



Assistance to NERC: Regulatory Support Program

The existing Green Tariff Law & Long-term implementation of the Green Tariff

Kiev, April 2 2013

AF-MERCADOS
ENERGY MARKETS INTERNATIONAL
Finding new paths for energy markets

Objectives

- Assess the implementation of renewable energy tariffs in Ukraine, identifying gaps and needs for improvement.
- Create a sustainable framework for the long-term implementations of green tariffs in Ukraine.
- Develop a system of monitoring and reporting for RES-E
- Evaluate the expected impact of the existing green tariffs on electricity tariffs
- Analyse the optimal share of RES-E in the electricity balance
- Assessment of possible adaptations of the green tariff concept



Key Issues on the Green Tariff Law

- Existence of Local Share Content rules
- Green tariff for biogas not provided
- Unbalanced Green tariff degression mechanism
- Wind farm definition
- Solid Waste green tariff should be backed up by sound waste management policy



Local Share Content Rules

General concerns on LSC rules:

- Promote inefficient use of the resources
- Do not reach the objective of developing the local industry
- Promote corruption and/or gaming against the system
- Increase generation costs

Also, in the Ukrainian case, the situation is exacerbated

- Provided on ex-post basis (no way-out procedure)
- Bureaucratic procedure
 - Certificates of Origin
 - Register of Suppliers

The increase in costs and risks is not reflected in Green Tariff. The mechanism hinders RES-E development



Local Share Content Rules

Recommendations:

- Remove the LSC rule
- Develop a policy promotion mechanism for local industry that incentivizes the development of RES-E
 - Green Tariff: bonus for use of local components / employment
 - Tax exemptions / rebates on companies producing key RES-E components
 - Tax exemptions on import duties for the provision of intermediate goods to fabricate key RES-E components



Other issues on existing Green Tariff

Biogas green tariff

- The Green Tariff coefficient for biogas – including landfill gas – could range from 1.90 to 2.98.
- It is recommended technology-wise (at least between biogas and landfill gas) and size-wise (two or three ranges) Green Tariffs.

Green Tariff Degression Mechanism

- The mechanism should be technology-wise (instead of a single degression value for all technologies)
- Until such mechanism is implemented the mechanism should be suspended

Wind Farm definition

- The green tariff should be provided with respect to the capacity of each generation unit and not to the installed capacity of the farm
- Green Tariff based on the smallest generation unit installed within a farm



Other issues on existing Green Tariff

Solid Waste GT and Waste Management Policy

- A waste management policy should be firstly placed on preventing the creation of waste materials, through the promotion of re-use of materials and resources and recycling.
- The system must prevent burning hazardous materials (similarly for biomass)
- Pricing mechanisms for waste to energy should consider power generation as by-product of waste management systems.
- Green Tariffs set at levels which help investment in waste-in-energy power generation projects, whilst also maintaining Gate Fees as the main driver of waste management programs.
- The Green Tariff coefficient should be set close to 1 for Municipal Solid Waste and for Industrial Solid Waste projects.



Long-term implementation of Green Tariffs

Monitoring and Reporting

- Monitoring is a key activity to measure how RES-E targets are being achieved and how much it costs.
- NERC has a monitoring scheme that needed to be updated to include RES-E generation, for which a new set of templates was provided.
- A more systematic approach to reporting activities and making information publicly-available through the internet shall be put in place.
- This will show RES development to any stakeholder and promotes sustainable implementation of the green tariff scheme in Ukraine.



Long-term implementation of Green Tariffs

RES-E Impact Assessment

- Current Green Tariff scheme could provide 21 – 29 TWh of RES-E per year (7.000 MW to 12.000 MW).
- Enough to achieve the national RES-E target and potentially to overshoot it;
- RES-E development largely driven by solar PV and wind power;
- Solar PV represents 45% to 65% of the total cost even though it generates between 20% and 30% of the E-RES power;
- The total cost of the green tariff scheme would be between 3.7 and 6.6 billion euro per year;
- The expected impact of E-RES in the electricity cost presents a range between 0.82 and 1.73 c€/kWh.



Long-term implementation of Green Tariffs

Possible adaptations to the Green Tariff Concept

- Optimal RES penetration analysis (cost-efficient alternative) showed that Solar PV could not be included in the optimal mix.
- Green tariffs (except Solar PV) in Ukraine are at an adequate level, that is, close to the optimal one.
- The promotion of Solar PV can be explained in terms of a domestic policy basis for promoting that sector in Ukraine, but at higher electricity bill for consumers.
- To prevent sustainability issues (as observed in some EU countries) we recommended resetting the Solar PV green tariff to a level between 2.16 c€/kWh and 3.74 c€/kWh, which reflects the average generation costs in Ukraine.



Thank You

