RENEWABLES NOW
DRIVING THE SHIFT TO RENEWABLES – NOW!

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

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

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

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

<table>
<thead>
<tr>
<th>Massive untapped potential</th>
<th>Fossil fuels &amp; import dependency</th>
<th>Need for stable and secure energy supply</th>
<th>Russia’s invasion of Ukraine accentuates importance of energy security and sovereignty</th>
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<tr>
<td>Key role of energy in economic and societal developments</td>
<td>Energy poverty</td>
<td>Emissions and air pollution</td>
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02.11.2022
Only 5 countries are self-sufficient – nearly entirely on fossil fuel.
HUGE POTENTIAL FOR ENERGY SAVING AND ENERGY EFFICIENCY

Even so, this has sharply declined in the last decades.
### DRAGS AND DRIVERS

**WHAT IS PUSHING GROWTH AND WHAT IS DRAGGING IT DOWN**

<table>
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<tr>
<th>Fossil fuel &amp; import dependency</th>
<th>Subsidies and artificially low tariffs</th>
<th>Energy security and sovereignty</th>
<th>CBAM (Cross-Border Adjustment Mechanism)</th>
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<td>The „power“ of conventional energy</td>
<td>Investment risks and uncertainties</td>
<td>Public opposition</td>
<td>Energy poverty</td>
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<td>Health and air quality</td>
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02.11.2022
WHAT’S BEEN HAPPENING?
THE GOOD NEWS
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

First time in 2018 that installed solar PV capacity overtook hydropower.

[Graph showing renewable energy capacity by technology from 2016 to 2021]
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 TFEC
HEATING, COOLING AND TRANSPORT LAG BEHIND
THOUGH LARGE SHARE IN ENERGY DEMAND (~80%)
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 7.2 billion in the region vs. USD 56.6 billion in Western Europe vs. USD 284 billion globally in 2018

For comparison, investment in Western Europe reached USD 56.5 billion 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

<table>
<thead>
<tr>
<th>Power</th>
<th>Transport</th>
<th>Heating &amp; Cooling</th>
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<tr>
<td>76%</td>
<td>41%</td>
<td>35%</td>
</tr>
<tr>
<td>24%</td>
<td>59%</td>
<td>65%</td>
</tr>
</tbody>
</table>

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

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

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
RENEWABLES NOW