



RENEWABLES NOW

UNECE RENEWABLE ENERGY STATUS REPORT 2022

GERE Annual Session 2022

Rana Adib
Executive Director



DRIVING THE SHIFT TO RENEWABLES – NOW!

The only **global community** of renewable energy actors from science, academia, NGOs, governments, and industry.

Our more than **3,000 community members** co-operate collecting information, changing norms and debating.



We build upon a **decentralised intelligence**, ensuring high responsiveness to an ever changing environment.

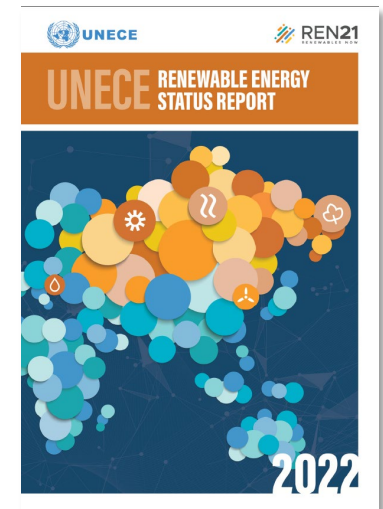
Our **annual publications** are probably the world's most comprehensive, crowdsourced reports on renewables.

2022 UNECE RENEWABLE ENERGY STATUS REPORT

CONTINUOUS REPORTING SINCE 2015 – 260+ CONTRIBUTORS IN 2022

THE REPORT FEATURES 17 COUNTRIES *PLUS KOSOVO*

- Regional Overview
- Policy Landscape
- Market and Industry Overview
- Distributed Renewables for Energy Access
- *Energy Efficiency*
- Investment Flows
- *Current Thinking about the Future of Renewables*



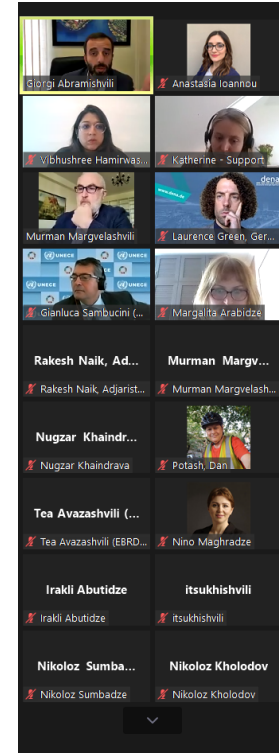
THE UNECE RE-UPTAKE PROJECT 2022

2 REPORTS, 4 HARDTALKS

PARTNERS



SUPPORTED BY



UNECE Renewable Energy Hardtalks

- Albania
- Georgia
- Serbia
- Moldova



WHY DOES THIS REGION MATTER?

RISING ENERGY AND FOOD SECURITY ISSUES AMONG OTHERS



Massive untapped potential

Fossil fuels & import dependency

Need for stable and secure energy supply

Russia's invasion of Ukraine accentuates importance of energy security and sovereignty

Key role of energy in economic and societal developments

Energy poverty

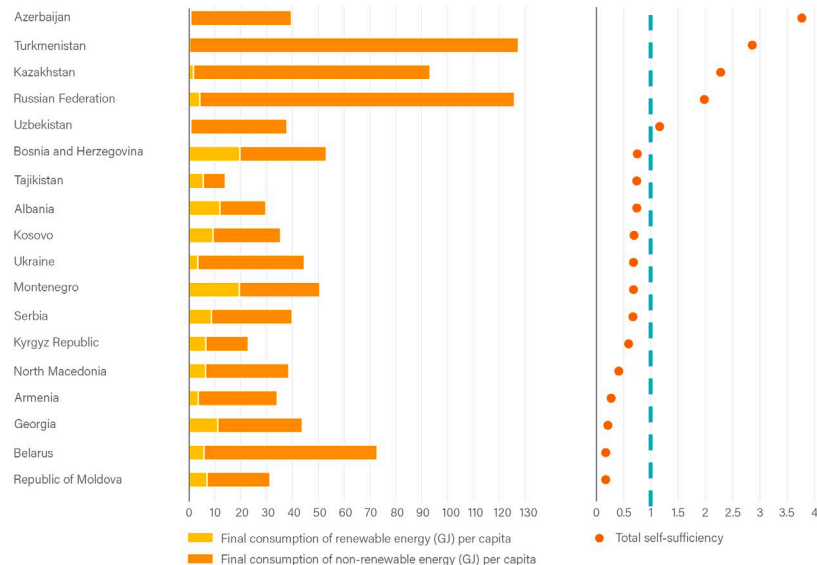
Emissions and air pollution



COMPETITION WITH OTHER ENERGY SOURCES AND IMPORT-DEPENDENCY

ENERGY SECURITY, SOVEREIGNTY AND RISING COSTS

 Energy Self-Sufficiency and Final Consumption of Renewable and Non-Renewable Energy in the Focus Countries, 2019



