



Delivering on Sustainable Energy:

Subprogramme Accomplishments Since the Thirtieth Session of the Committee on Sustainable Energy



ENERGY



Ms. Denise Mulholland

Secretary, Committee on Sustainable Energy



Meetings, Trainings,
Webinars

3. Delivering on Sustainable Energy: programme Accomplishments Since the Thirtieth Session of the Committee on Sustainable Energy

5 Expert Group Annual Meetings

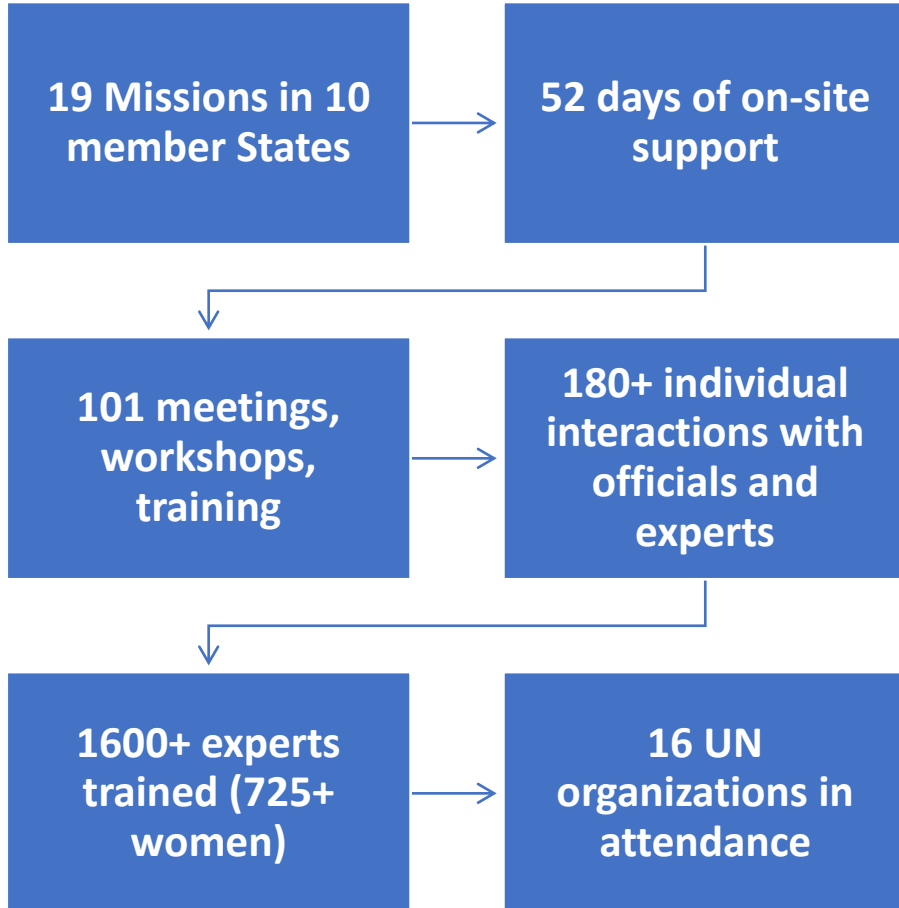
73 Bureau meetings

30 Workshops, Training, Webinars

3097 attendees, 971 women



3. Delivering on Sustainable Energy: Subprogramme Accomplishments Since the Thirtieth Session of the Committee on Sustainable Energy



3. Delivering on Sustainable Energy: Enhancing Outreach



**Just launched
September 2022!**
**UNECE Sustainable
Energy** on [LinkedIn](https://www.linkedin.com/company/unece-sustainable-energy) to
help us spread
information quickly and
more effectively to our
member States about key
products, events and
resources

