



**SPIREC** | ESPAÑA  
2023

20-23  
FEBRUARY  
2023

**RENEWABLES  
FOR PEOPLE**

RECINTO FERIAL DE IFEMA MADRID



MINISTERIO  
PARA LA TRANSICIÓN ECOLÓGICA  
Y EL RETO DEMOGRÁFICO



**IDAE**  
Instituto para la Diversificación  
y Ahorro de la Energía



**REN21**  
RENEWABLES NOW



genera

# PROGRAMME AT A GLANCE

MONDAY  
FEBRUARY 20

08:30-9:30	Registration opens					
	AUDITORIUM (Rooms N103+N104)					
09:30-10:00	<p>OPENING CEREMONY + HIGH LEVEL PANEL  <b>Renewable Energy, the Solution for Net-zero, sustainable Development, energy security and sovereignty - 2050 roadmaps start now!</b>            (9:30 - 12:30)</p>					
10:00-10:30						
10:30-11:00						
11:00-11:30						
11:30-12:00						
12:00-12:30						
12:30-14:00	Lunch Break (12:30 - 14:00)					
	Room N101	Room N102	Room N106	Room N105	Room N117	
14:00-14:30	<b>1A - Rethinking our Energy Supply:</b> Renewables, energy security and geopolitics	<b>2A - Renewables for Industry</b>	<b>3A - Local Value Creation:</b> Building inclusive economies	<b>4A - Can renewables solve energy poverty?</b>	<b>5A - Beyond Technology:</b> Using Social and Policy Innovation to Accelerate the Shift to Renewables	
14:30-15:00						
15:00-15:30						
15:30-16:00	Break (15:30 - 16:00)					
16:00-16:30	<b>1B - Beyond Market Reform:</b> Strengthening Supply Chains to Scale Up the Renewables Sector	<b>2B - Renewables for Agriculture</b>	<b>3B - The Renewables Transition:</b> Turning Crises into Economic Opportunities	<b>4B - Changing Energy Governance:</b> Communities and cities shifting to renewables	<b>5B - Disrupting the Fossil Fuel Reality:</b> Using innovation to shift to renewables	
16:30-17:00						
17:00-17:30						
	AUDITORIUM (Rooms N103+N104)					
17:30-18:00	Day's Learning: Perspectives (17:30 - 18:00)					
	Room N101	Room N102	Room N114	Room N105	Room N117	Room N115
18:00-18:30	La transición energética en las islas españolas <b>IDAE</b>	Empowering Lives and Livelihoods: Renewables for Adaptation USD 1-Billion Financing Facility to Reinforce Resilience in Agri-Food and Health Value Chains with Renewable Energy (A COP28 Initiative) <b>United Arab Emirates (UAE)</b>	What Community Power Needs <b>World Wind Energy Association (WWEA)</b>	The Role of Bioenergy in Spain and Beyond <b>World Bioenergy Association (WBA)</b>	Lessons Learned in Rapid Decarbonization of Power Sectors <b>National Renewable Energy Laboratory (NREL)</b>	Enabling Regulatory Mechanisms for Seamless Integration of RE in Transport <b>SLOCAT / World Resources Institute (WRI)</b>
18:30-19:00						
19:00-19:30						



# PROGRAMME AT A GLANCE

TUESDAY  
FEBRUARY 21

08:30-9:30	Registration opens						
	AUDITORIUM (Rooms N103+N104)						
09:30-10:00	Renewable energy for social and economic development for all (9:30 - 10:30)						
10:00-10:30							
10:30-11:00	Break (10:30 - 11:00)						
	Room N101	Room N102	Room N106	Room N105	Room N117		
11:00-11:30	<b>1C - Ramping up Renewable Energy Deployment:</b> The indispensable building block	<b>2C - Renewables for Transport</b>	<b>3C - The New Rules of Renewable Energy Supply Chains</b>	<b>4C - Renewables Leading the Transition:</b> Just, equitable, distributed, inclusive	<b>5C - Consumer Trends in Goods and Services Markets:</b> Building strategically on ESG to accelerate renewables		
11:30-12:00							
12:00-12:30							
12:30-14:00	Lunch Break (12:30 - 14:00)						
	Room N101	Room N102	Room N106	Room N105	Room N117	Room N114	Room N115
14:00-14:30	<b>1D - Grids and Infrastructure:</b> The backbone of renewable energy systems	<b>2D - Renewables for Buildings</b>	<b>3D - Mind the Gap:</b> Job offers and skilling	<b>4D - Engaging Citizens from the bottom-up</b>	<b>5D - Digitalisation to Speed up the Energy Transition</b>		
14:30-15:00							
15:00-15:30							
15:30-16:00	Break (15:30 - 16:00)						
16:00-16:30							
16:30-17:00	Good practices in ecological and socio-economic integration of energy initiatives <b>Global Solar Council (GSC) / Spanish PV Association (UNEF)</b>	100% Renewable Cities and Regions: Argentina, Indonesia and Kenya <b>ICLEI - Local Governments for Sustainability</b>	Renewable Energy to achieve universal access to energy <b>Mesa para el Acceso Universal a la Energía</b>	The critical role of Marine Energy in the sustainable energy transition - supported by international standards and certification <b>International Electrotechnical Commission (IEC)</b>	Australia: A successful integration of substantial and increasing levels of variable renewable energy <b>Clean Energy Council (CEC)</b>	Gender Equality: A critical pathway for a sustainable and inclusive energy transition <b>United Nations Development Programme (UNDP)</b>	Mobilisation of Finance to Achieve SDG7 in Africa - Launch of the 2022 AEEP Report on Financial Flows <b>African-European Energy Partnership (AEEP)</b>
17:00-17:30							
17:30-18:00	AUDITORIUM (Rooms N103+N104)						
	Day's Learnings: Perspectives (17:30 - 18:00)						
	Room N101	Room N102	Room N106	Room N105	Room N117		
18:00-18:30	Vientos de futuro: el diálogo para el desarrollo inclusivo de la eólica <b>Vientos de Futuro</b>	Mesa de diálogo del Cambio Climático y Energía: La experiencia de Navarra <b>Mediación Navarra</b>	Faster and further with HEAT PUMPS: decarbonizing heating, cooling and hot water European Heat Pump Association (EHPA) / Air Conditioning Equipment Manufacturers Association (AFEC)	Alliance for a Just Energy Transformation (AJET) - A collaborative discussion on shaping the Alliance's strategy and its implementation World Wildlife Fund (WWF) / United Nations Development Programme (UNDP)	How to Scale Minigrids and Score a Climate Win-Win <b>Africa Minigrid Developers Association (AMDA) / Husk</b>		
18:30-19:00							
19:00-19:30							



