UKRAINE has elected a new president, a new parliament and will soon have a new government. This provides an opportunity for new momentum in energy and climate policy. As there is no shortage of issues that need to be taken care of, we have drawn up a list where we see the priorities for energy and climate policies in the next legislature. What we have in mind is not an unrealistic revolution that questions all past strategic decisions, but a number of effective actions that are realistic to be achieved by determined administration until 2024.

Make gas and electricity markets competitive

Why: Well-functioning markets for electricity and gas will improve investment, operation and consumption decisions of all market actors reducing costs and thus lead to lower prices for companies and the population. Furthermore, they are a prerequisite for closer cooperation with the EU. Ensuring the integration of Ukraine's power system into the ENTSO-E system will foster competition (leading to lower prices) and improve energy security.

2024 target: Full implementation of target market schemes and market-based pricing for all consumers. Overall, the new administration should assume leadership in the market reform process (which is currently driven by interested companies) in order to ensure solutions that are good for Ukraine as a whole.

How: In the gas market, the new administration should enforce full ownership unbundling of the gas transportation system from other gas sector activities to ensure that new firms are able to access the network infrastructure. This entails a conditional certification of the new TSO by January 1, 2020.

In the electricity market, the new administration should enforce a true separation of distribution from other electricity sector activities (unbundling). Furthermore, the administration needs to devise credible mechanisms to curb market power of generators (including strict market power monitoring, effective penalties for market power abuses, sale of Centrenergo to a non-incumbent player, examine enforced divestment of incumbents, opening of cross-border trade, ...). This will lead to true competition and allow to gradually remove price caps. In addition, the compensation mechanisms (PSO, feed-in tariffs) should be monetised. Finally, ENTSO-E integration should become a strategic – and well-resourced – target of Ukraine.

Increase share of RES

Why: Increasing renewable energy is not an end in itself. Instead, renewable energy sources offer a cost-effective way of replacing old, delipidated electricity production which has to be decommissioned over the next years. By doing so, RES can help Ukraine to become less reliant on energy imports – including from Russia – and thus increase its energy security. Finally, RES may increase competition in the energy sector – assuming not only existing players invest in RES capacity. **2024 target:** The objective of the government is to provide good framework conditions for investments in RES to take place. Formulating medium-term targets (such as a 25% share in TPES and over 25% in gross electricity generation by 2035) are useful to guide action and measures if RES uptake is on track.

How: One of the important tasks is to make sure that Ukraine's power system can cope with increasing RES. Here, a first step should be the roll-out of the auction support scheme under the new legislation enacted in 2019 in a way that stimulates competition. Auctions and other measures should optimise RES deployment in terms of technology, size and location in order to increase the RES absorption capacity power system. Increasing the capacity to absorb RES will also require other improvements such as well-targeted network reinforcements as well as balancing and storage capacities, fair network access rules, high-accuracy load and weather forecasting etc. The update of the National Renewable Action Plan due in 2019 provides a good opportunity to develop a consistent plan for the interacting measure.

Facilitating structural change in the coal sector and coal regions

Why: Despite high subsidies, Ukrainian coal production is losing competitiveness and production has been declining for years. Amidst an increasing importance of other energy sources including renewable energy and possible carbon pricing, this trend is likely to continue and even accelerate. Although the overall economic importance of coal is moderate, coal extraction still accounts for a significant share of employment in some regions. Thus, there is a need to smoothen and facilitate the inevitable transition in order to avoid economic hardship for the affected communities and ensure that alternative employment options are created.

2024 target: The inevitable structural change resulting from declining importance of the coal industry requires a high-level policy response. Such a response has to assist affected regions with suitable policies in order to replace coal production with economic activity in other sectors and reduce the economic costs of the transition.

How: The basis for the transformation of the coal sector should be a strategy and an accompanying action plan; all developed together with all relevant stakeholders. On the one hand, the strategy needs to set a time-line for a gradual reduction of coal subsidies and establish a transparent coal market. It also has to specify how to restructure state-owned coal enterprises and, importantly, formulate criteria in order to identify which mines have to be closed and when. This needs to be flanked by measures which help those regions and people most affected by declining coal production in order for as many jobs as possible to move to more future oriented industries. Pilot projects could be used in order to test and replicate measures.



Low Carbon Ukraine Policy advice on low-carbon policies for Ukraine





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Raise investments in energy infrastructure

Why: For decades, affordable prices were secured at the cost of underinvesting in critical infrastructure. As a result, gas and electricity grids, production and generation facilities, storages, heating networks and other crucial infrastructure are often decayed. This comes at the cost of frequent shutdowns, power or supply failures and high transmission losses especially in the heat sector. Old electricity grids are not able to cope with increased renewables which have a large role to play when replacing old generation infrastructure.

2024 target: Provide the right framework conditions for both private and public operators in the energy sector to have incentives and means to invest.

How: A first step should be introducing cost-reflective tariffs for TSOs and DSOs in gas and electricity, as well as municipal heating systems along with strengthening regulatory oversight over their implementation. Those new tariff models have to promote efficiency and capital investments, rather than just ensuring higher revenues, so the regulatory regime has to include specific performance indicators for operators. Further, the administration should pursue a full and effective implementation of the National Emissions Reduction Plan so generators are forced to carry out the needed investments in order to comply with target levels of SO₂, NO_x and PM emission.

Further increase energy efficiency in the residential sector

Why: About half of the Ukrainian population lives in 240.000 multi-storage residential buildings from Soviet times. Up to 80% of those houses urgently need energetic refurbishment to reduce the tremendous energy losses (Ukraine's heating consumption is twice as high as in climatically comparable EU countries). After subsidies have been cut over the last years, energy costs predictably skyrocketed, partly being compensated for vulnerable consumers.

2024 target: Enable all affected parties – from housing associations to companies that offer modernization services – to successfully implement refurbishment projects to measurably reduce energy consumption. Ensure the successful energetic modernization of first typical large neighbourhoods,

that serve as a model for Ukraine-wide energetic refurbishments.

How: First steps include reaching full commercial metering of gas and heat supply to households. Energy Efficiency Fund products for housing associations and individual households have to be further developed and offered at large scale, while funding schemes should be closely connected to comprehensive modernization concepts, integrating the neighbourhoods and district heating systems. All municipalities and communities have to establish energy management and monitoring systems. Progress in this field also means elimination of all subsidies and benefits, with vulnerable consumers to be protected by means of monetized social support. To successfully implement energetic refurbishment projects, Ukraine needs a massive qualification campaign for technical experts, that includes quality assuring project management.

Selected works of LCU on the priorities

Make gas and electricity markets competitive

- Monitor of Electricity Market Opening
- Policy Paper: Ukraine on the way to a functioning electricity market – what is in place, what is missing?

Increase share of RES

 Low Carbon Ukraine has given detailed economic recommendations on the design of the auctioning scheme

Facilitating structural change in the coal sector and coal regions

 <u>Policy Brief: Promoting structural change in</u> <u>Ukrainian coal regions</u>

Further increase energy efficiency in the residential sector

 Policy Brief: A Scenario-based 2035 Forecast of <u>Electricity Demand in Ukraine</u>

