ANNEX

GUIDANCE TO MEMBER STATES ON NATIONAL ENERGY AND CLIMATE PLANS AS PART OF THE ENERGY UNION GOVERNANCE

to the


State of the Energy Union

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1. Introduction

The Commission's Communication on a Framework Strategy for the Energy Union adopted on 25 February 2015 explains that the Energy Union needs an integrated governance and monitoring process, to make sure that energy-related actions at European, regional, national and local level all contribute to the Energy Union's objectives.

In October 2014 – when agreeing on the 2030 Framework for climate and energy – the European Council called for a reliable and transparent governance system without any unnecessary administrative burden to help ensure that the EU meets its energy policy goals and on 19 March 2015, it concluded that a reliable and transparent governance system must be developed. Streamlined and integrated national energy and climate plans will be at the core of this governance system. The governance system will build on existing building blocks, such as national climate programmes, national plans for renewable energy and energy efficiency.

The Commission will closely cooperate with Member States on the delivery of these common goals in order to jointly ensure a successful implementation of the Energy Union, reduce the administrative burden and enhance transparency for Member States, and ensure investor certainty until the year 2030 and beyond.

The purpose of this document is to offer guidance to Member States on the process of developing their integrated national energy and climate plan as well as the main elements.

This document launches and explains the main steps of the gradual process from now until the finalisation of national plans in 2018, including the main roles and tasks of both Member States and the Commission. In 2016, the Commission will present a legislative initiative on streamlining of planning and reporting requirements and present a template for the structure of national energy and climate plans in order to complement and further specify this Guidance.

1. General principles and scope of the national plans

The national plan should take a holistic approach and address the five dimensions of the Energy Union in an integrated way which recognises the interactions between the different dimensions. Specific elements of existing plans may be preserved depending on the area and periodicity of the planning processes. The national plan should cover the period from 2021 to 2030 and build upon what each Member State should deliver in relation to their policies for 2020 and also include a perspective until 2050.

While Member States have the right to develop policies suitable to national circumstances, national plans should set out the direction of national energy and climate objectives and policies in a way that is coherent with delivering on the commonly agreed objectives of the Energy Union, in particular the 2030 targets (greenhouse gas emission reductions, renewable energy, energy efficiency and electricity interconnections) agreed by the European Council in October 2014. While for emission reductions in the non-ETS sector the approach taken in the Effort Sharing Decision will be continued to 2030, the EU-level targets for renewable energy
and energy efficiency will be met by collective efforts of the Member States as well as through policies and measures at EU level.

It is very important that national plans provide long term predictability and certainty for investment and ensure greater cooperation and coherence among Member States' approaches on climate and energy policies.

2. Content of national plans

National plans should cover the period from 2021 to 2030, including a perspective until 2050 in order to ensure consistency with long-term policy objectives at the EU and national level.

National plans should include the following elements:

a) Current Situation

- Overview of the national energy system and policy context of the national plan across the five dimensions of the Energy Union (including macroeconomic context, greenhouse gas emissions, energy mix and the situation in each subsector of the energy system).
- Assessment of the situation in terms of current energy and climate policies and measures, including support schemes and fiscal systems for renewable energy and energy efficiency, building on experiences with reaching 2020 targets for energy and climate.
- Overview of key issues of cross-border relevance including opportunities and challenges for further regional cooperation and integration.
- The administrative structure of implementing national energy and climate policies, including responsibilities of main administrative bodies and their interactions.

National plans may be built upon Member States' existing national energy and climate policy strategies for the years 2020, 2030 and beyond in accordance with this Guidance.

b) Objectives, policies and measures for the five dimensions

The national plans should define objectives for each dimension of the Energy Union. With regard to the 2030 targets for energy, the plans should set out national contributions needed to deliver collectively the EU-level targets. For greenhouse gas emissions in the non-ETS sectors, the plans should set out the policies and measures planned to meet the annual binding national limits set under the revised Effort Sharing Decision.

The interaction between the different dimensions should be set out (e.g. the contribution of renewable energies and energy efficiency to greenhouse gas emission reduction, the infrastructure needs arising from a greater use of renewables etc.).

For each objective, the plan should include a description of the policies and measures planned for meeting these objectives. This should also include an assessment of how these policies interact with each other to ensure policy coherence and avoid overlapping regulation.