# PROGRAMME AT A GLANCE

WEDNESDAY  
FEBRUARY 22

THURSDAY  
FEBRUARY 23

08:30-9:30	Registration opens					Site visits
	AUDITORIUM (Rooms N103+N104)					
09:30-10:00	Energy and industrial policies to mainstream renewables (9:30 - 10:30)					
10:00-10:30						
10:30-11:00	Break (10:30 - 11:00)					
	Room N101	Room N102		Room N105	Room N114	
11:00-11:30	¿Las ciudades hacen su parte? Greenpeace, Ecologistas en Acción, WWF España, Amigos de la Tierra, SEO/BirdLife	Launch of the Global Landscape of Renewable Energy Finance 2023 International Renewable Energy Agency (IRENA)		Technology pathways for decarbonization of energy intensive industries United Nations Industrial Development Organization (UNIDO)	Stakeholders' Role in the Electricity Grid Infrastructure Planning Renewables Grid Initiative (RGI)	
11:30-12:00						
12:00-12:30						
12:30-14:00	Lunch Break (12:30 - 14:00)					
	Room N101	Room N102	Room N106	Room N105	Room N117	
14:00-14:30	1E - Building Energy Resilience: Large centralised vs. distributed systems	2E - Electricity, Hydrogen and Low Thermal: The Interplay	3E - The Case of SMEs: Driving change outside globalised market	4E - Stopping the Exodus: How Renewables Can Make People Stay	5E - End-of-life: Circularity in renewables	
14:30-15:00						
15:00-15:30						
15:30-16:00	Break (15:30 - 16:00)					
16:00-16:30	AUDITORIUM (Rooms N103+N104)					
16:30-17:00	Closing Ceremony: Continuous acceleration to be 2050-ready (15:45 - 17:15)					
17:00-17:30						
17:30-18:00						
18:00-18:30						
18:30-19:00						
19:00-19:30						



# TRACK INFORMATION

## **Track 1: Stable Energy Supply, Energy Security and Sovereignty with Renewables**

A stable energy supply is critical for economies, societies and security. The COVID-19 pandemic has revealed systemic weaknesses in the fossil fuel-based order and exposed the fragility of global and regional supply chains. Renewable energy reduces vulnerability to fluctuating and rising fossil fuel prices and guarantees a secure, reliable and resilient energy supply. This track addresses the foundations necessary to build a stable new energy order around renewables: securing energy supply and the supply of materials and technology; developing infrastructure; and strengthening global, regional and local supply chains.

### **1A: Rethinking Our Energy Supply: Renewables, Energy Security and Geopolitics**

Renewables are crucial to overcome the fossil fuel crisis and enhance energy security in both the short and longer terms. Energy importers will be able to meet higher shares of their own demand, and some may even become exporters. Yet, shifting to renewables is not just a fuel switch but requires deep structural transformation across all parts of the economy. This session will showcase how renewable energy can reshape strategic realities and policy considerations. It will also address the changes that the development and use of renewables can bring to energy geopolitics.

### **1B: Beyond Market Reform: Strengthening Supply Chains to Scale Up the Renewables Sector**

With even industry leaders reporting eye-watering losses due to soaring prices and disruptions in the supply chain, the COVID-19 pandemic has revealed the criticality of dependencies in technology and manufacturing. For renewables to become the backbone of our global energy system, we need to not only ramp up generation capacity and develop grid infrastructure, but also build up full industrial value chains and innovate. The session will explore needs and strategies to escape the current supply chain paralysis. (Note: this session focuses on manufacturing, while session 3.C focuses on the new rulebook as regards restrictions for materials, rare minerals and land use, and session 5.E on the circularity of materials.)

### **1C: Ramping Up Renewable Energy Deployment: The Indispensable Building Block**

To stay below 1.5 degrees global warming, the world's economies must increase the speed of renewable energy uptake by the factor six, both through accelerated electrification of transport and heat, and more direct use of renewables. The aim of the session is to think boldly about how to lead transformative change and to discuss the radical measures needed for renewables to unleash investments, provide the bulk of the world's energy needs by the end of the decade, and ultimately, change the current trajectory towards a dystopian future.

### **1D: Grids and Infrastructure: The Backbone of Renewable Energy Systems**

In many regions there is still reluctance to move away from fossil fuels, fearing that the variable nature of wind and solar generation will cause problems for regional energy supplies. This session will show that achieving grids with high renewable energy shares (even 100%) are possible and discuss the parameters needed to facilitate these high shares in both distribution and high-voltage grids, from the perspective of grid operators and users. It will also explore the diverse challenges in making power grids fit for renewables – such as complex, multi-level approval systems (United States), problems siting transmission lines (Germany), barriers to investment (Vietnam), costly and lengthy procedures for connecting projects to the grid, i.e., offshore and onshore wind power (globally), and the role of storage.



## 1E: Building Energy Resilience: Large Centralised vs. Distributed Systems

The DNA of renewables – their global availability and decentralised nature – can increase the resilience of energy systems. Renewables can improve technical resilience to the impacts of climate change, ensure sufficient access to stable energy sources (e.g., avoiding blackouts and brownouts) and provide flexibility. This session will challenge conventional concepts such as the need for and superiority of centralised baseload power stations and the supposed lack of reliability of systems based on variable renewable energy. (Note: economic and social resilience is covered in Track 3.)

## Track 2: Renewables: Meeting Energy Demand in All Sectors

The demand for renewable energy is increasing. Energy is consumed across a diversity of economic sectors, including buildings, industry, transport and agriculture. Decision makers and decision-making processes in these “non-energy” sectors are crucial to accelerating the transition to renewables. Stronger integration is necessary: renewable energy planning and decision processes on the supply side must go hand in hand with those in the energy-consuming sectors. Meeting the diversity of energy demands also requires making choices about the type of fuel – whether renewable power, thermal energy, or renewable-based fuels such as biofuels, green hydrogen, ammonia and synthetic fuels.