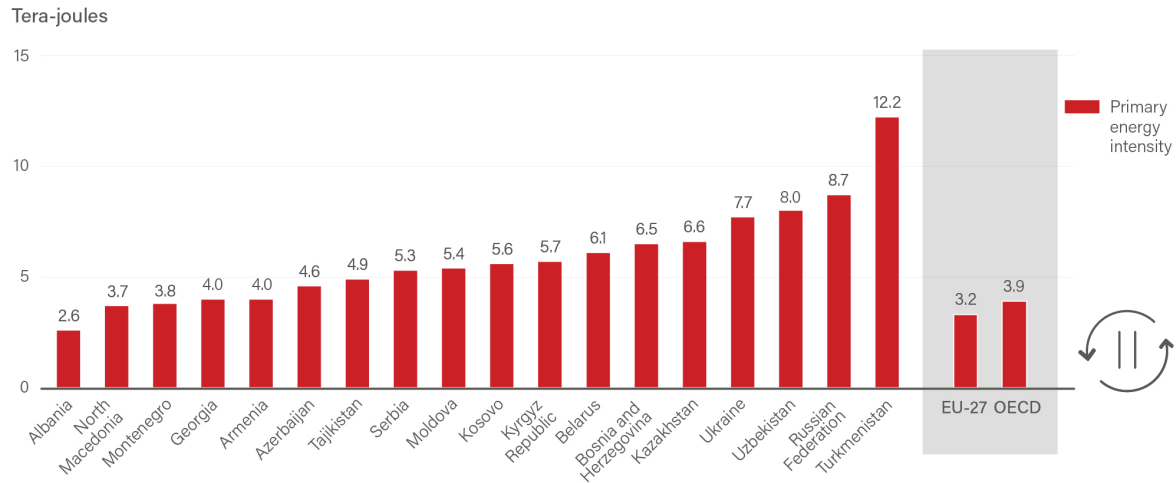
Only 5 countries are self-sufficient – nearly entirely on fossil fuel.

