources providing services to the grid as one potential solution)</li> <li>Digitalization: artificial intelligence, blockchain and internet of things (e.g. a combination of these innovations into demand-side response as another potential solution)</li> <li>Electrification: Electrifying end-use sectors with renewable power (e.g. industry, heating and transport) as a solution for decarbonization and avoiding curtailment of surplus renewable power</li> </ul> </li> </ul>
		<ul> <li>4 presentations of 8-10 minutes, followed by an interactive discussion with the workshop participants:</li> <li>Ms Elena Ocenic, Programme Officer, Innovation Networks, IITC, IRENA</li> <li>Mr Martín Garmendia, Dr. Ing. Marcelo Castelli, MCT ESCO, Uruguay</li> <li>Mr Doug Miller, Market Development Manager, Energy Web Foundation, USA</li> <li>Dr Ing Alejandro, Gutiérrez, Facultad de Ingeniería, Universidad de la República, Uruguay</li> </ul>
17:00	17:20	Summary of discussion  • Dr Paul Durrant, Innovation Strategy & Networking lead, IRENA
17:20	17:30	Closing remarks  • Mr Ruben Garcia, National Director of Energy, MIEM, Uruguay

### **Contact**

For further information, please contact us:

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