### 2A: Renewables for Industry

Industry is responsible for roughly one-third of the world’s final energy consumption. Industry is a crucial end-use sector that must be engaged to achieve high shares of renewables to drive the energy transition. It is also facing serious challenges related to energy security and rising energy costs. Renewable energy, in its different forms, is a solution to these challenges. This session will showcase pioneering solutions for industries with different needs, explore the relationship between energy and industrial policies, and look at what needs to happen to mainstream renewable energy solutions in industry, ranging from small to large scale.

### 2B: Renewables for Agriculture

The agriculture sector is a key economic sector and an important driver of socio-economic development. Access to reliable and affordable energy is vital to enable growth in the sector, as energy helps to increase yields, add value, reduce losses and improve market access. This session will examine how to meet growing renewable energy needs in agriculture – including for machinery, irrigation, heating and cooling, fertilizer, etc. – in an inclusive manner and discuss key actions to scale up renewables. It will also showcase innovative solutions for the mixed use of land for farming and renewables.

### 2C: Renewables for Transport

Transport contributes around one-quarter of all energy-related carbon dioxide emissions. Stronger action on renewable energy (e.g. electricity, e-methane, green hydrogen) must be part of a systemic approach to decarbonising passenger and freight transport, ranging from urban transport to rail and shipping. This session will examine developments in the different transport sub-sectors, focusing on road transport, responsible for 80% of the sector’s CO<sub>2</sub> emissions, and will explore how governmental and non-governmental actors can work together more effectively.

### 2D: Renewables for Buildings

A key pillar to achieving decarbonisation is integrating renewable energy sources into buildings and their direct surroundings. Various policies and renewable technologies can reduce demand and provide many, if not all, of the energy needs of individual buildings and small communities. Co-benefits can include improvements in the indoor climate, reductions in energy poverty and an increase in quality jobs. Based on practical examples and varying perspectives, this session will explore the interface between renewable energy, architecture,



building materials and identify levers to accelerate the uptake of renewables in the buildings sector, including cultural, regulatory, technology and financial aspects (Note: this session has a strong connection to session 4.D, which features urban planning.)

## **2E: Electricity, Hydrogen and Low Thermal: The Interplay**

The science in the latest report from the Intergovernmental Panel on Climate Change is crystal clear: speculative technological fixes (carbon capture and storage, hydrogen) are no substitute for real efforts to eliminate fossil fuel use. Only systemic transformations and scaling up both energy savings and all renewable energy carriers can secure a safe, healthy and liveable planet. In this session, different renewable energy representatives will “pitch” their solutions, and a Danish case study will illustrate the interplay among these energy carriers.

## **Track 3: Seize the Opportunity: Building a New Economy with Renewables**

Renewable energy has the potential to build value chains and stimulate local economic development. Renewables create jobs throughout the energy value chain, from materials extraction and processes, to manufacturing, installation and maintenance. Renewables also provide secure and reliable energy to “power” economic activities across all sectors. But, we need to massively scale up renewables, which requires significant industrial development, building up manufacturing and the skilling of people. To fully seize the economic opportunities associated with renewables, their development needs to move to the centre of economic, industrial, and trade strategies and policies. This track explores the necessary industrial developments, how to ensure local and equitable value creation, and the rules that need to be changed.

### **3A: Local Value Creation: Building Inclusive Economies**

The economic rationale of renewable energy is a key incentive for local communities to become involved in the energy transition. Substituting imported fossil fuels or final energy with renewables creates opportunities for employment and economic development. This session will demonstrate how renewables can create local value and explore new approaches to ensure that this value creation is not limited to select parts of the community or economic sectors.

### **3B: The Renewables Transition: Turning Crises into Economic Opportunities**

The current global crises – energy, climate– can be used as a turning point towards a cleaner and more secure future based on renewables. Affordable, stable access to energy supply has become a locational advantage in attracting industries. This session will explore the different types of economy-wide opportunities that come with renewables –from export to local development– and how these can be ramped up.

### **3C: The New Rules of Renewable Energy Supply Chains**

With the world’s insatiable hunger for ever more energy, the renewable energy sector must think long and hard about strategies to overcome potential limitations in its supply chains. Constraints include competition for land use, rare minerals and natural resources, human rights as well as trade rules that may impede the use of local content and development of local and regional supply chains. This session will identify risks and impacts to the sector’s operations, the hazards of commodity dependence and discuss how to change the “rules of the game”.



### 3D: Mind the Gap: Job Offers and Skilling

As many as 10.3 million jobs in energy efficiency and renewables could be created globally by 2030. This means that a successful shift to renewable energy requires a massive expansion of the skilled workforce in electrical engineering, heating and cooling technology, energy advice, computer science, and supporting services such as business management and community relations. At the same time, youth unemployment remains high, especially in many developing countries. How do we train and skill this workforce at the scale and speed needed? What innovative approaches and alliances could be formed to overcome the gaps and turn the renewable energy transition into a massive engine for skilling and job creation?

### 3E: The Case of SMEs: Driving Change Outside Globalised Markets

Start-ups and small and medium-sized enterprises (SMEs) play key roles in innovation and bringing renewable energy technologies to market. These organisations have knowledge of local markets and can participate in particular in small equipment manufacturing activities, installation, civil works, retail and maintenance. This session will explore how the growth of renewables can catalyse new entrepreneurial ecosystems. It will highlight opportunities for SMEs, their importance in local value creation and how they can/should be supported.

## Track 4: People at the Centre: Renewables at the Heart of Society

People can benefit massively from renewable energy everywhere. Renewables not only provide the energy we need, ensure energy access, and create a healthy environment, they also offer the opportunity to create jobs and economic opportunities and build a fairer, more inclusive society. With the right regulatory framework, the decentralised nature of renewable energy enables diverse players – including citizens, cities and regions – to engage actively in the energy game and produce their own energy. Yet, in some parts of society, the development of renewables can be seen as threatening. This track will address how to inspire and ensure the necessary trust to make the energy transition “work” for all. It will also explore how players from government, industry and civil society can work together to reach this goal.

### 4A: Can Renewables Solve Energy Poverty?

Energy poverty can be found in all conditions where there is a lack of – or difficulty in affording – adequate, reliable, quality, safe and environmentally sound energy services. The current energy crisis exacerbates these injustices. This session will discuss the repercussions of the energy crisis on the most vulnerable populations and provide evidence on how renewable energy solutions contribute to eliminating (energy) poverty.

