

EU Strategy for the Danube Region

PA2 Roadmap

10th October 2016

Target I

To help to achieve the national targets based on the Europe 2030 climate and energy targets

Action 1

To further explore the sustainable use of biomass, solar energy, geothermal, hydropower and wind power to increase the energy autonomy and to promote and support multipurpose cross border RES utilization projects

Policy background

The increasing use of renewable energy sources in EU contributes to more sustainable energy production, lower dependency of EU on imported fossil fuels and moreover drives technological innovation and employment across Europe. Following the Europe 2030 climate and energy framework and Energy Union Strategy, we can observe increasing attempt to spread the use of RES across the regions, including the Danube area.

The available biomass, solar, wind, hydro, geothermal resource base varies significantly across the Danube strategy participating countries. Examining the region's renewable resources potential for renewable energy production such as wind, solar, small hydropower and biomass alongside the existing energy infrastructure the Danube region can identify the potential for, and hurdles to, increased efficiency and energy storage.

In order to contribute to the dissemination of the renewable energy sources use in the region, Priority Area 2 of the EUSDR should provide data and overview for the policy makers and focus on sharing best practices (including learning from wrong practices) to support achieving 2030 climate-energy targets in our area and to help countries successfully navigate the change to an sustainable energy capable of meeting the energy challenges of the 21st century.

Milestones

Area of work: To further explore the use of the RES and its incorporation into the electricity grid in order to contribute to diminishment of barriers in the energy market.

Milestone n°1 Endorsement of the scope of study by the Steering Group

Responsible PA2 coordination

Deadline 2018

Milestone n°2 Study on the decentralization of the grid

Responsible Priority Area 2, Steering group members, external consultants

Deadline	2018
Milestone n°2	Seminar on the use of RES and its impact on the grid
Responsible	Priority Area 2
Deadline	2018

Area of work: Identification of bottlenecks and examples of good practices in the use of RES in sustainable way

Milestone n°1	Seminar on RES in mountain areas
Responsible	Priority Area 2 with relevant stakeholders (Carpathian Convention, EUSALP, etc.)
Deadline	2017
Milestone n°2	Policy brief or best practices report from milestone n°1
Responsible	Priority Area 2
Deadline	2017

Milestone n°3	Bioenergy and sustainable use of RES in DR expert seminar
Responsible	Priority Area 2
Deadline	2018

Milestone n°4	Policy brief or best practices report from output no. 3
Responsible	Priority Area 2
Deadline	2018

Area of work: Sharing knowledge, experience and strengthening cooperation across the region in the field of sustainable use of RES

Milestone n°1	Clustering workshop on use of RES in energy efficiency
Responsible	Priority Area 2
Deadline	2017

Milestone n°2	Clustering workshop on bioenergy
Responsible	Priority Area 2
Deadline	2018

Action 2

To facilitate networking and cooperation among national stakeholders (national and local authorities, businesses and citizens) in order to promote energy efficiency, mitigation of climate change and to increase the use of renewable energies

Policy background

Relevant institutions, policy-makers, actors from the private and public sector, universities and other stakeholders on different levels are crucial for tackling various issues across the member states. Energy efficiency presents one of the five dimensions of the Energy Union strategy from 2015 and furthermore it has its crucial role in the 2030 Energy and Climate policy framework. In the Danube region the heterogeneity of experiences and knowledge of the many stakeholders on the national and local level poses a unique opportunity for information sharing based cooperation.

In the following years, PA 2 should pay greater attention to the “last segments of the chain” in the energy field – its users and local stakeholders. It is necessary for PA2 to focus on engaging private and public authorities, providing information on financing opportunities and setting up exchange and cooperation channels based on the concrete needs in order to promote energy efficiency, mitigation of climate change and to increase the use of renewable energies. Especially with having in mind low capacity of the stakeholders to deal with those challenges in strategic approach.

Milestones

Area of work: Informing and engaging stakeholders in the most recent developments in the field of energy in the Danube region with focus on energy efficiency.

