

Policy Paper [PP/02/2019]

# Developing a National Energy and Climate Plan for Ukraine: Key Objectives, Strategic Questions and Options

Marc-Antoine Eyl-Mazzega

(Director, Centre for Energy, French Institute for International Relations Ifri)

Carole Mathieu

(Head of the EU energy policy & climate programme, Ifri)

## About Low Carbon Ukraine

Low Carbon Ukraine is a project that continuously supports the Ukrainian government with demand-driven analyses and policy proposals to promote the transition towards a low-carbon economy. In particular, the project has the mandate to support the work of the Vice Prime Minister as he coordinates the implementation of the Energy Strategy 2035.

This project is part of the International Climate Initiative (IKI) and is funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) on the basis of a decision adopted by the German Bundestag.

### Low Carbon Ukraine

c/o BE Berlin Economics GmbH

Schillerstr. 59

D-10627 Berlin

Tel: +49 30 / 20 61 34 64 0

Fax: +49 30 / 20 61 34 64 9

[info@berlin-economics.com](mailto:info@berlin-economics.com)

[www.lowcarbonukraine.com](http://www.lowcarbonukraine.com)

## Executive summary

As a follow-up to the adoption of the Recommendation 2018/01/MC-EnC on preparing for the development of integrated National Energy and Climate Plans (NECPs) by the Ministerial Council of the Energy Community, Ukraine needs to start the necessary preparatory work on the policy, analytical and technical aspects of the plan. This should not be seen as an administrative burden but as a strategic opportunity:

- It is adamant to consolidate Ukraine's energy sector and economic transformations with effective and adjusted strategies that provide clarity and predictability and that provide a clear and credible path to foster energy security, sustainability and competitiveness;
- It can be instrumental to fostering Ukraine's Europeanization, attracting investments and funding;
- The Plan and the underlying policies are key to preventing that a new "carbon wall" is progressively established between the European Union (EU), which is deepening its decarbonization process, and Ukraine which would put at risk future integration prospects.

This plan should be consistent with the already approved strategic long-term documents, be coordinated at interministerial level, involve leading public and private stakeholders in Kiev and all through the country and aim at taking stock of past developments & trends, high-yield opportunities, costs, constraints and laying a pathway to foster predictability in policies and regulations.

## Contents

1	Introduction: Ukraine and global climate governance	5
2	NECPs' central role in the new EU energy governance scheme	7
3	Energy community recommendations and the interest for Ukraine to develop a NECP	9
4	Structure and key elements to be presented in Ukraine's NECP	11
5	Crucial decisions to be taken by Ukraine in developing its NECP	13
6	Short-term actions points	16

## 1 Introduction: Ukraine and global climate governance

With the aim of keeping the increase of the global average temperature below 2° C compared to pre-industrial levels, 196 states agreed at the Conference of the Parties in Paris to reduce their national GHG emissions – Individually expressed by the Nationally Determined Contributions (NDCs). With the objective to reverse past emission trends and encourage other emitters to undertake comparable efforts, the EU has set for itself the goal to reduce CO<sub>2</sub> emissions by at least -40% until 2030<sup>1</sup> and by -80% until 2050 (versus 1990). An EU-wide GHG emission reduction of up to 80% requires the implementation of a manifold of emission reduction measures in all economic sectors and member states.

To integrate the different measures, policies, obligations and targets under the Governance Regulation, EU member states need to develop National Energy and Climate Plans (NECPs)<sup>2</sup>. With the introduction of these NECPs, the EU aims at streamlining and bringing together existing planning requirements in the fields of energy and climate, avoiding overlaps with other agreements, improving synchronisation of drafting processes and ensuring sufficient consideration of the potential synergies and interactions between the various policy areas. The approach is adopted by the Energy Community (EnC)<sup>3</sup>, which Ukraine is a member of. Therefore, Ukraine is supposed to formulate its own National Energy and Climate Plan, which is assumed to support and strengthen Ukraine in achieving additional economic, political, climate policy and energy related goals.

Ukraine has a strong interest in developing serious and comprehensive decarbonisation efforts in order to improve the resilience of its economy but also to favour strategic convergence with the EU, strengthen its membership in the Energy Community Treaty as well as to ensure a full implementation of the Association Agreement. A sound NECP will be a major step towards the achievement of these targets. Because the EU's climate strategy also includes an external dimension, the EU is expected to increasingly demand serious efforts against climate change in exchange for privileged access to its market, funding and various support mechanisms. This means that Ukraine's climate ambition could determine its access to funding and/or to the internal market, and policies aligned with the EU objectives would support assistance and cooperation initiatives.