### 4B: Changing Energy Governance: Communities and Cities Shifting to Renewables

Local communities and cities play a central role in the energy transition by shaping urban infrastructure planning, traffic regulations, social housing, street lighting, etc. However, they are often constrained by a lack of money and human resources, and they encounter numerous structural barriers such as a lack of power, conflicting national legislation, litigation by fossil fuel interests, citizens’ priorities etc. This session will showcase good and bad practice examples, discuss how to overcome governance barriers, and formulate concrete demands on how to bring citizens into the centre of the decision-making process.

### 4C: Renewables leading the transition: Just, Equitable, Distributed, Inclusive

Putting a rapid end to the fossil fuel era offers unprecedented opportunities to create just, equitable, distributed and inclusive economies. Based on visionary approaches and concrete examples, this session will call out the abuses and identify critical factors, potential pitfalls and scalable solutions to make sure that the renewables transition delivers.





#### 4D: Engaging Citizens from the Bottom-Up

Citizen engagement is central to integrating renewable energy across our economies and society. Putting people at the centre can help overcome even the most radical opposition to the implementation and use of renewables. It helps ensure that citizens benefit concretely from renewable energy projects – financially, morally and beyond the energy service itself.

#### 4E: Stopping the Exodus: How Renewables Can Make People Stay

Rural migration to urban locations is a constant almost everywhere in the world. As people move to cities, life in rural communities becomes harder. There are fewer and fewer jobs, declines in infrastructure development, and reductions in access to critical services such as health care and education. This session will show how renewables can bring back dignity and quality of life to rural and indigenous communities and motivate (especially) younger generations to stay. It will also identify ways to create the necessary ecosystem of technology, financing, policies and engagement.

### Track 5: Innovation to Fast-Track and Scale Up Renewables

Business as usual cannot continue. Renewable energy deployment must be massively scaled up, and the shift to renewables needs to be accelerated before 2030. Technological innovation is not the silver bullet. We urgently need changes in thinking, business models and creative solutions to create a disruptive environment that allows for structural transformation and the rapid scale-up that is required. The sessions in this track reflect the need to think outside the box and to democratise innovation, with a focus on new market players, approaches and leadership.

#### 5A: Beyond Technology: Using Social and Policy Innovation to Accelerate the Shift to Renewables

Social innovation and policy innovation must be paired with technological innovation to ensure the deep structural transformation needed. Social innovation can support increased energy democracy and citizen participation and develop innovative approaches to increase the uptake of renewables. This session will explore how innovation can create a supportive environment and build social acceptance of renewable energy. It will also examine how policies can foster such solutions.

#### 5B: Disrupting the Fossil Fuel Reality: Using Innovation to Shift to Renewables

Continued innovation in renewables is not guaranteed. Push and pull are needed including through policy support, development of incubators and accelerators, etc. This session will showcase successful strategies to foster game-changing innovation and how to scale this innovation up to market maturity via practitioners, such as renewable energy start-ups, scientists and intergovernmental organisations.

#### 5C: Consumer Trends in Goods and Services Markets: Building Strategically on ESG to Accelerate Renewables

A global build-out of renewables at the scale required will have major impacts across sectors, society and the natural world. Using environmental and social governance (ESG) can help the energy sector and investors understand the positive and negative impacts associated with renewable energy investments. This session will explore how financing institutions and businesses can strategically build on ESG to accelerate the deployment of renewables, creating value-added and ensuring social acceptance.



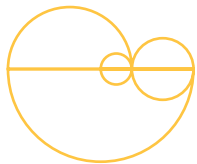
## 5D: Digitalisation to Speed the Energy Transition

Digitalisation is improving the safety, productivity, accessibility and sustainability of energy systems. It can help integrate variable renewables by enabling grids to better match energy demand. Storage and digitally enabled demand response can reduce curtailment. Blockchain allows consumers to order electricity directly from a neighbour's solar PV installation. This session will explore different aspects of digitalisation – from artificial intelligence to the Internet of Things, to blockchain – in the renewable energy value chain and how these can contribute to accelerating the uptake of renewables.

## 5E: End-of-Life: Circularity in Renewables

Circularity in renewable energy materials is key to minimise resource use and embedded carbon while growing the sector. It is also a building block to greater self-sufficiency and supports the development of supply chains. This session will highlight promising approaches to increase the reuse and recycling of materials for and from renewable energy technologies to inspire wide-scale implementation and innovations.





# 20 FEBRUARY 2023

08:30 - 09:30 Registration opens

---

09:30 - 11:00 **OPENING CEREMONY**  
AUDITORIUM  
(Rooms  
N103+N104)  
*Event Driver: Lorenzo Milá*

09:30 - 09:45 **Official opening**

**PEDRO SÁNCHEZ**  
Prime Minister of the Government of Spain

09:45 - 09:50 **Welcome address speech**

**ARTHOUROS ZERVOS**  
President of REN21

09:50 - 10:45 **High Level Discussion: Renewable Energies to Navigate through the World of the Polycrisis: Walking the Talk on our Path to 2030**

*Moderator: Cristina Monge*, political scientist and expert in governance for ecological transition

**FRANCESCO LA CAMERA**  
Director General of IRENA

**KADRI SIMSON**  
Commissioner for Energy of the European Commission

**TERESA RIBERA**  
Deputy Prime Minister for the Ecological Transition and Demographic Challenge of Spain

10:50 - 11:00 **Show cultural**

---



---

11:00 – 12:30  
AUDITORIUM  
(Rooms  
N103+N104)

## MINISTERIAL AND HIGH LEVEL DISCUSSION

11:00 - 11:45 **Roundtable Energy Security: Opportunities and Challenges for a genuine Energy Union – the Energy pillar of the EU's Open Strategic Autonomy**

*Moderator:* **Teresa Ribera**, Deputy Prime Minister for the Ecological Transition and Demographic Challenge of Spain

*Keynote speaking (video):* **Mariana Mazzucato**, Professor in the Economics of Innovation and Public Value at University College London