Milestone n°1	Seminar on Energy efficiency in SMEs
Responsible	Priority Area 2
Deadline	2017
Milestone n°2	Policy brief or best practices report
Responsible	Priority Area 2
Deadline	2017

Area of work: Empowering stakeholder to tackle the energy poverty in the Danube region.

Milestone n°1	Expert seminar on energy poverty
Responsible	Priority Area 2

Deadline	2019
Milestone n°2	Policy brief or best practices report
Responsible	Priority Area 2
Deadline	2019

Action 3

To improve energy efficient, cost efficient and innovative low-carbon technologies, including smart solutions while respecting the principle of technological neutrality

Policy background

Transitioning from a carbon-intensive economy to a low-carbon future presents challenges and opportunities for developing countries. The topic of energy and energy efficiency will thus be a fundamental part of EU actions in the following years as well as the post-2020 period. As the EU strives to improve its economic competitiveness, energy security as well as reducing emission, which is well reflected in the policy frameworks of the Energy Union Strategy (from 2015), as well as the EU energy efficiency targets for 2030 (from 2014), we need to support the increase of energy efficiency at all stages of the energy chain from its production to its final consumption. By this the Danube region can contribute to the EU 2050 low-carbon roadmap towards a low-carbon society. And clean technologies will play an important role in this process.

In order to support the development of research and innovation activities in the countries of the Danube Region, PA2 will offer the opportunity to develop cross-linkages between various actors e.g. enterprises, R&D institutions and public sector (following triple helix approach). Special attention will be given to the engagement of the actors from regional level.

Milestones

Area of work: Support to development of project ideas, sharing of experience and providing networking platform in the field of sustainable use of RES.

Milestone n°1	Clustering workshop on use of RES in energy efficiency
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Responsible	Priority Area 2
Deadline	2017

Milestone n°2	Clustering workshop on RES and bioenergy
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Responsible	Priority Area 2
Deadline	2018

Milestone n°3	Project workshop on financing energy projects post 2020
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Responsible	Priority Area 2
Deadline	2018

Target II.

To remove existing bottlenecks in energy to fulfill the goals of the Energy Union within the Danube Region

Action 4

To promote energy efficiency and use of renewable energy in buildings and heating systems including district heating and combined heat and power facilities

Policy background

Energy efficiency is one of the five dimensions of the Energy Union Strategy adopted on 25 February 2015. Given its importance, the Energy Union communication announced that the EU's energy efficiency legislation will be reviewed in 2016. Moreover, in line with October 2014 European Council conclusions, the new governance system will have to ensure the delivery of the 2030 energy and climate framework, and notably the implementation of the agreed 2030 targets on renewables and energy efficiency.

The Energy and Climate policy framework for 2030, as endorsed by the European Council of 24 October 2014, establishes ambitious EU commitments to make further GHG reductions (40%) in line with the cost-effective pathway described in the 2050 roadmap, for the share of RES consumed (at least 27%) and saving at least 27% energy by 2030 at EU level compared to 2007 baseline projections.

The Directive on Energy Efficiency (EED) (2012/27/EU) lays down the EU 20% headline target for energy efficiency and establishes a common framework of measures for the promotion of energy efficiency within the EU to ensure the achievement of the target by 2020 and to pave the way for further energy efficiency improvements beyond that date.

In general, energy efficiency has to be increased at all stages of the energy chain from generation to final consumption. EU measures therefore focus on sectors where the potential for savings is greatest such as buildings. Heating and cooling is the largest single source of energy demand in Europe. 84% of heating and cooling is still generated from fossil fuels while only 16% is generated from renewable energy. In order to fulfil the EU's climate and energy goals, this sector must sharply reduce its energy consumption and cut its use of fossil fuels. Given this context, in February 2016, the Commission proposed an EU heating and cooling strategy as part of the Energy Union strategy.

Milestones

Area of work: Mapping out the existing best practices of transforming waste into energy potential within the Danube Region as well as existing bottlenecks that may hinder the rapid expansion of such good examples by outside consultancy.

