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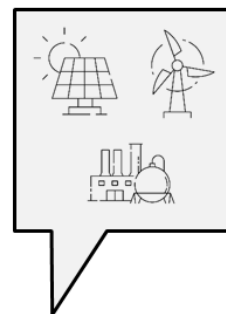
REN21
RENEWABLES NOW

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Deutsche Energie-Agentur



16-17 November 2021

Renewables in Serbia: The Path Ahead, Net Metering and Auctions



HARDTALK

CONCLUSIONS

Within the context of the UNECE RE-Uptake 2021 project, a Renewable Energy Hard Talk dedicated to Serbia was held remotely on the 16th and 17th of November 2021. The Hard Talk **Renewables in Serbia: The Path Ahead, Net Metering and Auctions** focussed on renewable energy support mechanisms in Serbia with a specific focus on the recent net metering scheme and the upcoming renewable energy auctions.

With more than 80 participants over two days, the Hard Talk featured presentations, interventions and discussion from a wide variety of Serbian and international energy sector stakeholders, including: Ministry of Mining and Energy of Serbia, the United Nations, E3 Analytics, Guidehouse, KfW Belgrade, AHK Serbia, EBRD, GIZ, Balkan Green Energy News CWP Global, CMS Belgrade, MT Komex, Elicio NV and others.

Key issues, challenges, solutions and recommendations regarding **renewable energy support schemes (incl. the net-metering scheme recently developed) as well as renewable energy auctions** were discussed and refined. The Hard Talk is intended to speed up existing processes to further progress renewable energy deployment, diversification and security of supply and the development of an attractive market for renewable energy in Serbia.

Day 1 of 2, Tuesday, 16 November 2021, 09:30-12:40 CET

RE Support: *How can current support mechanisms for renewable energy deployment be strengthened and improved?*

What is the role of net metering in the deployment of renewable energy in Serbia?

Challenges and Possible Solutions

1. Strategic planning of renewable energy deployment and alignment with climate targets

Planning and economic resource analysis for solar and wind is lacking. This hinders policy development and the setting of realistic targets, least-cost power system planning, and the ability to develop and implement appropriate support mechanisms.

Recommendation/s

- A comprehensive plan that aggregates energy sector data such as renewable energy zoning, energy resource potentials and historical statistical trends, together with qualitative and quantitative information, into a clearly



formulated and evidence-based development pathway will allow for sound decision-making and sector development. Energy Action Plans should also be developed at a municipal level.

- RE zones should be developed in accordance with analysis of resource potential, grid access and ability to receive renewable inflows, geographic and environmental aspects, proximity to demand, etc.
- The national integrated energy and climate plan (NECP) should be finalised as soon as possible.

2. Strengthening Support Mechanisms for Renewable Energy

Fiscal incentives and policies such as feed-in-tariffs (FiT) or premiums (FiP) and tax reductions comprise the main supporting mechanisms to attract investments in renewables. The new net metering scheme was recently launched in September 2021, including a 50% rebate on the installation costs of new rooftop PV systems up to 6kW in a first round offer. Given the relative immaturity of the market and recent adoption of said measures, increased adoption requires a change of mindset from local experts and industry. To aid adoption, current support mechanisms and associated processes could be revised and improved:

Recommendation/s

- Administrative simplification for approval and licensing of renewable energy projects is required.
 - o Create a “One-stop-shop” for renewable energy project approval and licensing to enable streamlined deployment of projects
- Advanced Net-Metering schemes could be explored and prepared for implementation, including third-party ownership and financing, rooftop leases and PPAs (power purchase agreements) and ‘virtual net metering’ for energy communities.
- Lack of clear procedure for remuneration of surplus energy reduces bankability of prosumer projects
 - o Energy pay factoring in the average market price of that year could be a workable solution
- Currently rolled out solar PV equipment is not always future-proof.
 - o Inverter standards and requirements for smart equipment should be introduced from an early time to ensure equipment is compatible with future technologies.

