





Recommendations from the Renewable Energy Hard talk in Georgia and possible follow up







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Outcome of the renewable energy hard talk in Georgia, 2021

The hard talk centered on enhancing support and appeal for renewable energy investments in Georgia through an examination of the policy environment, market dynamics, and public backing for the sector.

Its objectives included:

- Galvanizing local and external stakeholders to engage in substantive discussions and amplify their combined influence, and
- Offering guidance to entities within and outside Georgia to facilitate increased investment in renewable energy.

To achieve this, the discussion delved into critical obstacles, catalysts for transformation, potential solutions, and recommendations.







Hard talk 2021 in Georgia - what was covered?

- 1. Lack of network capacity
- 2. Uncertainty regarding market reform
- 3. RE support mechanisms need strengthening
- 4. Societal opposition lack of information and trust
- 5. Lack of adequate policy support
- 6. High investment costs
- 7. Lack of access to capital
- 8. Project implementation challenges
- 9. Lack of local capacity/ human resources







1. Lack of network capacity:

- Grid limitations for RE integration.
- Lack of reserve capacity.

Solutions

To enhance renewable energy integration, prioritize flexibility through energy storage, grids, and smart tech for a cleaner, resilient energy future.

- Flexibility options, including energy storage (such as pumped-storage power stations (SPPS) and battery storage), dispatchable generation, interconnections, demand-side management.
- Retrofitting of and constructing power grids play an important role for better RE integration.
- Accelerate the roll out of smart meters and smart, digital technologies.





2. Uncertainty regarding market reform:

- Slow energy market reform, (policy, social issues, market prices)
- Low electricity prices and no transparent price mechanism in market.
- Extra fees increase the financial burden that generators pay.
- Low participation in balancing market (market concentration related to major HPPs)

Solutions

Speed up transparent electricity market rules for investments, improve market design, aid investors during transition, maintain regulator's independence for effective regulation and competitiveness.

- Accelerate the adoption of electricity market rules, offer more transparency and provide stability to attract investments
- Monitor the implementation of the new electricity market and make transparent improvements.
- Introduce a transitional action plan that supports investors, as the pricing mechanism becomes clearer.
- Preserve the Regulator's independence and authority to effectively regulate the market and create competitive rules.







3. RE support mechanisms need strengthening:

- Feed-in premium (FiP)
 offers 1.5 USc/KWh on
 top of the market price,
 but there is a limit to 5.5
 USc/KWh, which is low
 considering the high
 costs.
- The support scheme does not apply during the summer months.
- No incentives for the private sector towards energy saving strategies.

Solutions

Embrace flexible support, transition to market-based tariffs, expand FiP, introduce CfD, and use temporary tariff guarantees for market stability during transition.

- Develop flexible support for diverse renewables and shift existing schemes to market-based tariffs with changing caps.
- Expand FiP to cover summer months for increased hydro and solar production, offering investors a minimum floor price for the initial decade.
- Introduce CfD to stabilize generator revenues at agreed levels.
- Establish temporary tariff guarantees and stability plans for the market transition.







4. Societal opposition - lack of information and trust:

- 43 suspended RE projects, halted USD 3.8 billion in investments, impacting 2,000 MW capacity.
- Lack of public awareness about RE and co-benefits.
- Lack of trust and communication between policymakers, the public, and investors.
- Limited citizen involvement in projects.

Solutions

Develop a robust, long-term communication plan involving experts, community engagement, public figures, and early citizen and stakeholder involvement to mitigate social opposition.

- Develop a comprehensive, long-term communication plan with experts and the public to address social acceptance issues through knowledge exchange and awareness campaigns.
- Involve public figures (not necessarily technical) as RE "ambassadors" in the country.
- Engage citizens and stakeholders throughout project development, with investors visiting sites and organizing local kickoff meetings.
- Sharing project benefits with the local community and communicating environmental achievements.





5. Lack of adequate policy support:

- Lack of long-term energy strategy, secondary legislation is missing.
- Renewables lack subsidies, of which fossil fuels substantially receive.
- Renewable resources
 face market entry
 barriers competing with
 established industries
 benefiting from
 infrastructure, expertise,
 and policy advantages.

Solutions

Set ambitious RE targets, create regional energy plans, collaborate with the Ministry of Finance to end fossil fuel subsidies, and promote efficient local heating solutions.

- Formulate a long-term renewable energy strategy with ambitious targets aligned with the national energy plan to boost investor confidence and attract capital.
- Create regional-level energy planning documents for decentralized decision-making.
- Assure investors during the transition with coordinated action from the Ministry of Finance, clear planning, and a focus on national priorities.
- Cease fossil fuel subsidies. Plan heating and cooling sectors using available local resources.







6. High investment costs:

- High upfront investment cost for some RE technologies.
- RE technologies are imported in Georgian market, further increasing the cost.
- As opposed to investment costs, electricity prices are low.

Solutions

Incentivize technology cost reductions, assess local-content requirements in renewable energy subsidies for cost impact.

- Incentives must address the high technology costs, which currently rely on imported materials, knowhow, and technology.
- Explore local-content requirements for RE subsidies.







7. Lack of access to capital:

- High interest rates with banks.
- Limited micro-financing access and inadequate business skills among RE suppliers/developers.

Solutions

Boost awareness and expertise in local financial institutions for renewable energy. Create microfinancing programs and improve capital resource accessibility.

- Enhance local financial institutions' awareness and expertise in renewable energy.
- Establish micro-financing schemes and increase access to capital.







8. Project implementation challenges:

- Relying on outdated data for RE project planning can result in inaccurate predictions.
- Inaccurate weather forecasts in Georgia disrupt hourly generation projections, hindering price forecasting.
- Lack of capacity developing full CBA for each project.

Solutions

Improve transparency by enhancing energy resource data quality. Address investor financial challenges related to meteorological uncertainties through policy measures and allowances in Electricity Market Reform rules.

- Increased transparency is needed in project development processes.
- Ensure accurate resource assessment by improving the quality and availability of energy resource data.
- Implement policies to account for potential discrepancies in investor finances caused by unforeseen meteorological challenges in later stages.
- Include appropriate allowances in Electricity Market Reform rules to address weather forecasting challenges.







9. Lack of local capacity/ human resources:

- Market reforms require a wide range of skills, involving not only engineers but also other specialists.
- Lack of spare parts and skills causes equipment failures, eroding customer confidence and impeding RE technology adoption.
- The Ministry of Economy and Sustainable Development is understaffed.

Solutions

Boost local capacity through education, industry collaboration, and resource utilization. Strengthen policy and project development expertise in the Ministry of Economy and Sustainable Development.

- Enhance capacity building with local education programs and incentivize student exchange programs for promising local students.
- Revise university curricula and create new programs to teach students the necessary new technologies and skills.
- Promote industry-oriented research and academic programs through university-industry collaboration.
- Promote local machinery and spare parts production through incentives.
- Ministry of Economy and Sustainable Development requires additional human resources.





Questions regarding the 2021 hard talk

Are the recommendations from 2021 still applicable and effective in the current circumstances and environment?

What has been the progress in implementing these recommendations? Have they been implemented?

What else needs to be done to speed up the uptake of renewable energy?