In the likely scenario that the EU starts scrutinising the climate footprint of its imports<sup>4</sup>, Ukraine can position itself as a possible gate to Europe with a competitive and well-educated workforce and good infrastructures, at the condition that its energy, transport and industry infrastructures are also subject to robust emission-reduction policies. This is even more relevant as Ukraine plans to join the transmission

---

<sup>1</sup> Taking into account the new legislation pieces agreed in 2018 (higher renewables and energy efficiency targets in particular), total greenhouse gas emission reductions are estimated to reach around 45% by 2030.

<sup>2</sup> The requirement for EU Member States to elaborate integrated national energy and climate plans (NECPs) for the period 2021-2030 stems from Regulation (EU) 2018/1999 ('Regulation on the Governance of the Energy Union'), published in the EU Official Journal on 21 December 2018.

<sup>3</sup> Established in 2006, the Energy Community is an international organisation fostering cooperation between the European Union and its neighbours, with the objective to increase regulatory convergence and facilitate the creation of an integrated pan-European energy market. A full description of the EnC's mandate can be found on its website: <https://www.energy-community.org/>.

<sup>4</sup> The EU will only provide a positive contribution to the global reduction of GHG gases, if its efforts to decrease emissions on its domestic territory are not counterbalanced by carbon leakages, i.e. the outsourcing of carbon-intensive products to third countries. Such outcome is to be avoided by giving greater consideration to the CO<sub>2</sub> embedded in trade.

network of continental Europe and intends to increase electricity exports to Europe, first via an energy bridge, then through the full network synchronisation<sup>5</sup>.

Moreover, developing a credible and efficient decarbonisation strategy as part of the Ukrainian NECP is also central to strengthening Ukraine's energy sector. Firstly, the decomposition of out-dated thermal power plants will enforce the development of new and more efficient power capacities. In turn, investments, notably into renewable energy sources, represent an economic and ecologically valuable alternative to thermal power stations. Secondly, a reduction of coal, oil and natural gas imports is – in the long term – suitable for reducing potential economic burdens resulting from price and exchange rate fluctuations and insecure trade relations. Finally, a robust long-term climate and energy framework, in line with EnC requirements, would offer a unique opportunity for developing Ukraine's own low carbon technologies and attracting investments.

The following Policy Paper introduces the concept of NECPs within the European Union as well as in the EnC. The recommendations of the EnC and the key elements of the NECP are briefly summarised. Crucial decisions that have to be taken in order to develop the plan are emphasised and short-term measures to implement the drafting process are proposed.

---

<sup>5</sup> ENTSO-E, „Electricity transmission system operators of the ENTSO-E Continental Europe Region sign agreements on the Conditions for Future Interconnections with Ukraine and Moldova“, Press release, 7 July 2017, available at: <https://www.entsoe.eu/news/2017/07/07/entsoe-ce-agreement-conditions-future-grid-connections-with-ukraine-moldova/>.

## 2 NECPs' central role in the new EU energy governance scheme

With the introduction of National Energy and Climate Plans<sup>6</sup>, the EU aims at streamlining and bringing together existing planning requirements in the fields of energy and climate, to avoid overlaps, improve synchronisation of drafting processes and ensure sufficient consideration of the potential synergies and interactions between the various policy areas. To that end, NECPs should describe the current situation, key policy orientations and corresponding measures with regards to the five “interrelated and mutually-reinforcing dimensions of the Energy Union”<sup>7</sup>, which are:

1. Energy security;
2. internal energy market;
3. energy efficiency;
4. Decarbonisation; and
5. Research, innovation and competitiveness.

While guaranteeing sufficient flexibility and fully respecting Member States' right to determine their energy mixes, the drafting of NECPs should help ensure that all energy-related initiatives taken at the national level will effectively contribute to the delivery of the Energy Union objectives, and in particular the agreed 2030 targets on renewables (32%), energy efficiency (32.5%), emissions reduction in sectors not covered by the European Union Emissions Trading System (-30% compared to 2005 levels)<sup>8</sup> and the development of cross-border infrastructures for electricity trading (interconnectivity of at least 15%).