**ROB JETTEN**

Minister of Energy of Netherlands

**VIRGIL-DANIEL POPESCU**

Minister of Energy of Romania

**ANA GOUVEIA**

Secretary of State of Energy of Portugal

**HENRIK ANDERSEN**

CEO of VESTAS

11:45h - 12:30 **Roundtable Net-zero**

*Moderator:* **Sara Aagesen**, Secretary of State of Energy, Ministry for the Ecological Transition and Demographic Challenge of Spain

*Keynote speaking*

**REN JINGDONG**

Vice Administrator of National Energy Administration of China

**MARÍA NEIRA**

Director, Public Health and the Environment Department, World Health Organisation

**MOHAMED BENYAHYIA**

Secretary General of the Ministry for the Energy Transition and Sustainable Development of Morocco

**HEIKE HENN**

Director Energy, Climate and Environment at the German Federal Ministry of Economic Cooperation and Development

**PAUL HEITHERSAY**

Chief Executive of the Department for Energy and Mining, Government of South Australia



---

12:30 - 14:00

Lunch Break

---

14:00 - 15:30  
ROOM N101

● **1A: Rethinking our Energy Supply:**  
Renewables, energy security and geopolitics

*Moderator:* **Joan Groizard.** IDAE

**MARGALITA ARABIDZE**

Ministry of Economy and Sustainable – Georgia

**TOMAS KABERGER**

Chalmers University of Technology in Göteborg

**GRACE KARANJA**

Environment, Energy Natural Resources and Climate Change

**ANNA SHPITSBERG**

Energy Transformation. U.S. Department of State

**RAFAEL MATEO**

Acciona Energía

---

14:00 - 15:30  
ROOM N102

● **2A: Renewables for Industry**

*Moderator:* **Sabine Froning.** Communication Works – Froning, Reise GmbH

**ISKANDER BURANOV**

Business Initiatives, CIS, Renewables Business Unit, Larsen & Toubro Construction

**ANTONIO LÓPEZ-NICOLÁS BAZA**

Renewables and Energy System Integration, European Commission

**GOKCE METE**

Hydrogen & Industry Decarbonization, Global Hydrogen Stakeholder Platform

**PALOMA SEVILLA**

AELEC

**ALEXANDRA TUDOROIU-LAKAVIČĚ**

Cogen Europe

**DAVID TREBOLLE**

Protermosolar

**ALI ZEROUALI**

Moroccan Agency for Sustainable Energy (MASEN)

---



---

14:00 - 15:30  
ROOM N106

● **3A: Local Value Creation: Building inclusive economies**

*Moderator:* **Wangari Muchiri**. Global Wind Energy Council

**VANESA MARTOS POZO**

ECOWAS Centre For Renewable Energy And Energy Efficiency

**ALI ZEROUALI**

Moroccan Agency for Sustainable Energy (MASEN)

**LAURA MARTIN MURILLO**

Just Transition Institute

**MARÍA PRADO**

Greenpeace Spain

**JAD BABA**

REN21

---

14:00 - 15:30  
ROOM N105

● **4A: Can renewables solve energy poverty?**

*Moderator:* **Ewah Eleri**. International Centre for Energy, Environment & Development Nigeria

**ANA ROVZAR**

RES4Africa Foundation

**PILAR SEVILLA**

Energías sin Fronteras Foundation

**GURBUZ GONUL**

IRENA

**RAFAEL SOLIS**

EDP Renewables

---



---

14:00 - 15:30  
ROOM N117

● **5A: Beyond Technology:** Using social innovation to accelerate the shift to renewables

*Moderator:* **Laura Williamson.** REN21

**DAMARIS AGWEYU**

Women for Environment Africa

**XAVIER GARCIA-CASALS**

IRENA's Knowledge Policy and Finance Centre

**BERND RIEDEL**

Ellery Studio

**TSSHERING TOBGAY**

People's Democratic Party in Bhutan

**MICHELLE MUSCHETT**

UNDP

---

15:30 - 16:00

Break

---

16:00 - 17:30  
ROOM N101

● **1B: Beyond market reform:** Strengthening supply chains to scale-up the renewables sector

*Moderator:* **Rana Ghoneim.** UNIDO

**HENOK ASSEFA**

Precise Consult

**RISHABH JAIN**

CEEW

**MARGARITA DE GREGORIO**

GEOPLAT/BIOPLAT

**MEGHAN O'SULLIVAN**

Harvard Kennedy School of Government

**JOAN BATALLA**

SEDIGAS

---



---

16:00 - 17:30  
ROOM N102

● **2B: Renewables for Agriculture**

*Moderator: Meghan Sapp. PlanetEnergy*

**PEDRO BARATO TRIGUERO**

President of Triguero Asociacion Agraria Jovenes Agricultores  
ASAJA

**ISHTIAQ A CHISTI**

USAID

**IBRAHIM TOGOLA**

Mali Folkecenter

**IRINI MALTSOGLU**

UN FAO

**PAULA SANTOS**

UNEF

---

16:00 - 17:30  
ROOM N106

● **3B: The Renewables Transition: Turning Crises into Economic Opportunities**

*Moderator: Maruxa Cardama. SLOCAT Partnership on Sustainable, Low Carbon Transport*

**PHILIP TURNER**

International Association of Public Transport's (UITP)

**ZEINA KHALIL HAJJ**

350.org

**SAYURI CHETTY**

ICLEI Africa

**MINORU TAKADA**

United Nations

**LAURA CORCORAN**

AptechAfrica

**BENOIT BIZET**

Royal Danish Embassy in Paris

---





---

16:00 - 17:30  
ROOM N105

● **4B: Changing Energy Governance:** Communities and cities shifting to renewables

*Moderator:* **Tabaré A. Currás.** WWF Cities

**VERÓNICA ARIAS**

Coalición de ciudades capitales de las Américas frente al cambio climático (CC35)

**JOEL NANA**

Sustainable Energy Africa

**LEA RANALDER**

UN Habitat

**CHRIS RADOJEWSKI**

Powering Past Coal Alliance (PPCA)

**DANIELA MASTRANGELO**

City Representative

**AININA SOFIA**

Energy Action Partners

---

16:00 - 17:30  
ROOM N117

● **5B: Disrupting the Fossil Fuel Reality:** Using innovation to shift to renewables

*Moderator:* **Sabine Froning.** Communication Works

**PAUL KELLETT**

UN Environment's global 'United for Efficiency' (U4E)