HIGHLY ENERGY INTENSE COUNTRIES

HUGE POTENTIAL FOR ENERGY SAVING AND ENERGY EFFICIENCY



Primary Energy Intensity in the Focus Countries, 2019

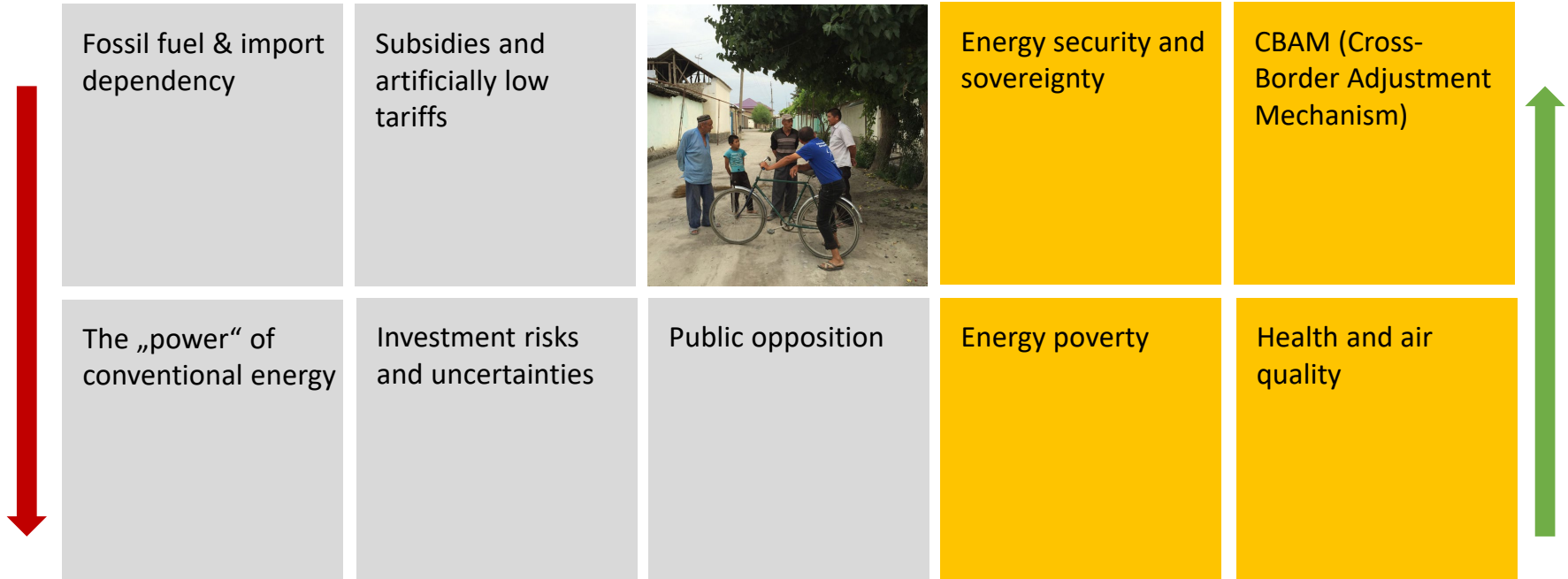


Exceeds EU-27/OECD averages.

Even so, this has sharply declined in the last decades.

DRAGS AND DRIVERS

WHAT IS PUSHING GROWTH AND WHAT IS DRAGGING IT DOWN



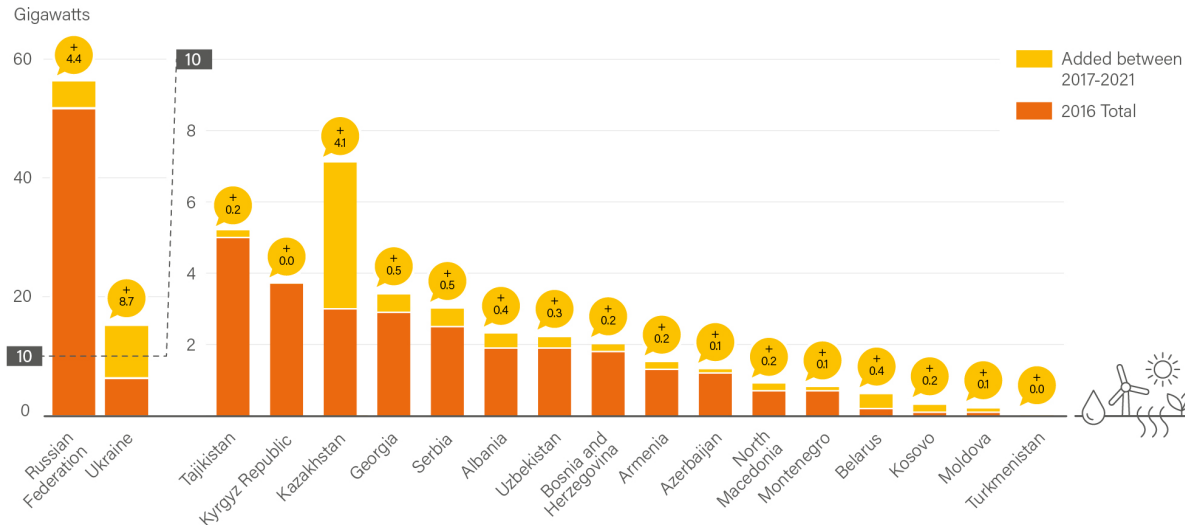


WHAT'S BEEN HAPPENING?

