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## Abstract

The translation of the European Green Deal to the Western Balkans is primarily a political process, that has to be followed by an adequate policy response. Indicators of its success or failure, however, are physical. The transposition of legislation and standards itself can be achieved via political and administrative processes. However, success is contingent upon the successful implementation illustrated by physical changes such as cleaner environment, circular economy, a dynamic deployment of renewable energy.

The key decision to be made is related to the future of lignite in the WB region. It is a decision with long lasting consequences. Translation of the Green Deal requires radical changes in emitted carbon, sulphur and particulate matter. Green deal is about the numbers. Alterations in flows of millions of tonnes of coal and wood are required. Millions of stoves would need to be replaced, hundreds of thousands of heat pumps deployed, millions of vehicles changed. Millions of tonnes of insulation material and millions of roofs equipped with solar panels. Hundreds of chimneys need to be torn down. Embracing the Green Deal by WB region has a potential to generate new job opportunites and benefits from the innovations withing the WB economies. It is most likely less costly that carbon lock in alterantive especially in light of the EU announced carbon border adjustment mechanism that changes the rules of the game. Europeanisation alone that is driven mainly buy the transposition will not be sufficient to bridge deep strategic and structural gaps between the current situation and the decarbonisation and climate neutrality by 2050, as the major goal of the Green Deal.

The EU and the WB need to find additional ways, reflecting also the lessons learned from the life of the Energy Community Treaty, that brought many improvements to the contracting parties retaed to climate change, energy and environmental policy framework. Goals of Energy Community are less ambitios in comparisomn to the Green Deal. However, the Energy Community parties have had cjhallenges in achieveing them as well. The feedback from the EU on the Energy Community outcomes would provide a good baseline for the next steps in the translation of the Green Deal to the WB region. One of them certainly involves a genuine integration of climate, energy and air pollution policy is a key to make Green Deal operational in the WB region. This particular tiangle has a powerful potential mid-term success. The physical, real-life improvements may trigeer a more radical green transition.

Consequences of the decisions in climate, energy and air last long and cost much. A broad dialogue in the WB societies is required for the decision making. Not many elements for such a dialogue are in place because typical strategic decision-making in the WB region fails to embrace principles of inclusion and participation. This practice, also increases the risk of wrong decisions. Delivery of sustainable, greener future for the WB region needs to rest on a broad social consensus enshrined in a inclusive and inclusive participatory decision making process. A clear communication and support from the EU to the WB region is essential given the unprecedent volume of resources, both human and financial, that countries need to pool to design and implement policies aligned with the ambitions of the Green Deal in the next decade. This is especially relevant in the presence of the COVID 19 threat and its consequences. The magnitude of possible lost opportunities and lock-ins calls for a careful thinking among all sides in order to create a win-win solution.

Citizens of the WB region deserve to breathe better air, live in a cleaner environment, and harness the benefits of sustainable, affordable energy and circular economy. Targeted translation of the Green Deal can help them in achieving those goals. For example, energy transition of the WB region anchored in the Green Deal is a development opportunity for the entire region. It allows building a modern, environmentally and climate-friendly power systems by 2050. Regional cooperation is essential in achieving those goals. Studies suggest that it is feasible to have at least half of the electricity produced by renewable energy in the region already by 2030. Precondition for such scenario is strong

integration of power systems. Time differences in wind patterns, for example, are large in a single power system, on a regional scale they are much smaller and almost cease to exist if entire continental power system is viewed as united. Only interconnected WB region will become greener, to the benefit of its citizens and the entire Europe.

# Introduction

The EU continues to pursue its smart growth goals with sustainability placed at the core of its growth. It resumes its decades long lead on fighting climate change through ambitious vision and policies. In 2019, the European Council agreed on 'A new strategic agenda for 2019-2024' that sets out the priority areas and steer the work programmes of other EU institutions. Building a climate-neutral, green, fair and social Europe represents one of the four main priority areas. Concretely, it is about consistency with the Paris Agreement; accelerating the transition to renewables and increasing energy efficiency; reducing dependence on outside sources, diversifying supplies and investing in solutions for the mobility of the future; improving the quality of air and waters; promoting sustainable agriculture and implementing the European Pillar of Social Rights (European Council, 2019).

The EU goes well beyond near terms both when visioning and practical tools are concerned. As a result of the Council's political vision, the Commission presented its communication on the European Green Deal: a new growth strategy for the EU with the objective to transform Europe to a climate-neutral, resource-efficient and competitive economy by 2050.



Figure 1 Green deal: key words and a number. Light colours.

Climate action is at the heart of the European Green Deal. There is, however much more than just climate action in the Green Deal as it encompasses an ambitious package of other measures ranging from investing in research and innovation, to preserving natural environment. The Commission communication announces initiatives covering a number of policy areas: climate, environment, energy, transport, industry, agriculture, and sustainable finance. All areas are strongly interlinked.