The NECPs should cover ten-year periods, with the possibility for Member States to update their plans once to take into account changing circumstances or adjust targets to reflect higher ambition levels. The first round of NECPs will cover the 2021-2030 period, while also including a perspective until 2050 to show how medium-term efforts fit with the country's long-term vision and the collective targets enshrined in the Paris Climate Agreement<sup>9</sup>. Final drafts are to be notified by 31 December 2019 and potential updates to be provided in 2024. A mandatory template has been established (Annex I to the Regulation) to ensure the comprehensiveness of the plans, and facilitate comparison and aggregation exercises.

By defining common schedules for the elaboration of such plans - requiring Member States to consult their neighbours during the drafting process and allowing the European Commission to issue country-

---

<sup>6</sup> The requirement for EU Member States to elaborate integrated national energy and climate plans (NECPs) for the period 2021-2030 stems from Regulation (EU) 2018/1999 ('Regulation on the Governance of the Energy Union'), published in the EU Official Journal on 21 December 2018.

<sup>7</sup> The “Energy Union” is a political project launched by the Juncker Commission in 2015 to create a more coherent approach to energy across different policy areas and ensure that “Europe's energy supply is safe, viable and accessible to all”. It bundles and structures different legislative initiatives along five pillars and provides a new governance framework for the cooperation between the Member States and between Member States and the EU. See in particular the European Commission's Communication on “A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy”, available at: <http://register.consilium.europa.eu/>.

<sup>8</sup> The EU aims to reduce overall GHG emissions by at least 40% by 2030, compared to 1990 levels. This objective implies reducing emissions from sectors covered by the ETS system (heavy industry and power sector) by 43% compared to 2005 levels, and reducing emissions from sectors not covered by the ETS by 30% compared to 2005, with sub-targets defined for each Member State in the Effort Sharing Regulation.

<sup>9</sup> Article 4 of the Paris Climate Agreement states that “Parties aim to reach global peaking of greenhouse gas emissions as soon as possible [...] and undertake rapid reductions thereafter [...] so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gas in the second half of this century”, available at: <https://unfccc.int/>.

specific recommendations and adjustment proposals (if national contributions do not add up to the collective EU 2030 targets) - the NECPs should facilitate the inclusion of cross-border dimensions in national energy policies, reduce inconsistencies and contribute to overall cost-efficiency.

Finally, Member States are required to organise public consultations with national stakeholders through dedicated fora, report on the comments received and explain how they have been taken into account in the final draft. Such requirements aim at informing policy-making and 'democratizing' decision-making processes while also contributing to a robust and stable public support to energy transformation, and in turn reinforcing the credibility of the plan itself. The assumption is that critical decisions will need to be taken if the 2030 energy and climate targets are to be reached, and such decisions have to be discussed and endorsed early in advance to avoid a social or political backlash.



### 3 Energy community recommendations and the interest for Ukraine to develop a NECP

The “Energy Union” should be understood as the EU’s renewed approach to energy and climate policy, with a higher focus on policy consistency and strategic thinking. In line with the objectives pursued by the EnC<sup>10</sup> – and in particular the creation of a single pan-European regulatory space for energy trade, the enhancement of security of supply and the improvement of the environmental situation -- the EnC Ministerial Council of early 2018<sup>11</sup> recommended that its nine Contracting Parties (incl. Ukraine) also develop NECPs for the 2021-2030 period, in order to foster the integration with the EU internal energy market, and extend the Energy Union concept to the EnC’s mandate. Although not setting a specific deadline, the Recommendation suggests that the drafting process should be iterative and dynamic, and start in 2018<sup>12</sup>. EnC working groups meeting started in 2018 and 2019 should see the actual drafting process begin, to be ready for a properly consulted and peer-reviewed document by 2020.