<https://unece.org/sustainable-energy>

3. Delivering on Sustainable Energy: Achieving High Performance Buildings

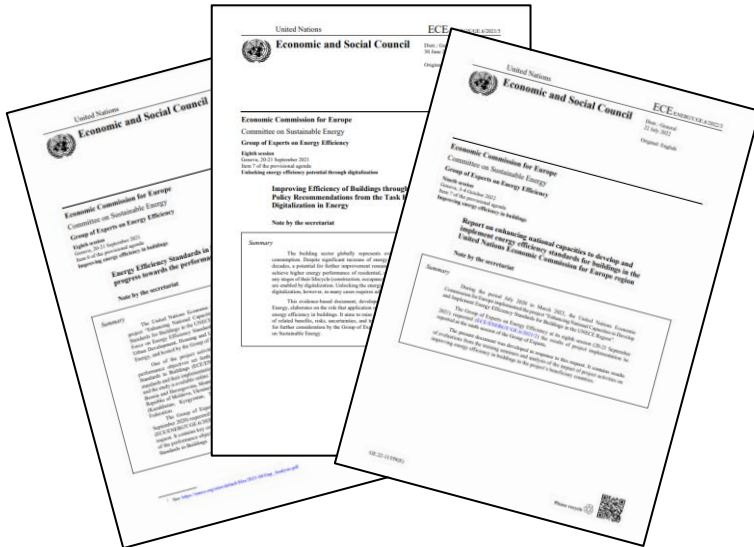


REPORTS

ECE/ENERGY/GE.6/2022/3 - [Report on enhancing national capacities to develop and implement energy efficiency standards for buildings in the United Nations Economic Commission for Europe region](#)

ECE/ENERGY/GE.6/2021/4 - [Energy Efficiency Standards in Buildings: analysis of progress towards the performance objectives](#)

ECE/ENERGY/GE.6/2021/5 - [Improving Efficiency of Buildings through Digitalization – Policy Recommendations from the Task Force on Digitalization in Energy](#)



EVENTS

Armenia, Yerevan and online | 09 - 11 March 2022
["Unveiling Market Opportunities for Boosting Residential Energy Efficiency and Alleviating Energy Poverty"](#) (Regional Advisory)

Moldova, Chisinau and online | 20 - 21 January 2022 | PROJECT
[National training seminar on high-performance energy efficiency standards in buildings in the Republic of Moldova](#) (Regional Advisory)

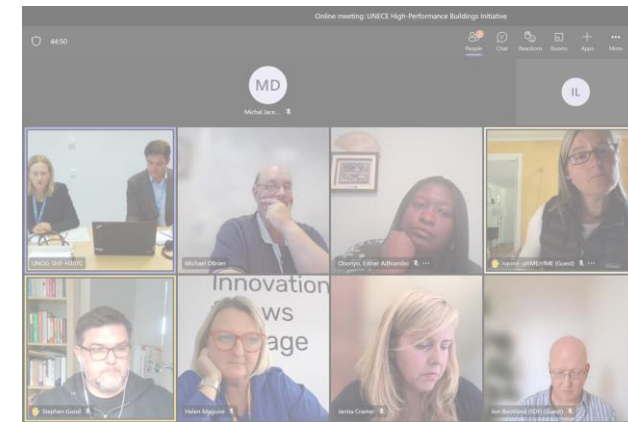
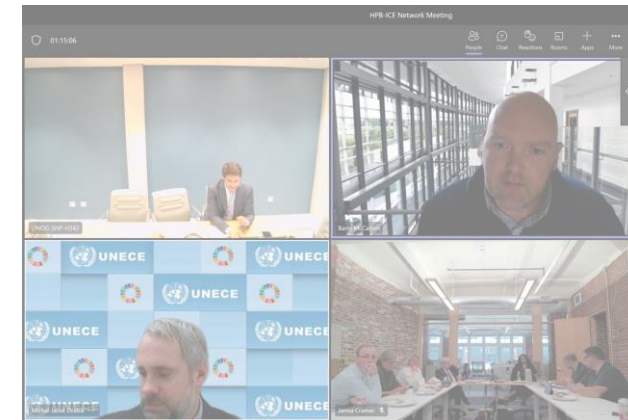
Kyrgyzstan, Bishkek and online | 29 - 30 November 2021 | PROJECT
[National training seminar on high-performance energy efficiency standards in buildings in Kyrgyzstan](#) (Regional Advisory)

Armenia, Yerevan and online | 25 - 26 October 2021 | PROJECT
[National training seminar on high-performance energy efficiency standards in buildings in Armenia](#) (Regional Advisory)

United States, Pittsburgh | 21 - 23 September 2022
[Clean Energy, Climate and the Built Environment: Ensuring a Healthy, Just and Sustainable Future for All](#)
[Towards a Buildings Breakthrough: Raising the Performance of the Built Environment](#)

ICE-HPB

COORDINATION MEETINGS



3. Delivering on Sustainable Energy: Modernizing Resource Management



Accelerated development and implementation of UN Classification for Resources (UNFC) and UN Resource Management System (UNRMS), with a focus on countries of the European Union for critical raw materials.