The EU is already on track to meet its greenhouse gas emissions reduction target for 2020 and has put in place the key laws and measures to achieve its climate and energy targets for 2030. Therefore, ambitious vision of European Green Deal calls for new policies that are building on already existing key EU legislation and policies: EU Emissions Trading System (EU ETS) to reduce greenhouse gas emissions from the power sector, industry and flights within the EU; national targets for sectors outside emissions trading, such as transport and buildings; reduction of greenhouse gas emissions from transport, e.g. through CO<sub>2</sub> emission standards for vehicles; boosting of energy efficiency, renewable energy and governance in the members states' energy and climate policies. Higher ambitions require novel tools. Consequently, under the European Green Deal, all current policies which are related to the climate neutrality objective will be reviewed and revised in line with the increased climate ambition. First climate action initiatives under the Green Deal include:

- European Climate Law that enshrines the 2050 climate-neutrality objective into EU law and,
- European Climate Pact that engages citizens and all parts of society in climate action (EC, 2019a).

The Green Deal and its policies aim to affect the physical world, significantly altering the patterns of emissions, resources, technologies and possibly employment. The Western Balkans and the EU share the same continent, some natural resources and public goods, and utilise connected infrastructure. As a result, the EU extends its ambition to the EU-Western Balkans relations. This year – 2020, has been announced as a key year for moving the WB closer to the EU. In February 2020, the Commissioner for Neighbourhood and Enlargement, Olivér Várhelyi stated that: '*The European Union enlargement to the Western Balkans is a top priority for the Commission*' (EC, Press Release 5 February 2020) which was reiterated at the EU-Western Balkans Zagreb Summit in May 2020 (EC Statement, 6 May, 2020).

At the same time, European Commission put forward a proposal to enhance and drive forward the EU accession process in the Western Balkans by making it more credible, with a stronger political steer, more dynamic and predictable. The proposal includes a process that ensures greater clarity on what the EU expects from the Western Balkan countries at different stages of the process, and what the positive and negative consequences are of progress or lack thereof.

The core element of the merit-based accession process is its conditionality. Therefore, the new proposal sets up that conditions must be clear from the beginning. From now on, the Commission will better define the conditions set for candidates to progress, in particular through its annual reports. These conditions must be objective, precise, detailed, strict and verifiable. If countries move on reform priorities agreed in the negotiations sufficiently, this should lead to:

- Closer integration of the country with the European Union, work for accelerated integration and 'phasing-in' to individual EU policies, the EU market and EU programmes, while ensuring a level playing field;
- Increased funding and investments including through a performance-based and reform-oriented Instrument for Pre-accession support and closer cooperation with IFIs to leverage support (EC, 2020)

These are all recent developments. However, the players have a history of relations around the phenomena that includes growth, stability, energy and environment. The history that teaches the important lessons.

Given the interconnected nature of network energy systems it seems natural that EU was vitally interested in the developments of the energy markets in the South Eastern Europe (SEE) as early as the 1990ies. Thoughts of (re)integrating the SEE energy markets and creating a single pan European market inspired the vision of a treaty that would serve such purpose. Negotiations of a comprehensive international legal arrangement started in 2001, during the Athens process. The first round of negotiations of the Athens process was marked by the signing of the Memorandum of Understanding in 2002. All the SEE countries signed it as well as the United Nations Mission in Kosovo for Kosovo<sup>\*</sup>, the Vice President of the European Commission and the Special Coordinator of the Stability Pact (European Commission, 2002). The following year, the Memorandum of Understanding was concluded. The finalization of the negotiations took place in Athens on 25 October 2005 with the adoption of a legally binding agreement. The EnCT was the first multilateral treaty signed by the Republics of the Former Yugoslavia after the wars in the 1990s and was deemed a decisive step towards reconciliation (European Commission, 2005b). For that reason, then President of the European Commission Jose Manuel Barroso has addressed it as 'a major achievement for peace and stability in Europe' (European Commission, 2005b). Political processes framing the possible pathway to the full EU membership were developing simultaneously. The processes provide for numerous insights, some of which will be addressed in this paper.

Fastforward to present, the EU is calling countries to move forward and step up their climate action (European Council, 2019). This fact is often overlooked in the Western Balkan countries that are still investing in coal, refraining from stringent environmental standards and neglecting the alarming levels of air pollution (EnC, 2020). The European Green Deal underlines the need for a *holistic approach* in which all EU actions and policies contribute to its objectives. This is the approach that WB countries need to embrace to fill in the existing gaps and move on with the transformative agenda to allow the participation at the EU market and strengthen the EU membership prospect.