Energy security, solidarity and trust

- Medium- to long-term objectives and standards relating to security of supply, including with regard to diversification of energy sources and supply countries, infrastructure, storage, demand response, readiness to cope with constrained or interrupted supply of an energy source, and the deployment of alternative domestic sources. The objectives should include regional cooperation and the policy measures to achieve these objectives should be regionally coordinated. In this context, national plans should build on the specific security of supply plans (assessment plans, preventive action plans and emergency plans) which are drawn up in accordance with the regulation on gas security of supply.
Policy strategies concerning energy security in the broader sense, including other relevant policy choices such as those relating to energy savings or the energy mix.

The general policy approach to ensure security of external energy supply, including through infrastructure and as applicable the intended approach to international governmental agreements with third countries should also be covered.

A fully integrated internal energy market

Development of electricity interconnectivity from 2021 to 2030 (ratio between cross-border transmission capacity and installed generation capacity), with the agreed 15% target for 2030 in mind, taking into account Member State specific factors such as costs and potential trade flows. This should also include an indication of the main projects envisaged to achieve the necessary interconnectivity in a 2030 perspective.

For energy infrastructure, how planned national infrastructure projects as well as the Projects of Common interest (PCIs) relating to the Member State will be implemented, including a time-line. In this context, national plans should build on the regulation on guidelines for trans-European energy infrastructure.

Objectives with respect to market competition, market integration and coupling, deployment of flexibility in the power sector, including development of short term markets, demand response competitiveness of energy markets, and roll-out of smart technologies and smart grids.

Assessment of the implications of planned infrastructure investments and of developments in energy production on wholesale and retail energy prices and on market integration with other Member States.

Energy efficiency contributing to moderation of demand

National policies and measures planned to support the achievement of the agreed EU-level energy efficiency target of at least 27% (to be reviewed by 2020 with a view to 30%) taking into account the expected energy savings from these policies and measures as well as the implementation of existing EU legislation.

A trajectory for energy savings to be quantified as the resulting level of primary as well as final energy consumption until 2030 should be provided as the Member State's contribution to achieving the EU target.

National policies and measures planned to increase energy efficiency in the building sector. This includes national building renovation strategies and national energy efficiency investment programmes.

Decarbonisation of the economy

Planned policies and measures to reduce greenhouse gas emissions, covering all key emitting sectors, including transport and agriculture, to meet the annual binding national limits for the non-ETS sectors up to 2030 set under the revised Effort Sharing Decision, with an outlook to the long-term vision and goal to become a low-carbon economy (2050).

National policies and measures planned to support the achievement of the agreed EU-level binding target for renewable energy of at least 27%, taking into account the implementation of existing EU legislation as well as a perspective up to 2050.

A trajectory for the share of renewable energy in gross final energy consumption until 2030, including trajectories for relevant technologies as well as for electricity demand.
installed capacity and produced energy), should be provided as the Member State's contribution guided by the need to deliver collectively the EU target.

- Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production. Status and plans for electricity market coupling and integration, regional measures for balancing and reserves and how system adequacy is assessed in the context of renewable energy. National policies and measures planned to support other low carbon technologies.

- National policies and measures planned to support the decarbonisation of transport.

- If Member States intend to support development of specific technologies, the plan should also include an assessment of the implications for energy prices and energy utilities and on market integration with other Member States.

**Research, innovation and competitiveness**

- Objectives, policies and measures set at the national level to ensure an appropriate contribution to the new European energy R&I approach to accelerate energy system transformation, in particular to the actions of the Integrated Strategic Energy Technology (SET) Plan.

- National policy strategies and funding programmes for research and innovation in the areas of renewable energy, energy efficiency, and other low-carbon technologies including in the transport sector, as well as their market uptake, including strategies to support research and technology institutions.

- Industrial policy strategies concerning competitiveness of the low-carbon technology sector and competitiveness in a broader sense, including subsidies, the impact on growth, jobs and skills, subsectors, finance and resources.

- As applicable, objectives relating to the competitiveness of the energy system and its contribution to the competitiveness of the economy as such as well as to international trade in EU energy technologies and equipment and access to third country markets.

**c) Integrated projections and indicators**

National plans should entail a separate section on projections as an analytical basis of the plan, including reference and policy scenarios assessing the relevant impacts of the policies and measures proposed. Biennial progress reports on the implementation of national plans should make use of key indicators developed by the Commission in cooperation with Member States as well as updated projections, policies and measures.