- Conducted **UNFC training**
- Created a **Network of Practitioners Europe**
- Drafted [UNRMS principles and requirements](#)
- **Supported resource efficiency** and progress towards a more circular economy
- Developed [case studies](#) from Bosnia & Herzegovina, Serbia, Ukraine, Kazakhstan, Kyrgyzstan and Tajikistan
- Fostered **adoption** by the African Union
- **Enhanced cooperation** with ESCAP and ESCWA

United Nations Resource Management System: Principles

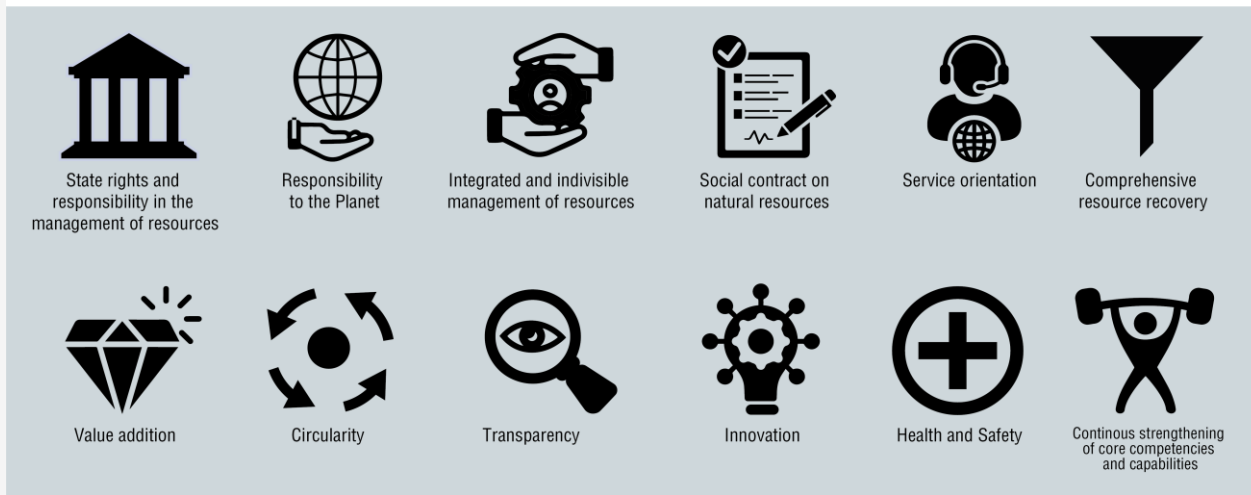
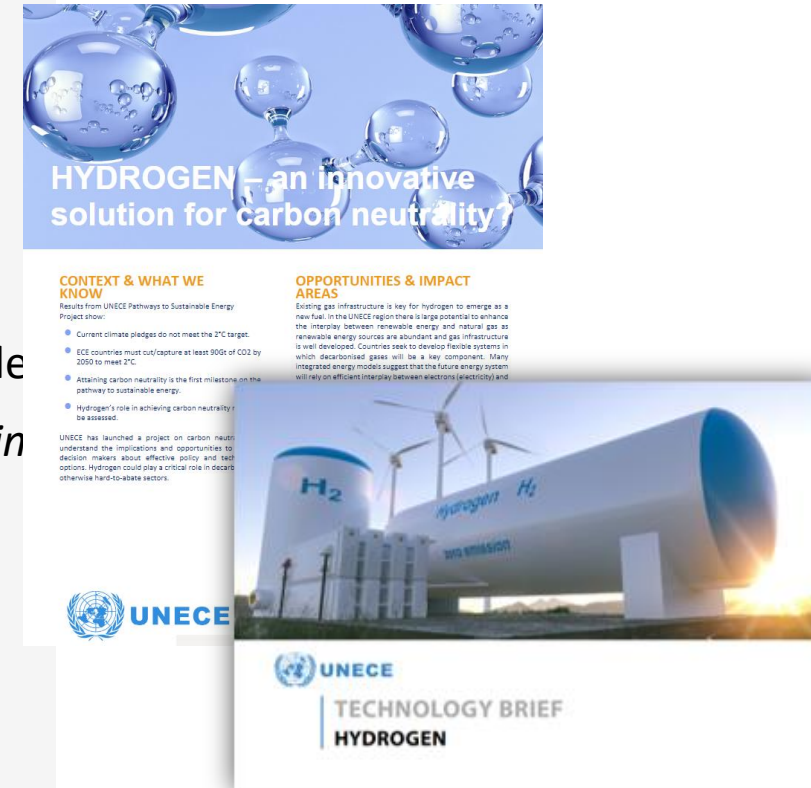