Given the nature and ambition of the European Green Deal, its operationalisation represents a challenge for the EU Member States that is even more strinking when in the Western Balkan countries

The WB countries are at the different stages when it comes to the Europeanisation process. It means that they are at different stages of compliance and, more important, practical implementation of the *acquis communautaire*. Albania, Montenegro, North Macedonia and Serbia are candidate country, with Montenegro and North Macedonia have been greenlighted to open accession negotiations by the Council only in March 2020. Bosnia and Hercegovina and Kosovo\* have a status of potential candidates. These differences are also reflected in the transposition stage of each country and time horizons. It also seems that some parts of the *acquis* have resonated better than others with the domestic structures and the policy aims of Western Balkans policymakers. However, Zagreb Declaration puts emphasis on the prominent role that should be given to the association of the region to the EU's climate-related ambitions, in line with the Paris Agreement, to promoting the Green Agenda for the Western Balkans including the prioritisation of energy security, the diversification of sources and routes (EU, 2020).

This papers shows that associating the WB countries with the EU's climate-related ambitions, in line with the Paris Agreement, and subsequently translating Green Deal, requires fundamental changes in existing policies, governance and the physical world. Changes that are required to deliver greener and more sustainable economy.

In this respect, climate, energy and environmental policy triangle have proven to be particularly promising. These polices have a common platform for transposition to the WB region through the Energy Community Treaty that uncovers what would be the green policy priorities for the Western Balkans.

The Green Deal is voluminous and complex agenda. The most effective way to look into the translation of it to the WB would be through examining the existing issues and challenges that are shared by the WB countries.



Figure 2 Translating Green Deal to Western Balkans: Main existing issues and challenges. Grey colours.

A fundamental lack of climate policy ambition is one of the shared characterists. This results in failures to start decarbonisation of the economy in general and energy sector in particular illustrated by a slow penetration of locally available renewables, slow and partial response to energy efficiency requirements (EnC, 2019). We believe these are compelling arguments for more ambitious policies as climate change is already bringing huge challenges to the WB region. An alarming increase of temperature over the whole territory (increase of 1.2°C that may warm further by 1.7 - 4.0°C till the end of the century (Vukovic, Vujadinovic and Mandic, 2018) and more frequent natural disasters are already present. We also believe that there are economic reasons for decarbonizations. The WB economies use much more energy to produce one unit of GDP and emit much more CO2 that the EU in that process.



Figure 3Carbon intensity of the selected economies in 2017. Black colours. Source: IEA

The main emitter of GHG is the energy sector. Energy production and consumption is also a major source of local air pollution as several air pollutants come directly from the energy sector and also represent climate forcers. The WB region is home to alarming and highest levels of air pollution in Europe (UNEP, 2019). The case for better policies is present in this area as well, and the EU environmental *acquis* provides a solid framework for better national air quality and environmental standards in the Western Balkans. However, the Europeanisation has not delivered tangible benefits in the air quality so far.



Figure 4 Years of life lost per 100 000 inhabitants attributable to PM 2.5 exposure. More black colours.

Kosovo\* ranked 1<sup>st</sup>, Serbia 2<sup>nd</sup>, Albania 4<sup>th</sup>, North Macedonia 5<sup>th</sup>, Bosnia 6<sup>th</sup> and Montenegro ranked 11<sup>th</sup> among 41 listed jurisdictions in years of life lost per 100 000 inhabitants attributable to Pm 2.5 exposure in 2016 (EEA, 2019).

The Western Balkans region suffers also from high levels of energy poverty, preventing a smooth transition to more sustainable and more eco-friendly heating systems through the replacement of the technologically outdated inefficient stoves (Macura et al., 2014). Only 12 per cent of the buildings in the Western Balkans are connected to district heating systems. Solid fuels (firewood and to a less extent coal) are used for domestic heating by over 60 per cent of the population and the share of energy in the annual household consumption expenditure is substantial (Sandra Esser, 2018). These insights infer a chronic problem stemming from a widely spread energy poverty in the region and its causal connection with the air pollution and the way the energy is produced and consumed in the WB region.

The strong interdependence of these policies, the lack of horizontal integration and their transformative potential for the whole WB region represent a potent optic to examine the ways in which the Europeanization and European Green Deal could shape the transformation of post-socialist countries. This includes the identification of the most promising policy priorities and interventions for the translation of the European Green Deal in the WB policy space as well. The backbone of this promise is weaning off its coal-dominated energy mix, decoupling electricity production from carbon emissions and introduction of more stringent environmental standards in the economic space.

Europeanization that is understood as adaptation of domestic policies to effectively implement EU law (*acquis Communautaire*) and standards, represents a powerful tool to the political and economic transformation of the countries with the prospect of EU membership such as the Western Balkan countries. The adoption of the acquis is one of the core conditions for EU membership. However, candidate countries do not only need to formally transpose and comply with the EU policies, but they must also put in place the necessary administrative infrastructure to apply and enforce them in an effective way. Formal compliance refers to whether EU policies are fully and correctly transposed into national laws, conflicting domestic laws are repelled, and administrative procedures are in place to ensure practical application. Compliance is an extremely demanding process for applicant states. It involves both new rules and a new way of making such rules. For example, applicant countries are required to adopt more than 450 pieces of environmental legislation as a condition for joining the EU. This massive policy load combines with limited resources (expertise, money, personnel) in countries that are already strained by managing their political, economic and social transformation (Börzel and Fagan, 2015).