In addition to ensuring strategic and political convergence with one of the main EU projects – the creation of an Energy Union – engaging in the preparation of such a plan will be beneficial for Ukraine, for (at least) the following reasons:

A national plan with a time frame up to 2030 would contribute to highlighting the most cost-efficient pathway for substantially improving Ukraine’s energy and climate record. Should this plan adopt a holistic approach, covering the five dimensions of the Energy Union project, and be the result of an extensive consultation process with all relevant ministerial entities and national stakeholders, it will be an opportunity for Ukraine to reflect on its key energy challenges for the next decade, evaluate risks and opportunities in implementing its 2030 energy and climate targets, and narrow down the implications in terms of policy initiatives and infrastructure needs. The NECP should not be developed from scratch; it should build upon Ukraine’s efforts to reorganize the energy sector and take full account of previous legislative developments, and in particular:

- The 2016 Concept for implementation of the State Policy on climate change up to 2030, and the subsequent action plan adopted in 2017;
- The 2017 Energy Strategy of Ukraine for the period up to 2035;
- The 2018 Strategy on Low Emission Development of Ukraine up to 2050;
- The 2018 National Transport Strategy 2030;
- And also, ongoing initiatives such as the identification of national energy saving measures for 2019-2030, to overtake the National Energy Efficiency Action Plan (NEEAP) applicable up to 2020, the upcoming revision of the 2014 National Renewable Energy Action Plan applicable up to 2020, the discussions, in cooperation with EBRD, on the potential revision of Ukraine’s nationally determined contribution, and others.

Using the standard template (see section below), the NECP would show how the different pieces of the puzzle fit together, provide an overall assessment of Ukraine’s energy situation and confirm its commitment to reform implementation over the next decade.

---

<sup>10</sup> Article 2 of the Treaty establishing the Energy Community, available at: <https://www.energy-community.org/>.

<sup>11</sup> Recommendation 2018/01/MC-EnC.

<sup>12</sup> Recommendation 2018/01/MC-EnC, article 5.

Such exercise, if well-coordinated, build on a wide consensus and robust data and credible assumptions and targets, would be strongly valued by Ukraine's private sector, external partners, foreign donors and investors as it would provide long-term predictability and foster confidence in the regulatory framework. It is an opportunity to demonstrate that Ukraine's ongoing reforms form a consistent package, contributing to the transparency, competitiveness and sustainability of its energy sector, and therefore creating a predictable and attractive investment climate for foreign stakeholders. Looking ahead and anticipating the implementation of the Paris Agreement, the NECPs would provide useful guidance on where the key mitigation opportunities lie. In addition, and as the EU is strengthening its climate ambitions for 2030 and also considering climate neutrality scenarios for 2050, a fair assumption is that climate protection will gain prominence in the European Neighbouring Policy (ENP), with a higher focus put on climate-friendly investments. In sum, the NECP would reinforce Ukraine's status of close investment partner to the EU if it can demonstrate a consistent energy & climate approach, fully in line with the bloc's Energy Union strategy.

By following common schedules at the EnC level and also providing room for regional consultations in the drafting process, as required by the EnC Recommendation, Ukraine would also be given the opportunity to engage in a constructive dialogue with neighbouring EnC Parties, and identify areas suitable for bilateral/regional action plans that would be mutually beneficial and help each country reach its national targets in the most secure and cost-efficient way. Optimizing the development of new energy resources and new energy infrastructures should be the primary focuses in bilateral/regional discussions.

Ultimately, NECPs should reduce the administrative burden by integrating a number of sectorial planning and reporting obligations already applicable to the EnC Contracting Parties. Cooperation on the development and implementation of a policy on climate change is also a central element in the 2014 Association Agreement between the EU and Ukraine, with specific requirements for Ukraine to establish an action plan for long-term (post-2012) mitigation and adaptation to climate change and also develop and implement measures to reduce GHG emissions<sup>13</sup>. Beyond fulfilling this EU-related mandate, developing a NECP would also be a step forward in meeting Ukraine's commitments under the Paris Agreement, which creates an enhanced transparency framework for action and support, requires Parties to submit their NDCs every five years, and invites them to update current pledges with time frames up to 2030, by February 2020<sup>14</sup>. A process to update Ukraine's NDC is ongoing, in cooperation with EBRD, and there will be evident synergies with the NECP drafting process.