Image Credit: British Geological Survey, UK

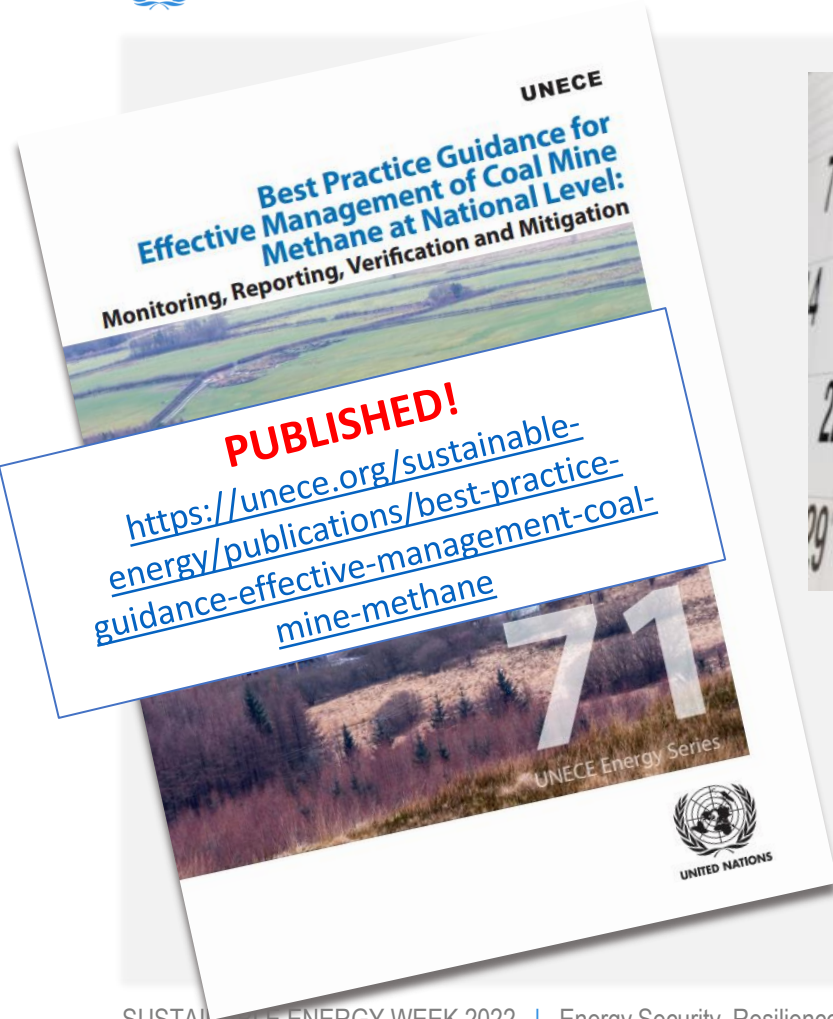
3. Delivering on Sustainable Energy: Enabling a hydrogen ecosystem



- The Group of Experts on Gas concluded in March 2022 that a hydrogen classification based on colours has limited value in international trade.
- GEG recommended to ECE member States to investigate integrated hydrogen production, transport, and consumption in the region and to examine regional potentials for hydrogen production and use at a local scale
- UNECE started to implement the project *Sustainable hydrogen production in the UNECE region and its role in the development of a hydrogen ecosystem and export potential*, funded by the Russian Federation.
 - Held a [webinar in December 2021](#), [Workshop in March 2022](#)
- Drafted document [Comprehensive and science-based terminology, classification and taxonomy for hydrogen](#) (ECE/ENERGY/2022/8)



3. Delivering on Sustainable Energy: Addressing Methane Management



Methane Mondays

- Launched & Hosted 5 exchanges on methane issues between various stakeholders
- Posted 13 [interviews](#) with experts on key topics online

PROGRESS ON JUST TRANSITIONS!

- [Expanded mandate](#) of the Group of Experts
- **Established cooperation** with Ukrainian local communities in mining areas
- **Hosted joint [side event](#)** with IEA, CSIS, and GBA at the **Global Clean Energy Action Forum** in Pittsburgh, Pennsylvania US on Friday, 23 September 2022

3. Delivering on Sustainable Energy: Carbon Neutrality



Outreach and Training

- Conducted **15 capacity building workshops and multi-stakeholder dialogues** about the potential of low- and zero-carbon technologies and their interplay to attain carbon neutral energy systems in ECE region
 - **More than 150 participants** from UNECE subregions (Central Asia, the Caucasus, Western Balkans)
- Promoted Carbon Neutrality findings at **high level international events**, such as the UN High Level Dialogue on Energy in New York, COP26 in Glasgow, Almaty Energy Forum

TOOLKIT LAUNCHED SEPTEMBER 2022!