Practical application is even more complex with many sectoral policies taking decades to be effectively implemented. Although the Western Balkan countries have been part of the European integration process for more than a decade the process has been slower and less effective than envisioned. Despite the strong push from the EU side, the Western Balkan candidate countries so far have been facing great difficulties in restructuring their economic and political institutions in order to meet the conditions for EU membership. Given their limited capacities, Europeanization poses a formidable challenge that cannot be solved by EU conditionality alone (Börzel and Fagan, 2015). This is well recorded in the EU progress reports for each WB country that over the years identify the transposition and implementation dynamic and gaps of the horizontal and sectoral policies (EC, 2019b). Energy Community in its most recent implementation report states that energy transition, from post-socialist, inefficient and non-transparent energy systems to functioning and integrated energy markets, has not yet been accomplished which hampers the second goal that is the clean energy transition (EnC, 2019).

Will Europeanisation and new age conditionality be sufficient to translate the Green Deal in a way that it delivers tangible benefits to the WB and the EU? If not, what new avenues should be taken? What are the costs of failing to make Green Deal work in the Western Balkans?

It takes a lot of resources to answer those questions. It is very important for both the EU and the WB to address them. We hope that this paper will be useful in this process.

Some questions have been asked to the experts in the region recently. More than hundred experts from the region expressed their thoughts on energy transition. Over 50% of experts see the energy transition as a development opportunity and believe that its implementation should be approached immediately and decisively, with long-term goals set by 2050 and corresponding intermediate goals by 2030 and 2040 (Jovičić, 2020). Such approach is aligned with the EU policies and seems to provide for the human resource base that might be instrumental in greening the region. While experts are ready to embrace the notion of energy transition, recent studies provided more evidence to support such moves. Many opponents to the Green deal find that accommodating large quantities of renewable energy to the network is not possible in the mid-term. Researchers proved that security of supply in the power systems of the region with 50% RES in year 2030 may be ensured by a mix of conventional power plants and cross-border cooperation. More interconnectors, market integration and regional cooperation will be key factors for maximizing national security of supply and minimizing power system costs. Cooperation may not only bring more secure and greener energy sector but may also provide for large financial opportunities. Region can be an important player in European power markets by providing flexibility services to other parts of Europe in years of high hydro availability (Agora, 2019). Hydro resources are also shared and interdependent. Cooperation and regional cooperation in particular is essential for its optimal and sustainable utilization. It sis also essential for the proper translation of the European Green Deal.

# Methodology

The main method for the analysis combines the triangulation technique with the focus on the dominant domestic factors in policy and problem streams. The technique of triangulation is used as appropriate technique for advanced policy analysis of a complex public policy challenge such as translation of European Green Deal in the WB. This means that the multiple sources of data including both qualitative and quantitative are used to analyse data to enhance the credibility of a research study. The main conceptual approach for interpretation of data, conclusions and recommendations takes into account 'goodness of fit' and Europeanisation concept that focuses on the interactions between the EU level policy making and its translation in the member states. In the next step, it is combined with the dominant domestic factors in policy and problem streams and expectations of the European Green Deal. As a result, a most realistic and effective pathway of WB countries are proposed and presented in the road map for each country.

Firstly, desk research of policy documents related to the European Green Deal is performed as a basis for the research paper. In particular, the specific aspects of translation of the European Green Deal to the WB countries is examined using the lenses identified in the introduction section, mainly by the comparison of the European Green Deal priority areas with the Energy Community priorities and competencies in sectoral policies, namely climate change, energy and environment. Special consideration is given to the weaknesses in consistency with the European Green Deal requirements for a *holistic approach* and coordination among the key policies such as climate change, energy and environment. This comparative framework is then complemented by the EU progress reports, the Energy Community implementation reports and national level documents such as national energy and climate strategies, nationally determined contributions under the Paris Agreement to shed light on the level of ambition and implementation record and pressing environment.).

Secondly, the comparative framework guides the baseline assessment that is performed to provide a relatively comparable snapshot of the current situation in each country. The baseline assessment of the legislative and institutional framework and implementation dynamics within the policy triangle reveals policy gaps and the areas of poor design, compliance, transparency, monitoring, information practices and similar. At the national level the paper takes into account the level of ambiguity and conflicts of policy goals related to the key aspects of policy triangle and the requirements of European Green Deal. The focus on the national level specificities is ensured through the examination of national level mechanisms that are fundamental to resolve divergences between sectoral priorities and policies, including external and domestic policies. Selected priority areas for intervention namely in climate change, energy and air pollution nexus are addressed in a more comprehensive manner. Firstly, we compile data relevant for establishment of energy profiles of the WB6 countries that consist of: energy production and consumption, CO2 emissions, population and general economic data: data on coal power plants: age, capacity, emissions, potentials for energy efficiency improvements and for RES deployment; energy poverty profiles of the WB6. We use data from European Environmental Agency, International Energy Agency, Eurostat, National Energy Balances, Household Budgetary Surveys, Survey on Income and Living Conditions and International Renewable Energy Agency to finalize the energy profiles of our cases and identify the gaps between the expected policy framework and reality. Data on energy mix, consumption, energy efficiency, carbon and energy intensity, GHG inventory, nationally determined contributions, air pollution trends are used to illustrate the current situation, reviling the gaps and underpinning the conclusions and recommendations. These gaps simultaneously uncover priority areas of intervention related to an early adoption and the translation of the European Green Deal in the WB policy space including Kosovo\* feeding into the road map for each case.