THE GOOD NEWS

BREAKTHROUGH GROWTH IN RENEWABLE POWER

 Renewable Power Capacity in 2016 and Additions During 2017-2021 in the Focus Countries, GW



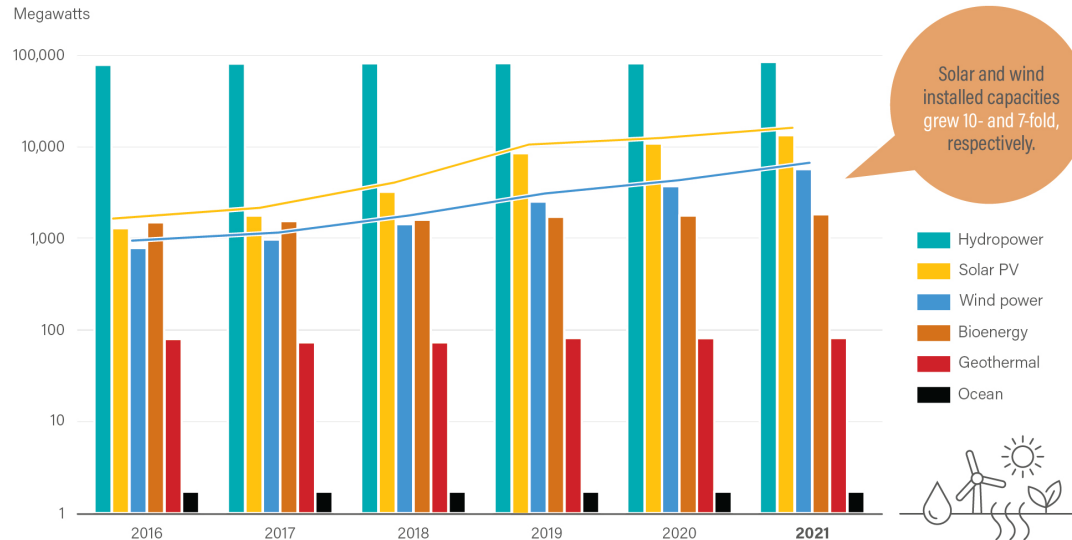
20.7 GW of capacity added in the last 5 years – total installed capacity was **106 GW** in 2021.

SOLAR AND WIND CAPACITY GREW DRAMATICALLY

DIVERSIFICATION OF FUEL SOURCES



Renewable Power Capacity by Technology in the Focus Region, 2016-2021, MW



GROWTH BACKED BY MANY FACTORS

- Energy security & sovereignty
- Favourable policies
- Falling costs of solar PV and wind
- Leaders
 - Russian Federation
 - Ukraine
 - Kazakhstan





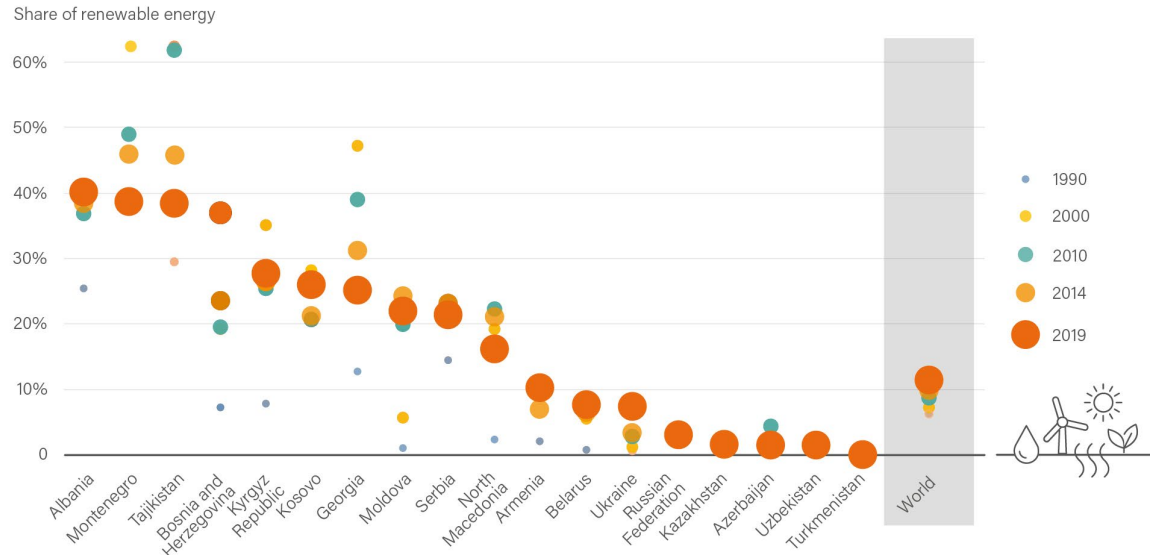
WHAT'S BEEN HAPPENING?