**JEROME KUSTERS**

The Stakeholder Company

**MAJD MASHHARAWI**

SunBox Group LTD

**HUSSEIN MOGAIBEL**

Islamic Development Bank

**JAMES WALSH**

Mainstream Renewable Power South Africa

---

17:30 - 18:00  
AUDITORIUM  
(Rooms  
N103+N104)

**Day's Learnings: Perspectives**

---



---

18:00 - 19:30  
ROOM N101

- **La transición energética en las islas españolas**  
IDAE

---

18:00 - 19:30  
ROOM N102

- **Empowering Lives and Livelihoods: Renewables for Adaptation USD 1-Billion Financing Facility to Reinforce Resilience in Agri-Food and Health Value Chains with Renewable Energy (A COP28 Initiative)**  
United Arab Emirates (UAE)

The UAE and IRENA are jointly organising the session to raise awareness and support for the COP28 initiative for governments, philanthropy, foundations, trusts, charitable funds, and businesses in climate, renewables and sustainability to be an integral part of the initiative.

---

18:00 - 19:30  
ROOM N114

- **What Community Power Needs**  
World Wind Energy Association (WWEA)

The event will present, from practitioners' viewpoints, the barriers which hinder a more decentralised and citizen-focused energy supply. Speakers will highlight the situation on the Iberian peninsula, and identify barriers as well as opportunities of community and citizen-based renewable energy economies.

---

18:00 - 19:30  
ROOM N105

- **The Role of Bioenergy in Spain and Beyond**  
World Bioenergy Association (WBA)

The event will gather experts to share examples of biomass heat as a renewable option in industries and residential end-use sectors. After presenting the role of bioenergy globally and in Spain, representatives from companies offering services to industries and collective residential heating will share their experience implementing biomass heating solutions.

---

18:00 - 19:30  
ROOM N117

- **Lessons Learned in Rapid Decarbonization of Power Sectors**  
National Renewable Energy Laboratory (NREL)

This high-level panel will explore highlights of the report "Lessons Learned in Rapid Decarbonization of Power Sectors," a collaborative effort of the 21st Century Power Partnership that encapsulates key learnings from planning, building, and operating decarbonized power systems over the past decade.

---

18:00 - 19:30  
ROOM N115

- **Enabling Regulatory Mechanisms for Seamless Integration of RE in Transport**  
SLOCAT / World Resources Institute (WRI)

This panel discussion will bring stakeholders from the private and public sectors to identify enabling regulatory measures that ensure seamless integration of EV into grid and RE charging. Partner representatives from the NDC Transport Initiative for Asia project will present India's case study, adding examples from Spain and other countries.





# 21 FEBRUARY 2023

08:30 - 09:30 Registration opens

---

09:30 - 10:30  
AUDITORIUM  
(Rooms  
N103+N104)

## High Level Panel: Renewable energy for social and economic development for all

*Moderator: Ana Belén Sánchez. ITJ Advisor*

### ANNA SHPITSBERG

Deputy Assistant Secretary, U.S. Department of State

### GLORIA MAGOMBO

Secretary for Energy and Power Development, Ministry of Energy and Power Development of Zimbabwe

### ALICIA MONTALVO SANTAMARÍA

Manager of Climate Action and Positive Biodiversity, Development Bank of Latin America (CAF). Kandeh Yumkella: Advisor, Ashinaga

### NELSON LAGE

President European Energy Network (EnR) and President of the Portuguese Energy Agency (ADENE)

### PAOLO FRANKL

Head of Renewable Energy Division, International Energy Agency (IEA)

### IBRAHIM YACOUBOU

Minister of Energy and Renewable Energies of Niger

### ROMEO MIKAUTADZE

Minister of Economy and Sustainable Development of Georgia

### KANDEH YUMKELLA

Advisor, Ashinaga

---

10:30 - 11:00 Break

---



---

11:00 - 12:30  
ROOM N101

● **1C: Ramping up Renewable Energy Deployment: The indispensable building block**

*Moderator: Sabine Froning.* Communication Works

**RAMÓN MENDEZ GALAIN**

Leading the Latin American Non Profit Organization

**RAMÓN FIESTAS HUMMLER**

GWEC Latin America

**JULIA SOUDER**

Long Duration Energy Storage Council

**PAOLO FRANKL**

International Energy Agency

**MIQUEL MUÑOZ CABRÉ**

SEI - Stockholm Environment Institute

**GIANNI CHIANETTA**

Global Solar Council

---

11:00 - 12:30  
ROOM N102

● **2C: Renewables for Transport**

*Moderator: Maruxa Cardama.* SLOCAT Partnership on Sustainable, Low Carbon Transport

**MIKE ENSKAT**

Sectoral and Global Programmes, GIZ

**APARNA VIJAYKUMAR**

Electric Mobility with the Sustainable Cities and Transport Team at WRI India

**HARRY LEHMANN**

PTX Lab – Lausitz – Chairperson World Council for Renewable Energy

**JOEL YONGOUA NANA**

Sustainable Energy Africa

---



---

11:00 - 12:30  
ROOM N106

● **3C: The New Rules of Renewable Energy Supply Chains**

*Moderator:* **Thomas Nowak**. European Heat Pump Association

**CHRISTOPHER DENT**

Edge Hill University

**JARROD LYONS**

Atlantis Special Economic Zone Company

**RICHARD DAY**

Energy and Mining Government of South Australia

**MARTA SAN ROMÁN**

AFEC

**FRANCISCO PERUCHO**

AFEC

---

11:00 - 12:30  
ROOM N105

● **4C: Renewables Leading the Transition: Just, equitable, distributed, inclusive**

*Moderator:* **Irene Giner-Reichl**. Ambassador ret

**CHRISTIAN RAKOS**

World Bioenergy Association

**DAVID ARINZE**

Diamond Development Initiatives (DDI)

**LEONARDO BELTRAN**

Sustainable Energy for All

**JULIE BEAULIEU**

Student Energy

**MARILYN SMITH**

The ENERGY ACTION Project (EnAct)

**VICTOR VIÑUALES**

ECODES

**YANN DUMONT**

ASEALEN

---



---

11:00 - 12:30  
ROOM N117

● **5C: Consumer Trends in Goods and Services Markets:**  
Building strategically on ESG to accelerate renewables