In addition to the overarching European Community framework, the analysis took into account the current regional level frameworks and documents to enrich regional approach consistent with the European Green Deal expectations. They include:

- The Strategy and Work Programme 2020-2022 'Stepping up the Transformation', of the Regional Cooperation Council (RCC) Secretariat, endorsed in 2019. This document aims to enhance socio-economic, digital and human connectivity within South East Europe (SEE), and between the region and the European Union (EU) through strengthened regional cooperation and development of a shared, inclusive and competitive economic space;
- Relevant aspects of the WB6 framework, including the Sustainability Charter, particularly related to the regional cooperation to build and connect transport and energy infrastructure as a driver for growth and jobs;
- Energy transition tracker for WB6 of Energy Community (2020).

Based on the research findings, namely baseline assessment, implementation gaps, and expectations of the European Green Deal the paper summarises the EU and national level data to identify the differences and similarities at the level of the WB, shaping the conclusions. This summary provides building blocks of policy recommendations that take into account the meaningful and potentially effective translation of the European Green Deal. The policy recommendations are furthermore summarised in a road map for each WB country. Each road map takes into account the generalisable categories of the translation of the European Green Deal into the WB regional policy space, as well as county level specificities that focus on national level actions.

The limitations of this research are related to the nature of the desk research methodology, namely availability of comparable data with sufficient coverage and documents for all WB countries.

# Discussion

## Road to the EU: Integrated climate and energy policies

#### Past

The region of the Western Balkans is an area of interest for the European Union since its establishment. That interest inspired numerous interactions between European Union and the region in areas that are covered by the Green Deal. The history of those interactions provide for extensive learning material. Lessons that may be learned from that material should decisively inform any efforts to translate the Green Deal to the region. While focus on energy markets was very clear from the beginning, environmental concerns arose fairly early in the process. Expectations from participants to implement Environmental Impact Assessment Directive, Directive on Reduction of Sulphur Content of Certain Liquid Fuels and Large Combustion Plants Directive, were part of the Memorandum signed in in 2003, in Athens. 17 years down the line not all signatories fulfilled that expectations and subsequent provisions of the Treaty and in some cases majority of signatories are still failing to comply. The biggest challenge that is adoption and implementation of ambitious climate policies is yet to come. We are not able to tell what lessons Commission has officially captured from such developments as there is no report from the European Commission to the European Parliament on the implementation of the Energy Community Treaty since 2011. This is a vital piece of information that is missing for all those involved in the process of translation of the Green Deal to the Western Balkans. Without such a feedback there is a risk of unnecessary and costly confusion due to which both the EU and WB may stand to lose.

Given the interconnected nature of network energy systems it seems natural that EU was vitally interested in the developments of the energy markets in the SEE as early as the 1990ies. Thoughts of (re)integrating SEE energy markets and creating a single pan European market inspired the vision of a treaty that would serve such purpose. The idea for such an endeavour first emerged in the late 1990s before any prospects for joining the EU were given to the region. Negotiations of a comprehensive international legal arrangement started in 2001. The first round of negotiations ended successfully with the signing of the Memorandum of Understanding in 2002. All the SEE countries signed it as well as the United Nations Mission in Kosovo for Kosovo\*, the Vice President of the European Commission and the Special Coordinator of the Stability Pact (European Commission, 2002). The Memorandum of Understanding was concluded, and extended the regulatory framework to natural gas in 2003. In 2005, the finalization of the negotiations took place in Athens with the adoption of a legally binding agreement. The EnCT was the first multilateral treaty signed by the Republics of the Former Yugoslavia after the wars in the 1990s and was deemed a decisive step towards reconciliation (European Commission, 2005b). For that reason, then President of the European Commission Jose Manuel Barroso has addressed it as 'a major achievement for peace and stability in Europe' (Jovančević, 2019). Political processes framing the possible pathway to the full EU membership were developing simultaneously.

## Present time

The translation fo the European Green Deal to the Western Balkans is above all a political process. Indicators of its success or failure, however, are physical. While transposition of legislation and standards may be achieved via political and administrative processes, its quality will be determined by achieved physical changes such as changes in emitted carbon, sulphur, particulate matter, etc. Different generations of climate and energy processes and policies live in the WB region at this moment. Europeanization is the process that is mainly responsible for the state of affairs in this area.