THE NOT-SO-GOOD NEWS


SHARE OF RENEWABLES IN TOTAL FINAL ENERGY UNCHANGED SINCE 2014

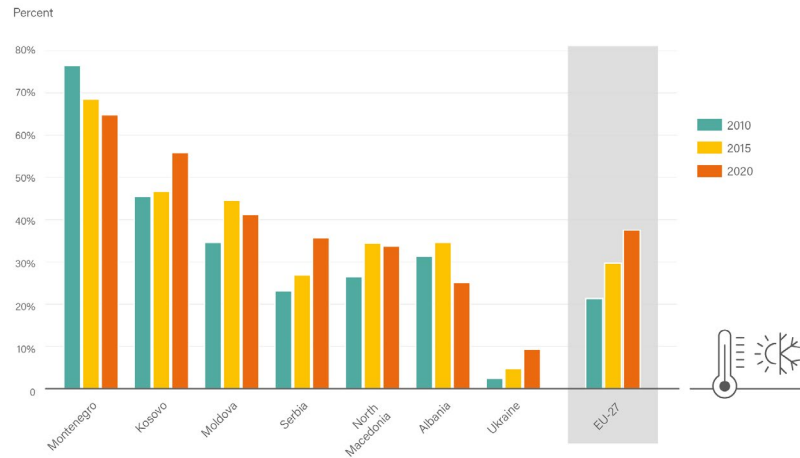
- **18.2% in 2019 and 2014**
- **Positive developments:**
 - Bosnia & Herzegovina
 - Kosovo
 - Ukraine
 - Armenia
- **Visible decline due to:**
 - Slowdown in hydropower
 - Increase in motorisation
 - Minimal change in TFEFC

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

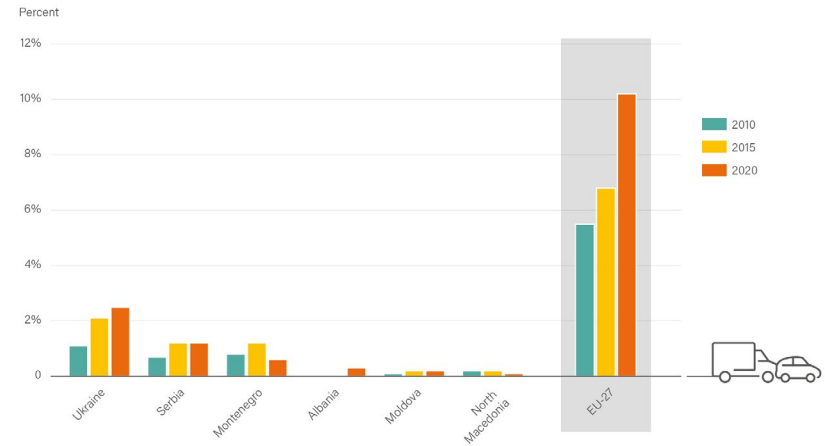


HEATING, COOLING AND TRANSPORT LAG BEHIND THOUGH LARGE SHARE IN ENERGY DEMAND (~80%)

 Share of Renewable Energy in Heating and Cooling in the Focus Countries and in the EU-27, 2010-2020



 Share of Renewable Energy in the Transport Sector in the Focus Countries and in the EU-27, 2010-2020