4 briefs

- 3 technology briefs on [CCUS](#), [hydrogen](#) and [nuclear power](#) and
- 1 on carbon neutral energy intensive industries

3 publications

- [Geologic CO₂ storage in Eastern Europe, Caucasus and Central Asia](#)
 - Technology Interplay under the Carbon Neutral Concept
 - Life Cycle Assessment of Electricity Generation Options
- <https://carbonneutrality.unece.org/>



Carbon Neutrality Toolkit

Supporting policymakers to make informed decisions towards the implementation of the 2030 Agenda for Sustainable Development and the Paris Agreement.



Highlights in Regional Advisory Services

ENERGY



Global Initiative towards post-COVID-19 resurgence of the MSMEs sector

Regional reports, Customized guidelines and Training:

- Guidelines and Best Practices for MSMEs in delivering energy-efficient products and in providing renewable energy equipment:

Georgia and North Macedonia, Albania, Armenia, Kyrgyzstan, and Republic of Moldova

- Guidelines and Best practices for MSMEs to assure resiliency and progress toward a circular economy in sustainable resource management and critical raw material supply chain solutions:

Tajikistan, Ukraine, Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, and Serbia.

Highlights in Regional Advisory Services

ENERGY



Enhancing national capacities to develop and implement energy efficiency standards for buildings in the UNECE region

- Regional Gap Analysis, in-depth studies for [Armenia](#), [Kyrgyzstan](#), and [Republic of Moldova](#), national training seminars, collaborative environment for experts, regional capacity-building workshops, and impact study.

Highlights in Regional Advisory Services

ENERGY



Energy Transition and Post-Covid-19 Socio-economic Recovery: Role of Women and Impact on Them

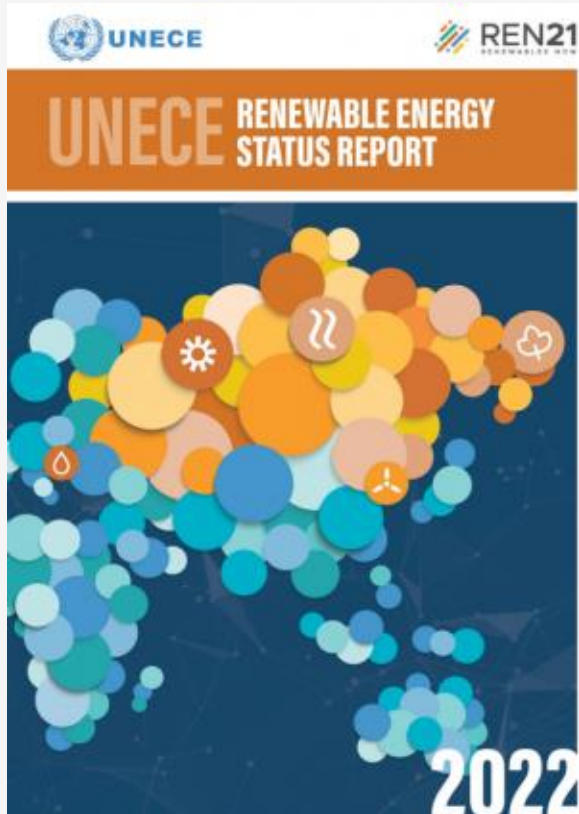
- Case studies of **Albania, Belarus, Ukraine, United Kingdom, and Uzbekistan.**



Energy Transition and the
Post-Covid-19 Socioeconomic
Recovery: Role of Women and
Impact on Them