---

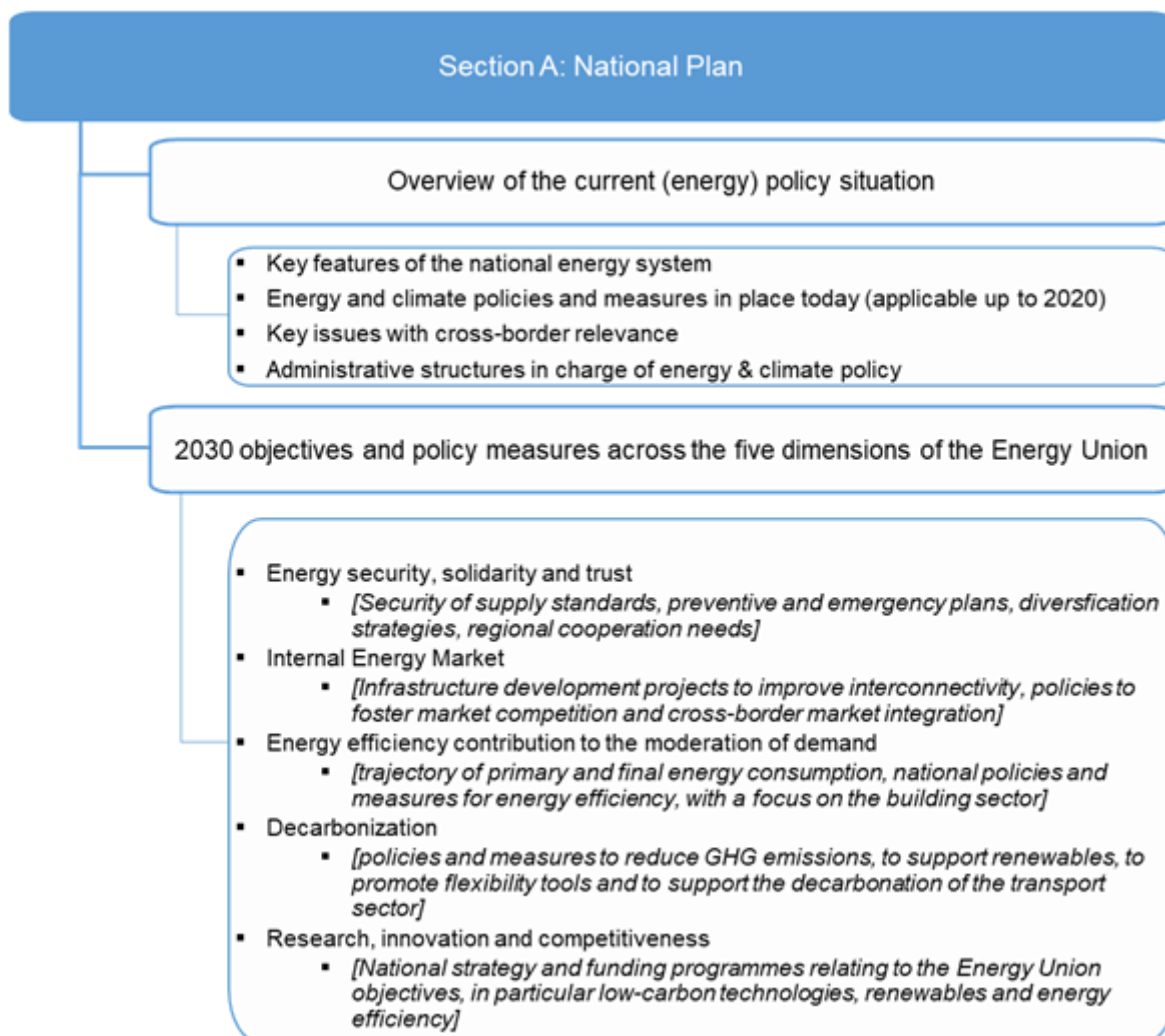
<sup>13</sup> See Article 365 and Annex XXXI to Chapter 6 of the 2014 Association Agreement between the EU and its Member States, of the one part, and Ukraine, of the other part, available at: <https://trade.ec.europa.eu/>.

<sup>14</sup> See Articles 4 and 14 of the Paris Agreement, available at: <https://unfccc.int/sites/>.