Due to the cross-cutting nature of the five dimensions of the Energy Union, there is a need to assess and validate policy objectives and instruments based on integrated methodological tools. For this reason national plans should include projections for the period until 2030 and beyond for the energy system and for greenhouse gas emissions¹, including a 2050 perspective. The projections should take account of, e.g. the macroeconomic context (such as expected Gross Domestic Products and population growth), structural changes to the economy likely to impact on the energy system and greenhouse gas emissions, global energy trends (such as international fossil fuel price developments) as well as carbon prices, cross-border grid interconnections, and technology costs. The Commission will provide technical

¹ Requirements under the Monitoring Mechanism Regulation on reporting of greenhouse gas projections shall be complied with.
recommendations on these issues, with Member States providing clarity where they would deviate from these, for instance due to model requirements.

The national plan should set out at least two scenarios: (i) a reference scenario based on current trends and existing policies and measures at EU and national level; and (ii) at least one policy scenario reflecting the implementation of envisaged national objectives by additional policies and measures for the five dimensions of the Energy Union including notably the 2030 targets, as outlined in the national plan. Potential synergies and trade-offs between the policies and measures would then be highlighted.

The Commission can support Member States by providing data and analysis. An important input will be the new EU Energy, Transport and greenhouse gas emissions Reference Scenario, prepared in close cooperation with Member States and to be published in the first half of 2016. Policy and sensitivity scenarios could also be provided to Member States to support their strategic planning, identify common challenges and assess implications of individual Member States' policy choices on the achievement of common Energy Union objectives. The EU Reference Scenario will also represent a basis for assessing Member States' collective contributions to Energy Union objectives.

National projections should be presented timely to allow EU-level aggregation and subsequent assessment of the overall state of the energy system and progress made. Therefore assumptions made as well as trends of the main modelling outcomes describing the energy system should be clearly and transparently presented.

Member States should make use of key indicators in the progress reports on the implementation of their national plans. Building on the indicators proposed in the 2030 Framework for climate and energy and those already included in the country factsheets, the Commission is presenting in a Staff Working Document\(^2\) a concept and first analysis of key indicators for monitoring progress towards the Energy Union objectives. It proposes indicators for the five dimensions of the Energy Union, for example on energy prices, competitiveness, the diversification of energy imports, decarbonisation, research and innovation or energy market functioning.

3. Regional cooperation to establish the national plans

A functioning Energy Union requires that Member States coordinate and cooperate among each other in developing their energy policies. National plans should therefore from the outset build on regional consultations.

Member States should identify areas suitable for joint or coordinated planning within their region and should consult their region early on in the preparation process. The various national plans in a region should complement and where possible reinforce each other, using national strengths to address the region’s challenges in the most secure and cost-effective way. Particular attention should be paid to ensuring a coordinated approach concerning the development of new energy resources and infrastructures.

Common approaches and joint objectives can increase long-term predictability and investment certainty. Coordination of national policies should therefore also prevent adverse incentives and mitigate possible adverse effects of national policies for other Member States. Plans should therefore contain an assessment of how the envisaged objectives and policies in the plans will impact on other Member States in the region and how regional cooperation across policy areas and sub-sectors should be strengthened.

Existing fora for regional cooperation framework, including macro-regional strategies, can be used for this purpose. The Commission will actively engage in the process and support the development of appropriate new fora. It is key that regions are balanced, enabling cooperation across several dimensions of the Energy Union.

The Commission will provide more detailed guidance to Member States on regional cooperation in the context of the implementation of the Energy Union objectives in 2016.

4. Reports on implementation of the plans and updates

Member States should provide progress reports every two years on the implementation of national plans starting in 2020. These implementation reports will be an important instrument in helping all Member States to see what is happening in implementing the Energy Union objectives.

The Commission will report on progress in its annual report on the State of the Energy Union.

Updating of national plans is foreseen once during the period from 2021 to 2030 to take account of changing circumstances and amendments in view of delivering on the commonly agreed objectives of the Energy Union, in particular the 2030 targets for climate and energy. As regards specific policy measures of the national plans, additional updates may be foreseen if necessary.

5. Process and timeline

The preparation of the national plans will be a dynamic process. Even though the outcome of the upcoming legislative processes for the key related EU legislation will have an impact on the design and implementation of national policies, the process of developing national plans needs to start in 2016 so that the plans can be finalised well before 2020 taking into account related EU legislation.