Kankana Dubey
UNECE Consultant

Spotlight: UNECE Renewable Energy Status Report

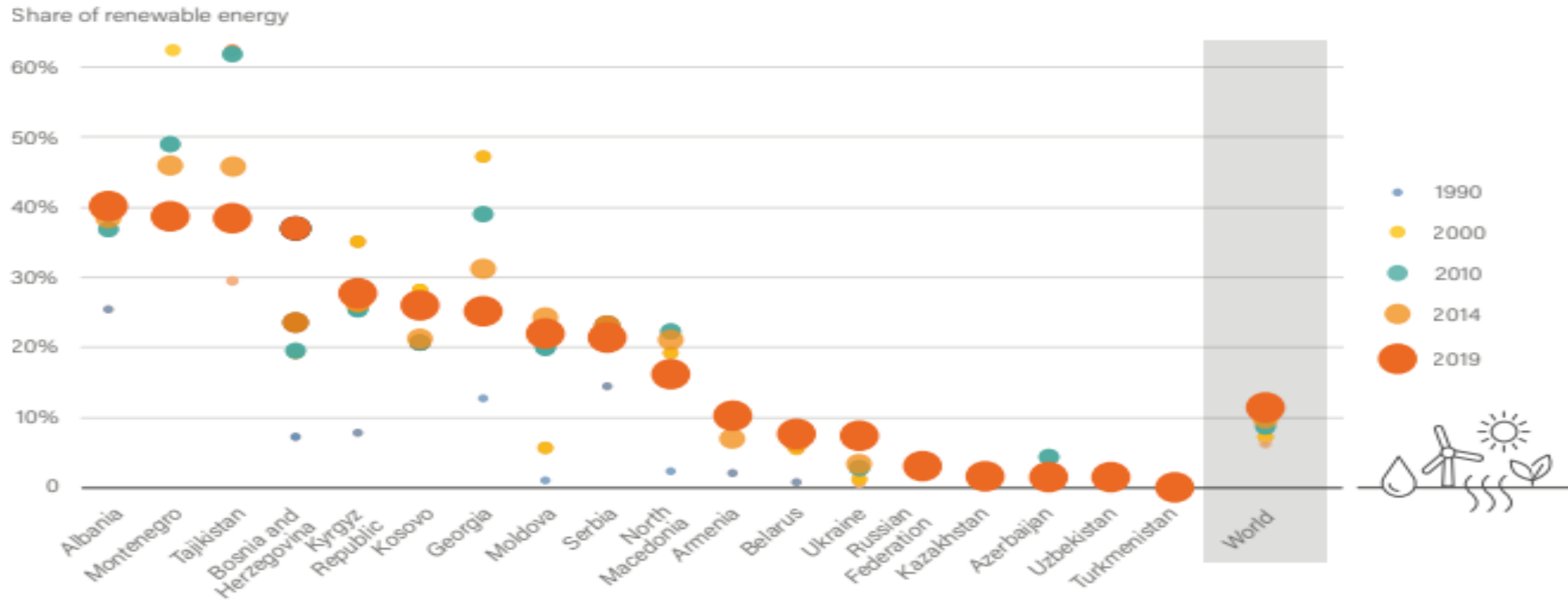


- [UNECE Renewable Energy Status Report 2022](#) launched on 14 September 2022;
- Provides a comprehensive overview of the current status of renewable energy and energy efficiency trends
- Prepared jointly by the Renewable Energy Policy Network for the 21st Century (REN21) and UNECE as flagship activity of the Group of Experts on Renewable Energy
- Long-standing cooperation with REN21 started with the first edition in 2015 to fill data and information gap in South-East and Eastern Europe, Central Asia, the Caucasus and the Russian Federation.

Spotlight: UNECE Renewable Energy Status Report



Share of Renewables in Total Final Energy Consumption in the Focus Countries and World, 1990, 2000, 2010, 2014 and 2019



Spotlight: Digitalization

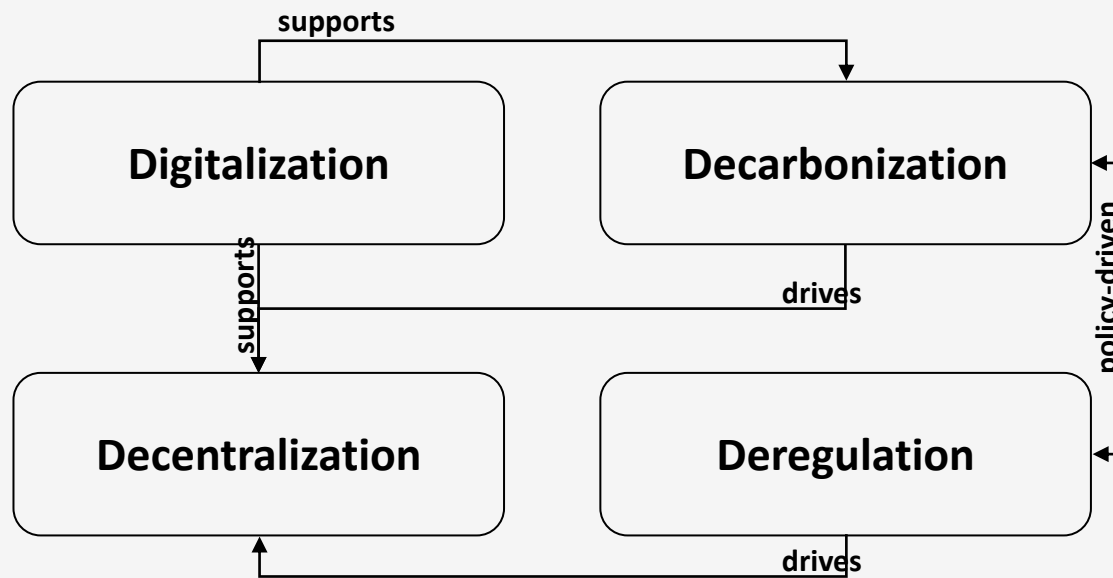
Accelerating the Electricity System Transformation