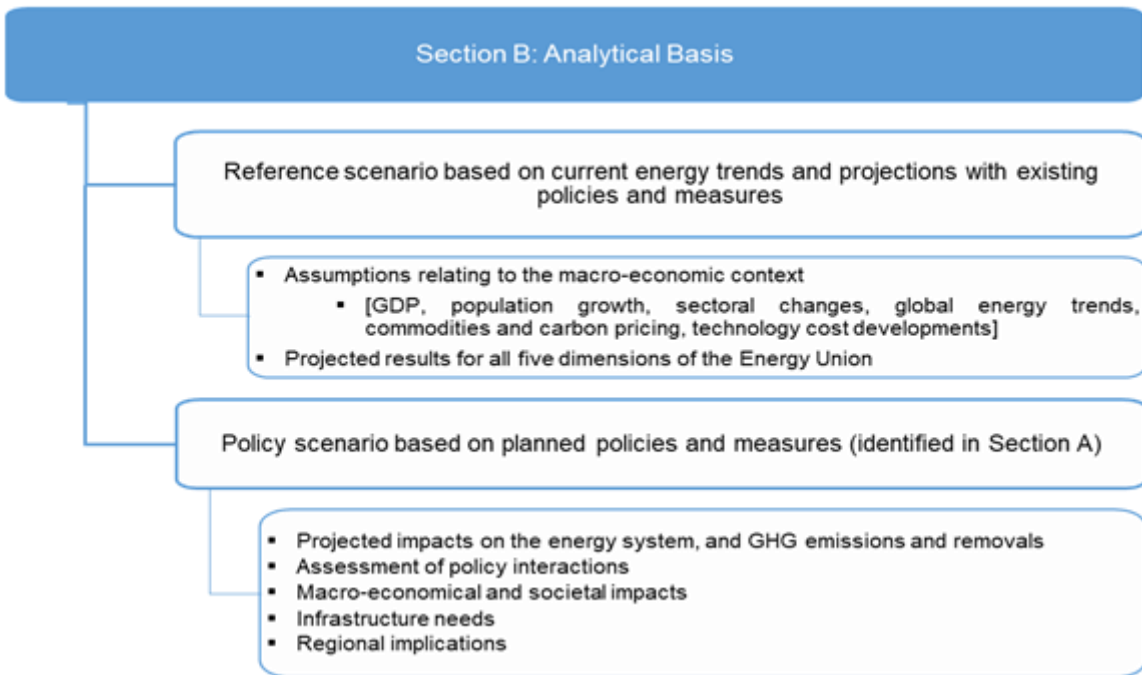
## 4 Structure and key elements to be presented in Ukraine's NECP

Taking into account the standard EU template (Annex 1 to Energy Governance Regulation), the EnC Recommendation of 2018 and the lessons learnt from drafting processes in EU Member States so far<sup>15</sup>, Ukraine's NECP should be structured in two main parts: the first one (Section A) describing the current situation, the objectives, the targets defined for 2030 and corresponding policies and measures taken or envisaged, and the second one (Section B) including projections up to 2030 and beyond (2050 long-term perspective) evaluating the impact of planned policies and measures.

Table: Potential structure for Ukraine's NECP



<sup>15</sup> Despite the requirement to submit draft plans to the Commission by 31 December 2018, many Member States have missed the deadline due to delays in preparatory works or pending decisions on critical elements of their plans. To date, only a handful of draft plans (Finland, Ireland, Italy, Sweden), have been made publicly available.



Source: Annex I to Regulation (EU) 2018/1999, Recommendation 2018/01/MC-EnC and DRAFT NECPS from EU Member States

## 5 Crucial decisions to be taken by Ukraine in developing its NECP

Ukraine's 2050 Low Emission Development Strategy is already asserting the State's commitment to decoupling economic growth from the growth in GHG emissions and forms the basis for developing policy instruments that will support Ukraine's low-carbon transition. This exercise is a major contribution for the NECP drafting process, in the sense that it provides an overview of Ukraine's energy and climate situation – with for example a description of the main factors behind Ukraine's GHG emissions over 1990-2015 – and defines three core objectives:

1. Transitioning to a low-carbon energy system (i.e. develop low-carbon energy sources for electricity and heat, promote energy efficiency, favour clean transportation);
2. Increasing carbon absorption and uptake in agriculture and forestry management;
3. Reduce methane gas and nitrogen oxide emission associated with fossil fuel production, agriculture and waste management.

While the 2050 Strategy frames the discussion and points to specific policies and measures to support the transition process, it does not set a specific action plan with milestones to be reached by 2030. One of the aims of the NECP is to derive the medium-term implications of Ukraine's 2050 strategy and define the policy agenda for the next decade.