Milestone n°1	Endorsement of the scope of the study by the Steering Group
Responsible	PA2 coordination
Deadline	2018
Milestone n°2	Issuance of a study

Responsible	PA2 coordination and outside consultancy
Deadline	2018

Area of work: Engaging stakeholders in policy discussions based on the analysis provided in Milestone n°2

Milestone n°1	Organization of a participatory event related to the action
Responsible	PA2 coordination
Deadline	2018

Milestone n°2	At least one media release as a follow-up to the event described under Milestone n°1
Responsible	PA2 coordination
Deadline	2018

Area of work: Mapping out the existing best practices of smart cities within the Danube Region as well as existing bottlenecks that may hinder the rapid expansion of such good examples by outside consultancy.

Milestone n°1	Endorsement of the scope of the study by the Steering Group
Responsible	PA2 coordination
Deadline	2018

Milestone n°2	Issuance of a study
Responsible	PA2 coordination and outside consultancy
Deadline	2018

Area of work: Engaging stakeholders in policy discussions based on the analysis provided in the study on smart cities

Milestone n°1	Organization of a participatory event related to the action
Responsible	PA2 coordination
Deadline	2018

Milestone n°2	At least one media release as a follow-up to the event described under Output n°1
Responsible	PA2 coordination
Deadline	2018

Area of work: Providing assistance for potential project partners and/or project ideas within the macro-region related to this action

Milestone n°1	Organization of a workshop for potential project partners with the aim to establish a project consortium
Responsible	PA2 coordination
Deadline	2018

Action 5

To enforce regional cooperation with the aim of supporting the implementation of projects connecting the gas and electricity markets (PCI and PEI) and particularly focusing on the priority projects of the Central and South Eastern Europe Gas Connectivity (CESEC) initiative

Policy background

In February 2015, 15 EU and Energy Community countries (Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Romania, Slovakia, Slovenia, Albania, Former Yugoslav Republic of Macedonia, Serbia and Ukraine) in Central Eastern Europe and South East European regions have agreed to contribute to establishing the well-connected EU energy market by boosting natural gas diversification and market integration in the region. To achieve this goal, Parties endeavor to build the missing gas infrastructure links and tackle remaining technical and regulatory issues.

Given this context, the High Level Group adopted a Memorandum of Understanding and Action Plan in July 2015 to boost natural gas diversification and market integration in the region.

The signatory countries expressed their commitment to jointly resolve challenges related to security of gas supply and promote source diversification by implementing coordinated measures that should enable regionally optimal results. They expressed their readiness to sustain the necessary political commitment to oversee the full and timely implementation of the CESEC Action Plan.

In certain Danube countries, the implementation of infrastructure projects has made a good progress since the launch of the CESEC process in 2015, and is expected to be ready by 2020. Therefore, it is now time to shift from hard measures to soft measures by removing bottlenecks that hinder regulatory compliance.

In order to contribute to the above, Priority Area 2 of the EU Strategy for the Danube Region shall serve as a platform for discussion for Danube countries (9 out of 14 are signatory parties of CESEC process) with a special focus on the regulatory bottlenecks of the CESEC process.

Milestones

Area of work: Mapping out the existing regulatory bottlenecks within the Danube Region by outside consultancy.

Milestone n°1	Endorsement of the scope of the study by the Steering Group
Responsible	PA2 coordination
Deadline	2017
Milestone n°2	A study will be issued
Responsible	PA2 coordination and outside consultancy
Deadline	2017

	Milestone n°3	Regulatory workshop for non-EU countries
	Responsible	PA2 coordination
	Deadline	2017
Area of work:	Exploring the “beyond 2020” outlook based on the current state of play described in the above point.	
	Milestone n°1	Endorsement of the scope of the study by the Steering Group
	Responsible	PA2 coordination
	Deadline	2017
	Milestone n°2	A study will be issued on post-2020 energy
	Responsible	PA2 coordination and outside consultancy
	Deadline	2017

Area of work: Engaging stakeholders in policy discussions based on the analysis provided in Milestone n°2