ECE/ENERGY/GE.6/2022/4-ECE/ENERGY/GE.5/2022/4

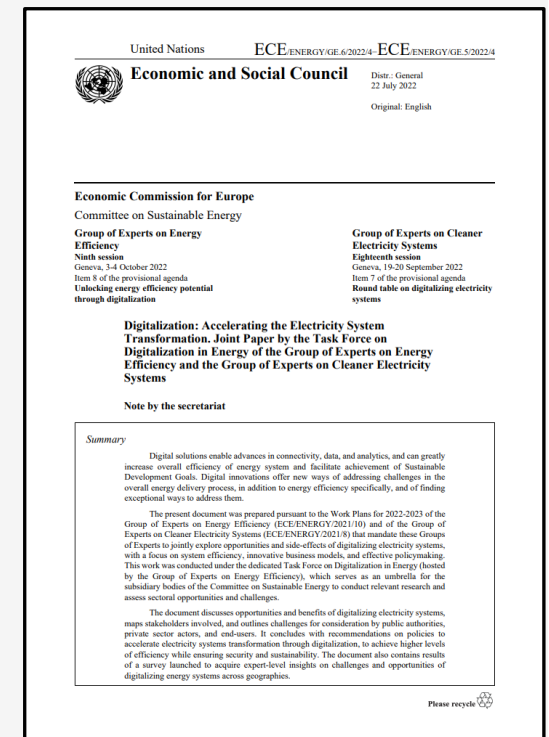


Joint Paper by the Task Force on Digitalization in Energy of the Group of Experts on Energy Efficiency and the Group of Experts on Cleaner Electricity Systems

[Mapping of stakeholders [Opportunities and benefits of digitalizing electricity systems] Challenges for consideration]



➔ **Short-, medium-, and long-term public policies and business strategies to accelerate electricity systems transformation through digitalization**



Spotlight: Digitalization

Addressing Behavioural Barriers to Energy Digitalization

ECE/ENERGY/GE.6/2022/5



Task Force on Digitalization in Energy of the Group of Experts on Energy Efficiency:

Addressing Behavioural Barriers to Energy Digitalization

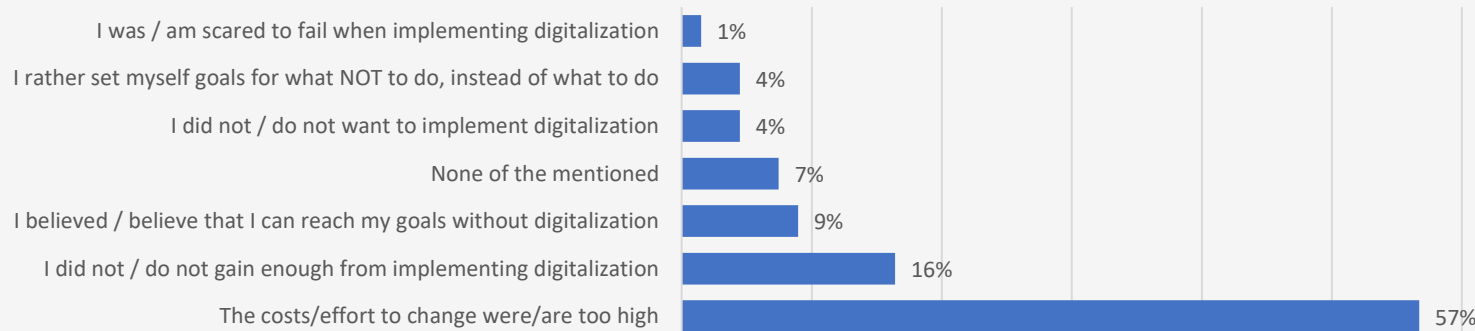
(Human psychology (Energy behaviour) Barriers to Achieving the Energy Benefits Enabled by Digitalization)