Despite not targeting exactly the same time horizon, the 2035 Energy Strategy should be a key building block of Ukraine's NECP, since the energy sector is responsible for 65% of the country's GHG emissions. This document approved in 2017 involves three implementation stages: reform of the energy sector (by 2020), optimization and innovative development of infrastructures (by 2025) and ensuring sustainable energy development (by 2035). It introduces the objectives of achieving a twofold reduction in GDP energy intensity and increasing the use of renewable energy sources up to 25% of primary energy supply (17% in 2030). Likewise, the ongoing work related to the National 2030 Transport Strategy, the sectoral GHG emissions reduction targets and efforts in promoting e-mobility and alternative fuels could all be included in the overview of Ukraine's 2030 priorities for energy & climate.

Ukraine's NECP should come up with a vision as to how it will see its energy, climate sector and economy developing towards 2030 and meeting the 2030 objectives, what are the goals it will set for itself by sector and how it will achieve them, with a clear understanding of how this will impact the various segments of the economy, the state budget, etc. The document should give a clear view on how best to ensure competitive supplies, energy security, the development of low carbon generation and energy efficiency, market integration and regional cooperation, as well as territorial and social cohesion.

More specifically, drafting the NECP could be an opportunity to clarify Ukraine's strategic thinking with regards to (at least) the following questions:

### **Demand side:**

- What are realistic GDP and population perspectives and how is the economy transforming in terms of geography and sectoral structure? What are the implications for electricity, gas, coal and oil demand?
- What is the likely impact of energy efficiency policies in the residential, transport, agriculture and industry sectors, and of reduction of electricity transmission losses? What progress has been realised so far (such as through the National Energy Efficiency Action Plan), what is working, what not, what could be further addressed, at what costs, who would have to pay, and with what results? This would provide a cost-benefit analysis in order to lay out clearer and possibly adjusted policy options.

- What could be new public transport and large countrywide infrastructure projects developed and how could they impact energy demand – for example efficient train connection, new freight routes by train, a greater deployment of biomethane use in the transport sector.

#### **Supply side:**

- What are the overnight costs of new capacities, be they coal, gas, nuclear, hydro, wind, solar, biomass, and the capital costs, taking into account the exchange rate and lead time? How are they expected to evolve? What are the social implications? What tariff is needed to recoup such investments, under different carbon price scenarios?
- Under what conditions can Ukraine accelerate the decommissioning of its coal generation capacities, starting with the most ageing ones? What would be the social costs and implications for the electricity sector?
- Given the solar and wind energy potential in Ukraine, and evolution of cost trends (equipment deployment and grid connection + intermittency) and results from the National Renewable Energy Action Plan, and what can be their respective contribution to electricity production by 2030? What technologies should be privileged? What would be the deployment, grid connection/integration costs/challenges and what would be implications for electricity prices?
- What is Ukraine's strategy to maintain a stable NPP base capacity by 2030? What are the costs of life time expansion, new build, decommissioning?
- How could the development of electricity interconnectors help Ukraine in decarbonizing its electricity sector?
- Are decentralized electricity solutions with battery storage an opportunity? Same for decentralized heat networks? And waste to energy projects?
- How much biogas, biomethane injected into the grid or green hydrogen could be produced in the country/exported? At what costs, timeline?
- Are there options for carbon capture and storage/utilization which could be developed and monetized? How could they

#### **Trade:**

- What is a reasonable outlook for external trade, taking into account developments in foreign markets and price developments?
- Are there opportunities for low carbon imports replacing domestically produced energy?

#### **Investments**

- What are the investments needs to 2030, by sectors, on the supply and demand side, how do they compare with past investment trends, what level of costs is to be covered by the state, the private sector, local public level?
- What are the low hanging fruits, what are the most cost-efficient options for decarbonisation?

Developing this plan will require using modelling tools that are consistent with those in the Energy Strategy 2035 and in the Ukraine 2050 Low emission development strategy (TIMES-Ukraine). It will require laying out where Ukraine would stand in 2030 on its trajectory to meeting the 2035 and 2050 strategies. Transparency in the modelling assumptions and process will be key for credibility and consensus building. The plan could include several scenarios, assuming for example a business as usual

case (roughly corresponding to Ukraine's current NDC), a sustainable scenario for 2030 consistent the 2035 and 2050 strategies, and an accelerated case towards sustainability by 2030, with higher energy efficiency, renewables and decentralized solutions and faster decommissioning of coal capacities for example.

## 6 Short-term actions points

To fulfil the aspiration of becoming an active participant in the Energy Union, Ukraine needs to launch the drafting process for its NECP within the shortest possible delay.