	Milestone n°1	Organization of a participatory event related to the action
	Responsible	PA2 coordination
	Deadline	2017
	Milestone n°2	At least one media release as a follow-up to the event described under Milestone n°1
	Responsible	PA2 coordination
	Deadline	2017
	Milestone n°3	Issuance of 1 policy paper related to CESEC process
	Responsible	PA2 coordination
	Deadline	2017

Action 6

To exchange best practices and to develop activities to decrease energy poverty, to increase the protection of vulnerable consumers and to empower consumers to engage in the energy market

Policy background

Energy poverty – when households are not able to adequately heat their homes at an affordable cost - is estimated to affect around 54 million people. The scale of the problem is due to rising energy prices, low income and poor energy efficient homes, and it is particularly prevalent in Central Eastern and Southern Europe. Even though under the EU's so-called Third Energy Market Package, the responsibility for putting measures in place to fight energy poverty lies with national governments, a number of EU countries still lack a comprehensive approach. It is estimated that less than a third of EU countries officially recognize energy poverty.

A comprehensive synthesis study needs to be commissioned regarding the energy poverty situation in the Danube region, identifying existing economic, political and technical bottlenecks and putting forward appropriate policy measures. By facilitating the exchange of best practices among the countries of the Danube Region this study should develop adequate definitions that are supported by statistics and can be useful for policy making. In the longer term the study should lay the groundwork for an Energy Poverty Reduction Action Plan.

Milestones

Area of work: Mapping out the level of energy poverty in the Danube Region, with a

special focus on underdeveloped regions and existing bottlenecks.

Milestone n°1	Endorsement of the scope of study by the Steering Group
Responsible	PA2 coordination
Deadline	2019

Milestone n°2	A comprehensive study commissioned to synthesize the existing
Responsible	PA2 Coordination
Deadline	2019

Area of work: Dissemination of the study in the EUSDR participating states and creating a network for relevant stakeholders dealing with energy poverty reduction.

Milestone n°1	Information disseminated and comments collected
Responsible	SG members
Deadline	2019

Area of work: Creating an Energy Poverty Reduction Guideline for the Danube Region. The implementation of this Milestone will require specific professional skills; therefore outside consultancy will be hired.

Milestone n°1	Outside consultancy with proper professional skills selected
Responsible	PA2 coordination
Deadline	2019

Area of work: Creating an Energy Poverty Reduction Guideline for the Danube Region.

Milestone n°1	Detailed guidelines created
Responsible	PA2 coordination
Deadline	2019

Area of work: Policy recommendations provided

Milestone n°1	Policy recommendation accepted by Steering Group
Responsible	Consultancy in close cooperation with Priority Area
Deadline	2019

Action 7

To promote diversification of supply (e.g. through access to multiple sources, including LNG)

Policy background

The EU imports more than half of all the energy it consumes. Its import dependency is particularly high for crude oil (more than 90%) and natural gas (66%). The total import bill is more than €1 billion per day. Many countries are also heavily reliant on a single supplier, including some that rely entirely on Russia for their natural gas. This dependence leaves them vulnerable to supply disruptions, whether caused by political or commercial disputes, or infrastructure failure. In response to these concerns, the European Commission released its Energy Security Strategy in May 2014. The Commission has also asked EU and Energy Community countries to prepare regional energy security preparedness plans which were reviewed and adopted in 2015.

The conclusions that can be drawn from these plans is that increasing energy efficiency and reaching the proposed 2030 energy and climate goals, increasing energy production in the EU and diversifying supplier countries and routes, completing the internal energy market and building missing infrastructure links, speaking with one voice in external energy policy, and strengthening emergency and solidarity mechanisms and protecting critical infrastructure are all key elements of reaching a sustainable energy diversification of supply. This includes more coordination between EU countries to use existing storage facilities, develop reverse flows, conduct risk assessments, and put in place security of supply plans at regional and EU level.