Missing link in understanding the lagging implementation of digital technologies

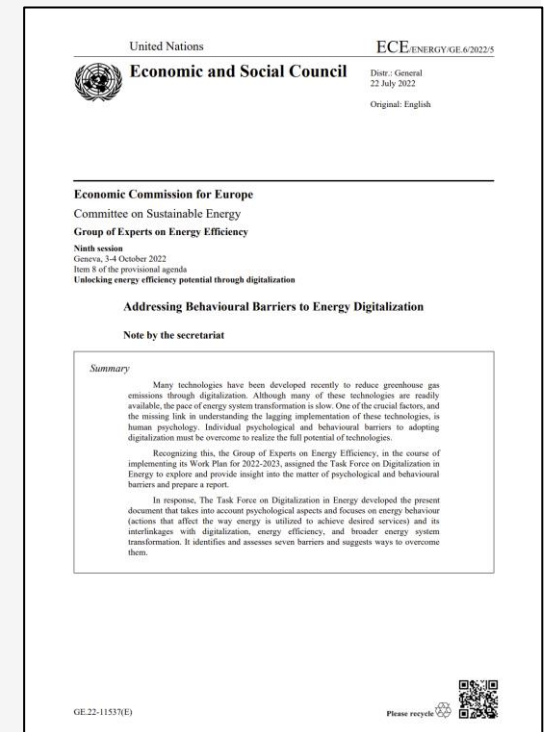
Actions that affect the way energy is utilized to achieve desired services

(1) Experienced cost of change; (2) Fear of failure; (3) Addressing the right need; (4) Missing intrinsic motivation; (5) Disempowering beliefs; (6) Maintaining consistency over time; (7) Negatively formulated goals

Main reasons holding back implementation of digitalization in energy



➔ Interlinkages of psychology with digitalization, energy efficiency, and broader energy system transformation



Spotlight: Digitalization

Challenges of big data and analytics-driven demand-side management

GEEE-9/2022/INF.3



Policy discussion by the Task Force on Digitalization in Energy of the Group of Experts on Energy Efficiency

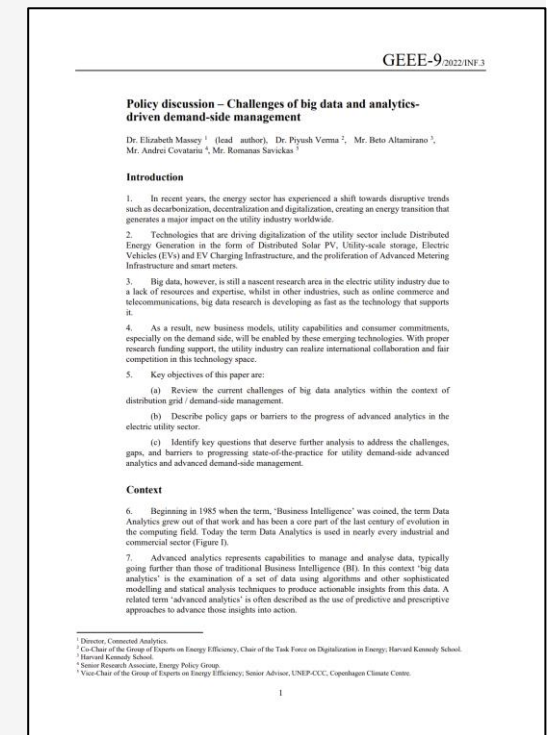
(Challenges of big data analytics (Policy gaps and barriers) Questions for further analysis)

→ Key areas for further consideration:

Integrity	to ensure that the system and information is accurate and correct	Data Curation, Data Integration, Cybersecurity and Data Translation
Availability	to ensure that systems, information, and services are available as appropriate to the operational needs of the utility	Data and Analytics Model Availability, Advanced Analytics Model R&D Efforts, Cybersecurity, Outreach
Confidentiality	to ensure that only the correct, authorized users, systems and resources can view, access, change or otherwise use data	Data Democratization, Cybersecurity, Grid Resiliency

→ Follow-on activities

- **Investigate** key questions raised in the document and carry out comprehensive analysis for each
- **Research funding models** for big data technology advancement (natural language processing, digital twin modelling, demand / load forecasting, optimized ML, progression of AI capabilities), grid resilience, infrastructure as relates to data access, storage, management, and real-time analytics
- **Create and maintain** a common dictionary of terms in the area of Digitalization in Energy



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Thank you!

We're looking forward to another productive year.

Committee on Sustainable Energy Secretariat