Based on the experience from EU Member States in developing their first NECP drafts, a one-year delivery process is challenging: while Ukraine has all elements already available to draft Section A, the preparation of Section B is complex and requires strong political commitment. Decisions need to be taken on the following elements:

1. As defined in its 2019 action plan, Ukraine's Ministry for energy will be the leading institution for drafting the NECP. The next step would be for the Ministry to identify the other possible contributors (other Ministries and State agencies in particular) and define a framework for coordinating their tasks, reviewing the inputs and ensuring overall consistency;
2. Scheduling a preliminary stocktaking exercise, to review all relevant legislation pieces and strategic plans, see how they would fit with the NECP template and identify missing blocks, i.e. areas for which policy guidance will need to be developed for the sole purpose of the NECP. For the sake of minimising the administrative burden and ensuring policy coherence, targets featured in the NECP should be primarily based on / or derived from existing plans. New targets should only be defined for policy areas not yet covered by existing legislation;
3. Deciding which methodologies will be used for the analytical part (Section B), with the dual objective of providing a clear picture of Ukraine's energy and climate future by 2030, but also not engaging in excessively burdensome processes leading to potentially unreliable results. The first step should be to identify which set of macro-economic assumptions will be retained and which quantitative indicators should necessarily be featured in Ukraine's NECP (based on the list applicable at the EU level). A decision will have to be taken regarding the modelling tools that should be used, with due account of:
  - the choices made for the 2050 Low Emissions Strategy, published in July 2018
  - the technical recommendations from the EnC Secretariat and the European Commission, and the results from the technical study on the EnC reference scenario 2018;
4. Define which national stakeholders will be informed and consulted during the drafting process, when and how their comments will be collected, reviewed and incorporated in the final draft; This can be done through meetings of sectoral working groups gathering leading stakeholders, or a dedicated webpage for example. Stakeholders should be reflective of the variety of supply side and demand side as well as sectors and territories being taken into account. Section B would require working out perspectives from the supply and demand side in close collaboration with a modelling team. It would need to involve: Ministries; national agencies such as SAEE or the State Committee for statistics; regulatory bodies; states energy companies; private energy companies; industry associations; consumer associations; local governments and municipalities; experts and civil society; multilateral and national banks – WB, EBRD notably -
5. Define when and how to engage with neighbouring EnC countries, in view of identifying the cross-border dimensions of Ukraine's energy and climate priorities for 2030 and agree on potential areas of cooperation, to be reflected in the final NECP. In this objective, existing fora for regional cooperation, such as the EnC working group on energy and climate, or the energy and climate committee could potentially be used.



Given the extent of the workload and the time needed to ensure proper consultation and coordination with various domestic and external entities, it is crucial for Ukraine to agree on a work plan as soon as possible and kick-start the drafting process irrespective of the 2019 national election calendar.

**Possible timeline:**

- **March 2019:** As responsible coordinator for the NECP, the Ministry for Energy should formally establish a working group gathering all relevant public institutions that should be directly involved in the drafting process.
- **21 March 2019:** Participation to the EnC technical working group on energy and climate, with a focus on the key features of the NECP analytical part (Section B.).
- **March-April 2019:** Hosting of a kick-off workshop with national stakeholders (all participants to the NECP working groups + representatives from NGOs, energy companies, local communities, etc.). The EnC and representatives from selected EU countries could be invited to present the role of NECPs and their experience with the drafting process.
- **April to October 2019:** Members of the NECP working group to complete the stocktaking exercise, identification of possible additional targets to be agreed, and development of integrated projections for both a reference and policy scenario.
- **16 October 2019:** Presentation of the first elements of Ukraine's future NECP during the EnC technical working group on energy and climate. Discussion with EnC Parties to identify areas suitable for bilateral/regional cooperation.
- **November-December 2019:** Inclusion of the EnC Secretariat and EnC Parties' initial feedback, fine-tuning of the integrated projections and preparation of the draft NECP.
- **January 2020:** Launch of a web-based public consultation for national and foreign stakeholders.
- **February-March 2020:** Inclusion of stakeholders' comments and finalisation of the draft plan for submission to the EnC.

In strong coordination with the EnC secretariat, LCU/Ifri's role could be to advise the Ukrainian government on the different steps of the drafting process, facilitating decision-making in due time, with the ultimate objective of ensuring that Ukraine's NECP provides the highest added-value for the energy sector, for the overall economy and for Ukraine's strategic convergence with the EU bloc.