Existing planning and reporting obligations for policy areas with existing 2020 targets will remain unchanged until the year 2020. Reports would be synchronised with the new process of national energy and climate plans. For the period beyond 2020, the Commission will present a legislative initiative on streamlining of planning and reporting requirements in 2016 in order to reduce administrative burden and ensure coherence, simplification and consistency between the various planning and reporting streams while maintaining the quality of reported information and data. The Commission and Member States should already be able to consolidate and streamline a certain amount of reporting before 2020, where this can be done without legislative changes and without impacting on the substantive obligations. The Commission is already showing the way in its consolidation of periodic reports with the first State of the Energy Union.

The timeline for developing national energy and climate plans, which shows the relevant activities of Member States and the Commission, is presented in the table at the end of this section.

By autumn 2016 Member States are invited to present first results of their integrated projections for a reference scenario. Regional discussions with other Member States should be initialised. In the same year, the Commission will finalise the EU Reference Scenario 2016, provide a template for national plans, and issue guidance on regional cooperation. The relevant legislative proposals on the revised Effort Sharing Decision, renewable energy, energy efficiency, market design, and streamlining of planning and reporting obligations will be presented in the course of 2016.
In 2017, national political process on the plans should be initialised in order to allow for broad political validation of the plans at the national level and regional and stakeholder consultations finalised. By March 2017 integrated projections should be provided to the Commission covering both a reference and policy scenarios. These projections will form a key input to Member States' national plans. Draft national plans should be submitted to the Commission in 2017, after which a consultation with other Member States and the Commission will be organised, in particular with a view to collectively achieving EU-level energy targets and objectives. Subsequently, the Commission will issue recommendations on draft national plans and present them in subsequent State of the Energy Union.

In 2018, final plans should be submitted to the Commission, taking into account consultations with other Member States, Commission recommendations and relevant EU legislation. The Commission will subsequently issue the State of the Energy Union including a first aggregate assessment of national energy and climate plans.

As regards the 2030 targets for renewable energy and energy efficiency agreed at EU level, the Commission will assess collective efforts presented in Member States' national plans in view of delivering on these targets. Policies and measures at EU level to complement national efforts in ensuring target delivery will, inter alia, be laid out in the new Renewable Energy Directive and the reviewed Energy Efficiency Directive to be presented by the Commission in 2016. The specific application of some of these measures will be determined at a later stage based on Member States' collective efforts presented in their national plans and on progress reports in view of delivering on the Energy Union objectives.

Along the process, the Commission will organise regular meetings and engage in dialogue with Member States to provide technical support, take stock of the preparation of the plans and discuss the way forward.

In the governance process, adequate involvement of all relevant European Institutions, notably the Council and the European Parliament, will be ensured.

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3 For simplification purposes, the date set will allow to use these projections to fulfil Greenhouse gas projection reporting requirements under the Monitoring Mechanism Regulation.
Table: Timeline for developing national energy and climate plans

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<th>Year</th>
<th>Member States</th>
<th>European Commission</th>
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| 2016 | - Start to develop overarching strategy, main objectives and overview of policies of national energy and climate plans  
- Develop integrated methodological tools to prepare a reference and policy scenarios as the analytical basis of national plans and present first results of reference scenario  
- Start national stakeholder consultations on national plans  
- Start regional discussions with other Member States on the preparation of national plans  
| - Finalise, in collaboration with Member States, the EU Reference Scenario 2016  
- Provide template for national plans, including on main variables and parameters for national integrated projections  
- Provide guidance on regional cooperation  
- Present legislative proposals on the revised Effort Sharing Decision, renewable energy, energy efficiency (including for the buildings sector), market design, and streamlining of planning and reporting obligations  
- Hold technical meetings with Member States e.g. on methodological tools as well as key indicators  
- Issue 2nd State of the Energy Union  |
| 2017 | - Finalise stakeholder consultations and regional consultations on national plans  
- Engage in national political process on national plans  
- Provide integrated projections to the Commission covering both a reference and policy scenarios  
- Submit draft national plans to the Commission based on Commission Guidance on national plans and template  | - Provide technical support to Member States on the preparation of national plans  
- Facilitate and support regional consultations with other Member States on national plans including establishment of appropriate fora  
- Organise consultation with Member States of draft national plans and provide recommendations on draft plans  
- Issue 3rd State of the Energy Union  |
| 2018 | - Finalise national plans, taking into account Member States' peer review and Commission recommendations  
- Submit final national energy and climate plans  | - Provide support to Member States in finalising national plans  
- Issue 4th State of the Energy Union including first aggregate assessment of national energy and climate plans to be presented to Council and Parliament  |