Table 2 Overview of climate-related commitments and planning processes currently under preparation in the Energy Community Contracting Parties. Sources: New Climate Institute and GIZ, 2019; EnC, 2019.

subm	itted or adopted	will exist, process has started	will exist, process has not started	does not exist / no process in place

	International ta commitments	argets and	National strategies and plans				
	Nationally	National	National	National	National		
	Determined	Energy and	<b>Climate</b> Action	Renewable	Energy		
	Contributions	Climate Plans	Plans	Energy Action	Efficiency		
	update			Plans	Action Plans		
Albania							
Bosnia and							
Herzegovina							
Kosovo*							
North Macedonia							
Montenegro							
Serbia							

The national energy and climate plans (NECPs) were introduced by the Regulation on the Governance of the Energy Union and Climate Action (EU)2018/1999, agreed as part of the Clean energy for all Europeans package which was adopted in 2019. The national plans outline how the EU countries intend to address:

- energy efficiency
- renewables
- greenhouse gas
- emissions reductions
- interconnections
- research and innovation

This approach requires a coordination of purpose across all government departments and it provides a level of planning that will ease public and private investment<sup>1</sup>. The Regulation emphasizes the importance of meeting the EU's 2030 energy and climate targets and sets out how EU countries and the Commission should work together, and how individual countries should cooperate, to achieve the energy union's goals. It takes into account the fact that different countries can contribute to the energy union in different ways.

The goals of the Regulation are:

- to implement strategies and measures which ensure that the objectives of the energy union, in particular the EU's 2030 energy and climate targets, and the long-term EU greenhouse gas emissions commitments are consistent with the Paris agreement
- to stimulate cooperation between Member States in order to achieve the objectives and targets of the energy union
- to promote long-term certainty and predictability for investors across the EU and foster jobs, growth and social cohesion
- to reduce administrative burdens, in line with the principle of better regulation. This was done by integrating and streamlining most of the current energy and climate planning and reporting requirements of EU countries, as well as the Commission's monitoring obligations
- to ensure consistent reporting by the EU and its Member States under the UN Framework Convention on Climate Change and the Paris agreement, replacing the existing monitoring and reporting system from 2021 onwards

The transparency of the governance mechanism is ensured by consulting wide public on the NECPs.

## The road ahead

This paper provides a country by country overview of processes related to the implementation of climate change policy, energy efficiency policy, renewable energy policy and policy on industrial emissions. It firstly presents to the reader critical differences in the frameworks in which those policies live in the EU and in the contracting parties of the EnCT.

The 2020 policies in the EU were part of the much broader development framework. Those '20-20-20' targets were aimed at combating climate change, increasing the EU's energy security and strengthening its competitiveness. They were also headline targets of the Europe 2020 strategy for smart, sustainable and inclusive growth.

The 2030 EU climate and energy policy come also as a response to commitments under the Paris Agreement and following the introduction of the Energy Union. The NECPs, for example, are tools envisaged under the above mentioned Regulation.

	EU					WB			
2020 climate and energy policy	Part	of	the	t	proader	Isolate	ed ad-ho	C I	policy
	develop	ome	nt	fran	nework	docun	nents adopted	d as de	crees
	aiming	at	increas	sing	energy	or	sometimes	by	the
						conclu	usion of the go	vernm	nents.

Table 1 2020 and 2030 climate and energy policy frameworks: differences between the EU and the WB

<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/info/energy-climate-change-environment/overall-targets/national-energy-and-climate-plans-necps\_en

	security and strengthening of the competitiveness	
2030 climate and energy policy	Targeting multiple goalsApproachrequirescoordination of purpose acrossall government departmentsRequires giving the public earlyand effective opportunities toparticipate in planningExists in the framework of theenergy union which effectivelytransfersa degreeofsovereigntyof the memberstates to the EU.AimsAimstopromotelong-termcertaintyandposterjobs,growthandsocialcohesion	The timeline for NECP finalization, as set by the EnCT Secretariat's non-binding Policy Guidelines, is the end of 2020 (while the 2030 targets will be known only in 2021) A policy that is supposed to be the key for the implementation of the Green Deal developed in the frameworks that are not comparable with the EU framework in any of the key aspects The European Commission is expected to table 2030 targets for the Energy Community alongside the clean energy package in the first half of 2021.

The NECPs should be crucial tools for the future tranlation of the Green Deal to the WB. Currently it is difficult to understand whether the development of the NECPs in the contracting parties of the EnCT represents much more than a regulatory game. The idea to set common target for jurisdictions that are not in any kind of political union and do not have a common budget, does not seem to provide for the framework in which such policy can be enforced. Target setting exercise methodology for the GHG target for 2030 does not mention that it should be a least cost path to 2050 goals. It clearly says that the envisaged emission reduction trajectory becomes steeper after 2030, and more effort would then be required.