*Moderator:* **Mariana Castano-Cano.** 10 Billion Solutions

**IDA KRABEK**  
Ørsted

**JEROME KUSTERS**  
The Stakeholder Company

**ANDREA WAINER**  
REN21

**SANTIAGO GÓMEZ RAMOS**  
APPA

**QI KAI SHENG**  
IKEA

---

12:30 - 14:00

Lunch Break

---

14:00 - 15:30  
ROOM N101

● **1D: Grids and Infrastructure:** The backbone of renewable energy systems

*Moderator:* **Antonella Battaglini.** Renewables Grid Initiative

**BEATRIZ CORREDOR SIERRA**  
Redeia

**JAQUELIN COCHRAN**  
National Renewable Energy Laboratory

**MARIA JOSÉ ESPÍRITO SANTO**  
Directorate-General of Energy and Geology of Portugal

**YIN BO**  
GEIDCO Europe Office

---



---

14:00 - 15:30  
ROOM N102

● **2D: Renewables for Buildings**

*Moderator:* **Lea Ranalder.** UN Habitat

**PETER LUNDBERG**

Asia Pacific Urban Energy Association (APUEA)

**THOMAS NOWAK**

European Heat Pump Association

**NILCE GREGORET**

Project 100% Renewables: Cities and Regions Roadmap. Local leader of Avellaneda, the model city in Argentina

**ANDREA VOIGT**

Danfoss

**LUIS CABRERA**

ANESE

---

14:00 - 15:30  
ROOM N106

● **3D: Mind the Gap: Job offers and skilling**

*Moderator:* **Mariana Castano-Cano.** 10 Billion Solutions

**NAWAL AL-HOSANY**

UAE to the International Renewable Energy Agency (IRENA)

**THOMAS ANDRÉ**

REN21

**DIANA JUNQUERA CURIEL**

ITUC's Just Transition Centre

**IRENE GINER-REICHL**

Ambassador ret

**OLEGUER FUERTES**

ASIT



---

14:00 - 15:30  
ROOM N105

● **4D: Engaging Citizens from the Bottom-Up**

*Moderator:* **Niels Reise.** Communication Works

**KOSSI AFELETE ATIGAKU**  
PADIE

**ELIFADHILI SHAHIDI**  
Climate Action Network-Tanzania

**ERICA WU**  
Student Energy

**MARYKE VAN STADEN**  
ICLEI - Local Governments for Sustainability

**MONTSERRAT MIR**  
ITUC's Just Transition Centre

---

14:00 - 15:30  
ROOM N117

● **5D: Digitalisation to Speed up the Energy Transition**

*Moderator:* **Martin Hullin.** Datasphere Initiative

**ALFREDO PARRES**  
Hitachi Energy

**LUIS MARQUINA**  
AEPIBAL

**CARLOS VILA**  
Iberdrola

**JUAN DIEGO DÍAZ**  
AEE

**CARMEN GONZÁLEZ MURIANO**  
Airzone

**ELENA DODEVSKA**  
TSC

---

15:30 - 16:00      Break

---





---

16:00 - 17:30  
ROOM N101

● **Good practices in ecological and socio-economic integration of energy initiatives**

Global Solar Council (GSC) / Spanish PV Association (UNEF)

Energy transition demands the application of best practices in renewables, integrating socio-economic and environmental aspects to ensure people and nature are the core of decision-making toward resilient and green economies. The session will showcase the Spanish Certification of Excellence in Sustainability to promote high-quality standards and innovation in solar photovoltaics.

---

16:00 - 17:30  
ROOM N102

● **100% Renewable Cities and Regions: Argentina, Indonesia and Kenya**

ICLEI - Local Governments for Sustainability

This session will present perspectives from local governments from the Global South on the challenges and opportunities involved in implementing a sustainable energy transition, including the ambitious goal of 100% renewable energy use across all sectors.

---

16:00 - 17:30  
ROOM N106

● **Renewable Energy to achieve universal access to energy**

Mesa para el Acceso Universal a la Energía

---

16:00 - 17:30  
ROOM N105

● **The critical role of Marine Energy in the sustainable energy transition - supported by international standards and certification**

International Electrotechnical Commission (IEC)

The session will provide a summary of marine energy developments in Spain and globally, along with examples of the critical role that IEC Standards and Conformity Assessment Systems play in reducing risk, increasing confidence, and enabling the industry's growth

---

16:00 - 17:30  
ROOM N117

● **Australia: A successful integration of substantial and increasing levels of variable renewable energy**

Clean Energy Council (CEC)

A standout case study in Australia's rapid clean energy transition can be found in South Australia, where – through both necessity and vision – the state has achieved the feat of operating its electricity system on 100 per cent renewables for days at a time.

---



---

16:00 - 17:30  
ROOM N114

● **Gender Equality: A critical pathway for a sustainable and inclusive energy transition**

United Nations Development Programme (UNDP)

The main objective of this session is to showcase the opportunities the just energy transition presents to catalyse gender equality and women's economic empowerment, generating multiple development benefits, and the needs for such processes to purposefully develop target approaches to integrate women as agents of change.

---

16:00 - 17:30  
ROOM N115

● **Mobilisation of Finance to Achieve SDG7 in Africa – Launch of the 2022 AEEP Report on Financial Flows**

African-European Energy Partnership (AEEP)

The event will focus on the current energy crisis and how Africa and Europe can work jointly to combat climate change and achieve access to affordable energy for all by evolving governments, the private sector, and civil society.

---

17:30 - 18:00  
AUDITORIUM  
(Rooms  
N103+N104)

**Day's Learnings: Perspectives**

---

18:00 - 19:30  
ROOM N101

● **Vientos de futuro: el diálogo para el desarrollo inclusivo de la eólica**

Vientos de Futuro

---

18:00 - 19:30  
ROOM N102

● **Mesa de diálogo del Cambio Climático y Energía: La experiencia de Navarra**

Mediación Navarra

---

18:00 - 19:30  
ROOM N106

● **Faster and further with HEAT PUMPS: decarbonizing heating, cooling and hot water**

European Heat Pump Association (EHPA) / Air Conditioning Equipment Manufacturers Association (AFEC)

This session will present benefits of heat pumps as a key technology to current energy efficiency and decarbonisation targets, and as a reference for public/private actors involved in the electrification of economy to increase the use of renewables for energy security and strategic autonomy.