The situation in the Danube Region is also worrisome as many countries in Central and South East Europe are dependent on a single supplier for most or all of their natural gas. To help these countries we need to diversify their supplies by finding ways to expand infrastructure that can bring gas into the Region from new sources. Liquefied natural gas (LNG) imported to Europe through LNG terminals is a source of diversification that could significantly contribute to competition in the gas market and security of supply. New LNG supplies from North America, Australia, Qatar, and East Africa are likely to increase the size of the global LNG market and some of these volumes should reach the European market. Considering that most of the existing capacity is located in Western Europe and the existence of internal bottlenecks from the Atlantic coast to the East, the development of a few new regasification units in Eastern Europe would be justified. This is the case in the Baltics and in South-East Europe where LNG regasification units have been identified as Projects of Common Interest.

Milestones

Area of work: Dissemination and validation of the LNG Policy Paper in the EUSDR Member States (ministries, implementing authorities, professional associations, knowledge centers). Steering Group Members are responsible for disseminating the study in their countries and also liable for collecting comments, suggestions raised by relevant stakeholders (public consultation). PAC's are responsible for consulting the Action Plan with the European Commission.

Milestone n°1	A validated LNG Policy Paper, comments collected
Responsible	SG Members, PAC's
Deadline	2017

Area of work: Mapping out alternative solutions to increase diversification of supply of the Region, as well as identifying possible political, economic and technical bottlenecks that could hinder

The implementation of the following milestones will require specific professional skills; therefore outside consultancy will be hired.

Milestone n°1	Endorsement of the scope of study by the Steering Group
Responsible	PA2 coordination
Deadline	2017
Milestone n°2	A comprehensive study of available methods to increase energy diversification and identify possible bottlenecks
Responsible	Consultancy in close cooperation with Priority Area
Deadline	2017

Area of work: Policy recommendations to relevant decision makers in order to eliminate existing bottlenecks in the way of energy diversification

Milestone n°1	Policy recommendation accepted by Steering Group
Responsible	Consultancy in close cooperation with Priority Area
Deadline	2017

Target III.

To better interconnect regions by joint activities with relevant initiatives and institutions

Action 8

To ensure that actions are coherent with the general approach of the Energy Community and explore synergies between the Energy Community and the Danube Strategy processes

Policy background

Macroregional strategies are unique platform where EU as well as non-EU countries are participating. As such they have great potential for sharing of experiences, dissemination of examples of good practices and stimulating cooperation across the border not only on the policy but also project level. At the same time macroregional strategies, and the EU Strategy for the Danube Region is not exception, provide also a platform where the non-EU countries can contribute to the debate on the current EU policies and developments.

The Energy Community which has been established in 2005 with the aim to implement the relevant EU energy *acquis communautaire*, to develop an adequate regulatory framework and to liberalize their energy markets in line with the *acquis* under the Treaty, is the most important part of the Priority Area 2 in terms of cooperation with the non-EU participating countries. In order to support the non-EU participating countries, the Priority Area 2 should ensure that its actions are coherent with the general approach of the Energy Community and to support sharing of information and encouraging cooperation either on the policy level or the project level between the EU and non-EU participating countries. The Priority Area 2 should also establish working exchange of information with the Energy Community secretariat.

As the EU and non-EU countries share many common challenges (remaining barrier to the energy market, energy poverty, need to increase energy efficiency, etc.) the Priority Area 2 should engage the stakeholders in its activities in order to support cross-border cooperation namely in diminishing the market barriers and energy efficiency measures.

Milestones

Area of work: Identifying the bottlenecks in the electricity market in terms of the renewable energy sources and exploring potential of increasing the use of renewable sources of energy

Milestone n°1	Endorsement of the scope of study by the Steering Group
Responsible	PA2 coordination
Deadline	2018
Milestone n°2	Study on the decentralization of the grid in the Danube region
Responsible	Priority Area 2, Steering group members, external consultants
Deadline	2018

Area of work: Engaging stakeholders in policy discussions based on the analysis provided in Milestone n°1

Milestone n°1	Organization of a participatory event related to the action with special focus on sharing experiences with the non-EU participating countries
Responsible	PA2 coordination

Deadline	2018
Milestone n°3	At least one media release as a follow-up to the event described under Milestone n°1
Responsible	PA2 coordination
Deadline	2018