Political weight is particularly important if the processes count on Governments only. The Athens Memorandum, setting foundations for the Energy Community Treaty, was signed in the same year in which Thessaloniki Declaration was presented. Today, the demand for even more transformative policies is announced without a comparable political process.

Finally, EnCT was signed after the long-lasting process that involved numerous actors and required endorsement by the national parliaments of the Treaty itself, but also of other documents of significant relevance such as Stabilization and Association Agreements. Today, we are in the process in which transformative goals are set to the WB via existing structures that involves at best Ministers of certain ministries within the WB governments. This represents a significant democratic deficit that might not necessarily lead to accelerated developments towards climate neutrality. General public could be more interested to adopt and implement the Green Deal compared to incumbent structures. According to RCC 74% of the citizens in the SEE region believe that climate change is either a very serious problem (41%) or somewhat serious problem (33%)<sup>2</sup> and another 74% believe that air pollution is either a very serious problem (42%) or somewhat serious problem (32%). On the other

<sup>&</sup>lt;sup>2</sup> Balkan Barometer 2020, Public Opinion Analytical Report. Regional Cooperation Council. <u>https://www.rcc.int/download/docs/2020-06-Balkan-Barometer-Public-</u> <u>Opinion\_final.pdf/bf27f9fc10de8a02df9db2b60596f0cd.pdf</u>

hand, citizens are frequently not engaged in the environmental actions and have little trust in their governments, courts and parliaments. More than 50% of respondents distrust those institutions with the exception of the Northern Macedonia where trust and distrust are balanced. 71% of the respondents in the Western Balkans totally disagree or tend to disagree that judiciary is independent from the political influence.

To summarize: current plans for transposition of climate and energy policies are to utilize unchanged existing mechanism (EnCT) for the adoption (in the next 12 months), and implementation of transformative policies that should deliver by 2030. This deadline comes after currently envisaged lifetime of the EnCT (2026). EnCT has not secured delivery of less ambitious goals over longer period of time so far. Let us be reminded that European Commission has not formally informed European Parliament of its own opinion on the Energy Community Treaty since 2011. We believe that this approach should be altered, building on the experience and structures of the EncT. The reader may have different opinion after reading the text that follows.

## More than words: numbers and key challenges

A view from the above: climate challenge, key #1 to the Green Deal

In the following chapters we assess the implementation gap by looking at major numbers and by comparing them to the selected Green Deal requirements or relevant elements.

We start with the climate challenge.



Figure 5 Green deal elements constituting key#1 for the translation of the Green Deal to the WB (EC, 2019 a)

Economies of the Western Balkans are closely interlinked and strongly linked to the EU. WB countries exported to the EU 27 and to other WB countries 88% of their total exports of goods while share of imports from those regions combined to 71% of all imports. China, Turkey and Russia accounted for 23% of imports of goods to the WB in 2019.



Figure 6 Main trade in goods partners of the Western Balkans, 2019. Source: Eurostat

Goods that constitute main share of exports to the EU come from the sectors in which energy use may be very intensive, as well as carbon intensity. More detailed analysis would be required to determine the levels of energy intensity in those sectors in the WB and to benchmark the intensity against EU competition.



Figure 7Main exports products by HS section. Source: Eurostat

Carbon intensity in the WB is very high, both in absolute terms and PPP terms as previously explained. Difference between carbon intensity of the economies from the region, with the exception of Albania, and the EU economy are striking.

More than two thirds of exports of goods from the region goes to the EU and additional 20 percent goes to the trading partners in the region who are again critically tied to the EU economy. These critical ties with the EU accompanied by a high level carbon intensity set the stage for the extreme sensitivity to one particular emerging aspect of the Green Deal: carbon border adjustment mechanism (CBAM).

Should differences in the levels of ambition worldwide persist, as the EU increases its climate ambition, the Commission plans to propose a carbon border adjustment mechanism, for selected sectors, to reduce the risk of carbon leakage. This would ensure that the price of imports reflect more accurately their carbon content. This measure will be designed to comply with World Trade Organization rules and other international obligations of the EU. It would be an alternative to the measures that address the risk of carbon leakage in the EU's Emissions Trading System (EC, 2019 a). Proposal for the design of mechanism for the selected sectors is to be expected in 2021 (EC, 2019 b). Acronym of the mechanism would be CBAM but in the case of the region, given the trade and carbon intensity data, it is to be pronounced as 'Ka-boom'.

CBAM is prepared on the EU side of the border. On the WB side there coal is a pre-dominant source of electricity production, followed by large hydro. The two sources combined account for nearly 90% of generation capacities in the region.



Figure 8 Generation capacity structure in WB. Source: EnCT

Coal represents almost 48% of the entire primary energy supply of the region and is by far the most dominant energy source. Countries who use it believe that it provides for the backbone of their energy security.