---

18:00 - 19:30  
ROOM N105

● **Alliance for a Just Energy Transformation (AJET) –  
A collaborative discussion on shaping the Alliance’s strategy  
and its implementation**

World Wildlife Fund (WWF) / United Nations Development  
Programme (UNDP)

This event will bring together organisations who have an interest to take action related to Just Energy Transition and work with others to share knowledge, build on existing activities, co-ordinate, and collaborate. It will consider the practical needs to address and propose priority activities for the AJET Alliance.

---

18:00 - 19:30  
ROOM N117

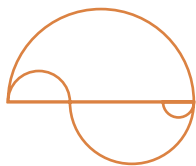
● **How to Scale Minigrids and Score a Climate Win-Win**

Africa Minigrid Developers Association (AMDA) / Husk

This interactive session (with no presentations) will focus on tracing a roadmap for RE minigrids to reach their full potential, with insights from experts about scale, speed, and sustainability, including finance, policy, and innovation. It will also highlight the importance of minigrids in the context of climate action and finance.

---





# 22 FEBRUARY 2023

08:30 - 09:30 Registration opens

---

09:30 - 10:30  
AUDITORIUM  
(Rooms  
N103+N104)

## High Level Panel: Energy and industrial policies to mainstream renewables

*Moderator:* **Joan Groizard**, Director General of IDAE

### CELINE REYMONNET

Secretary General: Western Europe and Overseas, Akuo Energy

### RANA ADIB

Executive Director, REN21

### RAMÓN MENDEZ GALAIN

Former Energy Minister, Uruguay

### JOSE DONOSO

Chairman, Global Solar Council

### CIYONG ZOU

Managing Director of Technical Cooperation Services Directorate, UNIDO

### ALI ZEROUALI

Head of Cooperation & International Development, Moroccan Agency for Sustainable Energy (MASEN)

---

10:30 - 11:00 Break

---

11:00 - 12:30  
ROOM N101

### ● ¿Las ciudades hacen su parte?

Greenpeace, Ecologistas en Acción, WWF España, Amigos de la Tierra, SEO/BirdLife

---

11:00 - 12:30  
ROOM N102

### ● Launch of the Global Landscape of Renewable Energy Finance 2023

International Renewable Energy Agency (IRENA)

This event will present insights from IRENA and CPI's Global Landscape of RE Finance 2023, including trends in investment by technology and sector, region, source of finance (public and private), and financial instrument. The role of public funding in driving investments will be discussed, particularly in developing countries that increasingly struggle to attract investments.

---



---

11:00 - 12:30  
ROOM N105

● **Technology pathways for decarbonization of energy intensive industries**

United Nations Industrial Development Organization (UNIDO)

The session will examine the status of readiness of different technologies for industrial decarbonisation, share examples and best practices for enabling the development of new technologies, and discuss how government policies can create the right pull mechanisms to boost innovation and deployment.

---

11:00 - 12:30  
ROOM N114

● **Stakeholders' Role in the Electricity Grid Infrastructure Planning**  
Renewables Grid Initiative (RGI)

This interactive session will raise awareness about the importance of stakeholder engagement in grid planning, and the equally valuable views of all stakeholders. The audience will have the possibility to learn and exchange different stakeholder engagement measures and experiences in grid planning with project partners.

---

12:30 - 14:00

**Lunch Break**

---

14:00 - 15:30  
ROOM N101

● **1E: Building Energy Resilience: Large centralised vs. distributed systems**

*Moderator:* **William Brent.** Husk Power Systems

**DIPTI VAGHELA**

Hydropower Empowerment Network (HPNET)

**DOUGLAS ARENT**

National Renewable Energy Laboratory (NREL)

**PABLO VALVERDE**

International Hydropower Association (IHA)

**KARIM SELOUANE**

Resallience

**NEERAJ KULDEEP**

Council on Energy, Environment and Water (CEEW)

---



---

14:00 - 15:30  
ROOM N102

● **2E: Electricity, Hydrogen and Low Thermal:** The interplay

*Moderator:* **Adam Brown.** Independent Consultant

**THIERRY LEPERCQ**

HyDeal

**DIANA SÜNDERMANN**

TÜV Nord

**BRAM CLAEYS**

Regulatory Assistance Project

---

14:00 - 15:30  
ROOM N106

● **3E: The Case of SMEs:** Driving change outside globalised markets

*Moderator:* **Victor Marcos.** IDAE

**EWAH ELERI**

International Centre for Energy, Environment & Development,  
Nigeria

**CELINE REYMONNET**

Akuo Energy

**JAD BABA**

REN21

**ADRIANA RODRIGUEZ**

CLIMATE STRATEGY

**MARÍA DE PABLO**

Triodos Bank

---



---

14:00 - 15:30  
ROOM N105

● **4E: Stopping the Exodus:** How renewables make people stay

*Moderator:* **Rana Adib.** REN21

**ASUNCIÓN RUIZ GUIJOSA**

BirdLife

**LEONARD HERVÁS**

CIDE Asociación

**ASMA ROUABHIA**

El Khadra Sustainable

**DAVID LECOQUE**

Alliance for Rural Electrification (ARE)

**MOHAMMED JIBRIL**

Federal Government of Nigeria

**EUNBYEOL JO**

SFOC

---

14:00 - 15:30  
ROOM N117

● **5E: End-of-life:** Circularity in renewables

*Moderator:* **Mariana Castano-Cano.** 10 Billion Solutions

**JINLEI FENG**

International Renewable Energy Agency (IRENA)

**SERIFE 'ELIF' CAN SENER**

Research Fellow, Consultant, RESR2023 Author

**DEBORAH OHUI NARTEY**

Footprints Africa Limited

**SHARON GIL**

UNEP

---

15:30 - 15:45

Break

---



---

15:45 - 17:15  
AUDITORIUM  
(Rooms  
N103+N104)

**Closing Ceremony:** Continuous acceleration to be  
2050-ready

*Moderator:* **Miriam Bueno.** MITECO

**HELENA VIÑES**

Board Member of CNMV (Spanish financial markets regulator)

**KANE THORNTON**

CEO of Clean Energy Council

**DANNY KENEDY**

CEO of New Energy Nexus

Closing speech by **RAQUEL SÁNCHEZ.** Ministry of Transport, Mobility  
and Urban Agenda

---