Action 9
To reinforce the Carpathian Convention to share best practices and to develop joint projects

Policy background

Mountain areas are of special importance in the Danube region. The Carpathians, Europe's largest range of mountains, extending over 450,000 KM2, are an important biodiversity reservoir and a recreational and living ecosystem in the heart of Europe. And with the exception of Polish Carpathians, the mountain range is located within the Danube Region. International cooperation on sustainable development and protection of the Carpathians is already ongoing within the framework of the Carpathian Convention, which has been signed in 2003 as an international multilateral agreement – the Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention) by seven countries (SK, CZ, HU, PL, RO, RS and UKR) and which has entered into force in 2006. The Framework Convention is designed to be an innovative instrument to ensure protection and foster sustainable development of this outstanding region and living environment, the Convention is willing to improve the quality of life, to strengthen local economies and communities. With such geographical, but also thematical overlap, further exploration of synergies and avoiding duplication is needed in the energy field.

The Priority Area 2 has already established cooperation with the secretariat of the Carpathian Convention, which also participated in several of the Priority Area 2 projects and activities. The main task should be now to better integrate the mountain issues into the EUSDR and to enhance the possibilities for inclusive transboundary cooperation of stakeholders from all the Carpathian countries in the energy field.

Milestones

Area of work: Establishing well working exchange of information and cooperation channels between the Priority Area 2 coordination and the Carpathian Convention secretariat

Milestone n°1	Signed Memorandum of Understanding
Responsible	Priority Area 2 and Carpathian Convention
Deadline	2017

Milestone n°2	Established cooperation channels
Responsible	Priority Area 2
Deadline	2017

Area of work: Identified bottlenecks and examples of good practices in the sustainable use of RES in mountain areas in the Danube region

Milestone n°1	Seminar on RES in mountain areas
Responsible	Priority Area 2 with relevant stakeholders (Carpathian Convention, EUSALP, etc.)
Deadline	2017
Milestone n°2	Policy brief or best practices report from milestone no.1
Responsible	Priority Area 2
Deadline	2017

Area of work: Sharing knowledge, experience and strengthening cooperation across the region in the field of sustainable use of RES with the aim to promote innovations and research.

Milestone n°1	Clustering workshop on use of RES in energy efficiency
Responsible	Priority Area 2
Deadline	2017
Milestone n°2	Clustering workshop on RES and bioenergy
Responsible	Priority Area 2
Deadline	2018

Action 10

To encourage exchange of information and best practices to improve cooperation, create synergies and to initiate joint projects with other macro-regional initiatives and relevant stakeholders from national, European and global level.

Policy background

After five years of implementation of the EU Strategy for the Danube Region a strong upward trend can be observed in the EU in terms of cooperation. The number of initiatives to establish and strengthen links among EU and non-EU countries is constantly growing. However, there exists an untapped potential for the Danube region to explore synergies with other macro-regional strategies (EUSBSR, EUSALP, EUSAIR, Carpathian Convention, Energy Community, etc.) as well as with other regional, international initiatives.

In order not to duplicate efforts and to better use available resources, in the following years PA2 should pay greater attention especially to creating possible joint initiatives such other macro-regional strategies and relevant initiatives within and outside of the region.

Milestones

Area of work: Mapping out any potential room for cooperation with other existing initiatives within the Danube Region as well as relevant non-EUSDR initiatives (e.g. other macro-regional strategies) in a matrix providing overview of potential synergies and cooperation.

Milestone n°1	Endorsement of the matrix by the Steering Group
Responsible	PA2 coordination
Deadline	2017

Area of work: Based on the results of the mapping of energy actors in the region from Milestone n°1, the Priority Area will launch a project in cooperation with the relevant initiatives in order to remove existing bottlenecks that may hinder cooperation and in order to strengthen existing good practices between the parties.

Milestone n°1	Setting up the framework of cooperation (calendar, channels of information, information exchange processes, database of relevant stakeholders, monitoring system of the cooperation...)
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Responsible	PA2 coordination and relevant regional initiatives
Deadline	2017