3. Lack of qualified personnel for the renewable energy industry

Skilled workers will be required throughout the emerging renewable energy industry in Serbia. This includes technicians and engineers but also managers and economists. Dedicated renewable energy training and education at vocational, tertiary and technical levels is lacking. Such investment and nurturing of human resources and expertise are required to maximise and ensure the development of local economies.

Recommendation/s

- Update existing curricula in local universities and develop new programs that introduce students to the new technologies and skills required.
- Encourage the connection/collaboration between the universities and industry and promote an industry-oriented focus to research/academic programmes.
- The introduction of renewable energy training programmes and a focus on specific areas such as PVs should be prioritised in order to realise benefits as soon as possible.



- There should be a focus on the development of skills required for PV installation and energy auditors and a subsequent certification scheme for renewable energy technicians.

Day 2 of 2, Wednesday, 17 November 2021, 09:30-12:40 CET

RE Auctions: *What are the opportunities and challenges for renewable energy auctions in Serbia?*

How can international best practice and experience be utilised in the development of renewable energy auctions in Serbia?

Challenges and Possible Solutions

1. Market and system integration challenges

The increase of market and system integration of renewable energy will become increasingly difficult as capacity is added. As grid capacities are limited and reinforcement and extension of the grid are not aligned with the RE deployment pipeline, curtailment becomes likely and frequent in the future.

Recommendation/s

- A comprehensive power system plan should be established to match future grid reinforcements and extensions with the planned deployment of RE capacities in order to ensure more efficient system integration.
- Market-based support mechanisms coupled to the day-ahead market price should be introduced to increase market integration:
 - o Variable premiums (one-way or two-way contract for difference (CfD)) provide higher planning certainty for investors and offer a lower risk premium than fixed premium.
 - o Fixed premiums could also be considered and are less complex and easier to understand and implement early on. There is however exposure to long-term electricity price volatility.
 - o A fixed premium could be initially introduced and transition to a variable/sliding premium as the wholesale market develops and capacities increase.

2. Balancing Responsibility

The responsibility for system balancing, including balancing costs as a result of increasingly intermittent generation from higher shares of renewable energy and subsequent deviations in planned from actual production volumes remains unclear and the respective bylaws are yet to be finalised.

Recommendation/s

- A liquid intra-day market is a precondition for full balancing responsibility however an intermediate solution of 'partial responsibility' through a cap or fixed imbalance price/penalty-free production deviation could be considered.
- The decree regulating balancing responsibility for renewable energy producers should be finalised and published as soon as possible.



3. Cost competitiveness of projects with older or outdated technology.

Due to the lengthy process from announcement of auction, bids, awarding of bids and finally project realisation, projects permitted with old technology, in particular older wind turbine models, may have difficulty competing with the levelised cost of electricity (LCoE) of new projects in development.

Recommendation/s

- In the case of wind projects, the turbine selection should be moved to a later stage in the planning/permitting process to allow up-to-date equipment to be deployed at the time of construction. This will ensure that the most competitive technology options can be considered throughout implementation from the initial winning of the auction, approval and awarding of capacity right up until construction.
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For further information, please contact:

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This event and associated works of the UNECE RE-Uptake Project was commissioned by the German Federal Ministry for Economic Affairs and Energy. Through various projects, dena supports the German government in implementing energy and climate policy goals.



Federal Ministry
for Economic Affairs
and Energy

In cooperation with

UNECE: The United Nations Economic Commission for Europe is one of the five regional commissions under the jurisdiction of the United Nations Economic and Social Council. All activities relating to the Hard Talks are implemented in close cooperation with the UNECE Secretariat.



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REN21: REN21 is the global community of renewable energy stakeholders from Science, academia, governments, NGOs and industry. They provide up-to-date facts, figures and peer-reviewed analysis on global developments in technology, policy and markets, to inform decision makers.



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The **Department for Green Energy** of the Ministry of Mining and Energy, Serbia, carries out the activities related to the use of renewable energy sources, including preparation of development strategies, action plans, draft laws, other regulations and general acts that are used to formulate the Government's policy in the field of the use of renewable energy.



Republic of Serbia
Ministry of Mining
and Energy