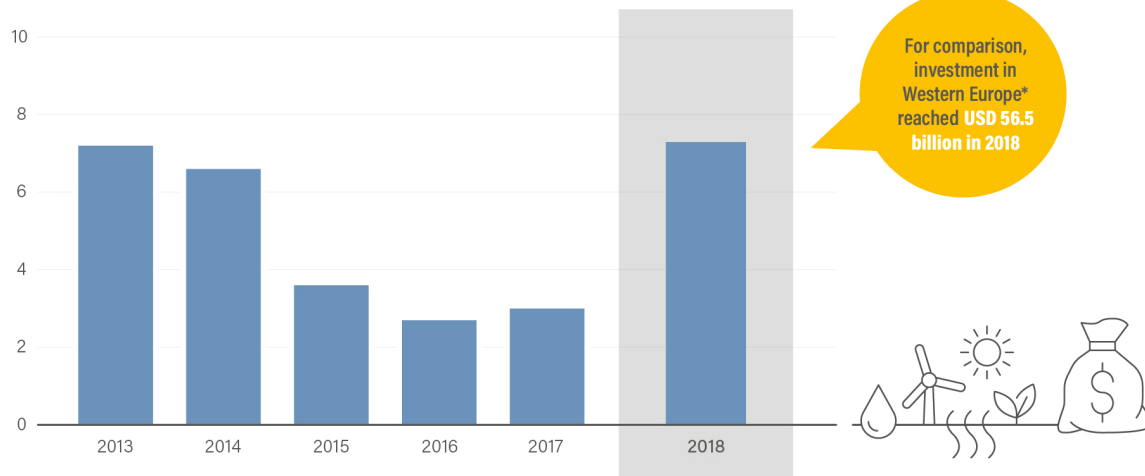
FLUCTUATING INVESTMENT LEVELS

INVESTMENT DATA FOR THE REGION IS A HUGE CHALLENGE



Renewable Energy Investment in the Focus Countries and in Four Countries of Central and Eastern Europe, 2013-2018

USD Billion



USD 7.2 billion in the region
 vs.
 USD 56.6 billion in Western Europe
 vs.
USD 284 billion globally in 2018



POLICIES PLAY A KEY ROLE

LOOKING BACK TO LOOK AHEAD

HAVING TARGETS ARE NOT ENOUGH


POLICIES AND IMPLEMENTATION NEED TO BE STRENGTHENED

Renewable Energy Targets

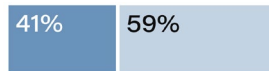
Power




Only **23%** of the focus countries having a renewable energy target in electricity achieved it.



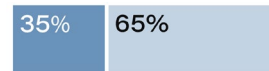
Transport




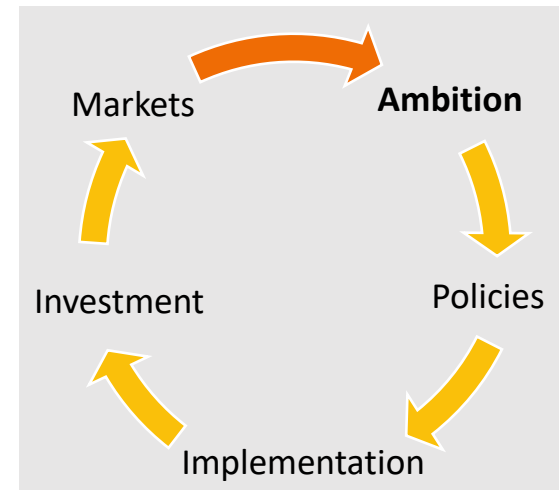
No focus country having a renewable energy target in transport achieved it.



Heating & Cooling



Only **67%** of the focus countries having a renewable energy target in heating and cooling achieved it.

MOREOVER, POLICIES NEED TO BE BROADENED

TRADE AND INDUSTRIAL POLICIES

■ CBAM & export markets

- Energy supply has impact on trade and goods supply
- Effect on economy

■ Food nexus

- Agriculture: key energy-consuming sector
- Caucasus, Western Balkans and Central Asia

■ Industrial and economic policy

Local value creation and jobs





BUILDING VALUE FOR RENEWABLES

WHERE DO WE GO FROM HERE?

RENEWABLES – A SOLUTION BEYOND ENERGY SUPPLY

RESILIENCE AND NEW ENERGY GOVERNANCE

■ Resilience

- to shocks and conflict (Russian invasion of Ukraine)
- climate resilience

■ Diversification

reduces energy imports and fluctuating prices

■ Decentralisation

- serves remote areas
- addresses energy poverty

...key role in the socio-economic and political priorities



URGENT AND CONCRETE ACTION NEEDED BY GOVERNMENTS

IN COLLABORATION WITH PRIVATE SECTOR AND CIVIL SOCIETY

Investment in **energy supply** but also energy **infrastructure**

Go **beyond electricity** – heating and cooling, transport



Continuously close **data gaps** (heating, cooling, transport, investment)



Build stronger technology **supply chain** (domestic and regional)

Increase **regional cooperation**

UNECE RENEWABLE ENERGY STATUS REPORT 2022



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The image features a vibrant green background. In the upper right corner, there are several colorful geometric shapes: a cyan circle, a blue circle, a yellow circle, and three elongated bars in cyan, orange, and blue. Scattered across the green field are numerous dandelion seeds, some fully dispersed with their white, feathery pappus, and others still attached to their brown, oval-shaped seed heads. The text 'RENEWABLES NOW' is centered horizontally in a white, sans-serif font.

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