Therefore, it does not come as a surprise that current climate ambitions and the policies in the region do not provide sufficient tools to mitigate overwhelming risk presented by the possible introduction of the CBAM. Albania with its energy mix being exception. All other countries submitting their NDCs actually pledged to increase its GHG emissions comparing to current levels and with the exception of Montenegro, to increase its emissions comparing to 1990 levels<sup>3</sup>. Kosovo\* is not a member to the UNFCCC and has not submitted its INDC. In its Climate Change Strategy for the period up to 2028 (Government of Kosovo\*, 2018) it does not set any quantifiable goals and clearly outlines the future of the power sector based on lignite as it envisages the construction of Kosovo e power plant. Many climate related processes that are ongoing across the region may, perhaps, deliver change in the main lines of reasoning.

<sup>&</sup>lt;sup>3</sup> Serbia officially pledged to reduce its emissions by 2030. comparing to 1990. However due to methodology used the emissions from 1990. and 2030. as presented in INDC are essentially incomparable.

Bosnia and Herzegovina	<ul> <li>INDC envisages 2030 emissions in the range from +20% to -3%</li> <li>Reduction "only possible to achieve with international support"</li> </ul>
Kosovo*	<ul> <li>Climate change strategy does not quantify mitigation efforts</li> <li>Increasing the efficiency of production of electricity through replacement of TPP Kosovo A with Kosova e Re Power Plant and Improving efficiency of existing TPPs cited as mitigation measures</li> </ul>
Montenegro	<ul> <li>30% emission reduction by 2030 compared to the 1990</li> <li>Assumed sell of carbon credits</li> </ul>
North Macedonia	• Increase in emissions envisaged in the range from 20% to 87%.
Serbia	<ul> <li>INDC envisages emission reduction of 9.7% 2030 emissions however uncomparable with 1990 emissions due to different coverage</li> <li>Draft low carbon developpment strategy envisages emissions in 2030 higher than emissions in 2014</li> </ul>

Figure 9 Some figures from current climate policy documents in the Western Balkans

Translation of the Green Deal to the WB when climate ambition is concerned requires structural changes. Climate neutrality by 2050 means that any investment in lignite-based electricity production from now on will become sunk cost. Increased climate ambitions by 2030 are also impossible without the reduction and ultimate closure of lignite plants.

If effective carbon pricing, another element of the Green Deal, is ensured in the WB it will again have the same result: immediate reduction of competitiveness of lignite production.

Finally, Green Deal envisages tool that would be designed for those who cannot, or do not want to translate the internal Green Deal requirements but want to trade with the EU: CBAM. Once we learn more about the details of the scheme when (if) it is proposed, we would be able to quantify the damage to the WB economies. Without the CBAM the transkation of the Green Deal to the Western Balkans returns to the conditionality frameworks which we have seen in motion over the last 17 years. With the CBAM, a novel tool is introduced, and tangible losses may result from non-compliance.



Figure 10 CBAM: Will the doors close?

Translation of the Green Deal to the Western Balkans when increased climate ambitions for 2030 and 2050 are concerned challenges the structure of economies but also of the entire societies across the region. Given the width of the existing gap, transposition based on Europeanisation and conditionalities does not seem to be able to deliver the required physical changes in the near future. Energy industry in the WB counties is state dominant and corporate decisions will not lead to radical changes in the foreseeable future. Community energy projects are rare and exceptional. Risks that state sector agents perceive will be critical in decision making. Those risks do not necessarily need to be in line with the risks for the quality of public goods as decision makers may tend to act also on behalf of vested interest as well as on behalf of short-term political benefits.

Should WB countries want to embrace either of the three elements: climate neutrality by 2050, increased climate ambition in line with the EU targets by 2030, or effective carbon pricing, they have to decide on the future of lignite first.

Deciding on lignite and implementing possible decision to phase out, is a development issue of the highest magnitude for the WB and needs to be made in a process that matches its relevance. The case of renewables policies in the region shows clearly that mere implantation of the policy that was part of the smart growth package of one entity, the EU, as a stand-alone unrelated policy of other entities, WB countries, leads primarily to regulatory games and investment decisions made in incomplete frameworks. All sorts of outcomes are possible under such conditions: statistical 'discovery' of biomass consumption, small hydro power plants built in protected areas, heavily subsidized biogas plants that will never be competitive without subsidies, new wind power projects based on outdated technologies, to name just a few adverse consequences. The decision on lignite needs to be discussed in the parliaments.

Deciding to stick to lignite despite the climate elements of the Green Deal actually means rejection of the transaltion of the Green Deal. Still, due to CBAM, the Green Deal remains relevant. This decision may have serious political consequences. Analysing its outcomes is beyond the scope of this paper. With the CBAM an offer of the Green Deal includes possible penalties for rejection to transpose, for the WB. Actors will probably calculate the credibility of this threat. Clear communication by all

stakeholders will be essential to reduce risks and increase probability of successful outcome for both the EU and the WB. Such decision should also be discussed in the parliaments.

Discussing viable alternatives to fossil-based energy production is beyond the scope of the paper. We provide some elements to illustrate the possible directions for discussion.

Technical potential for renewable electricity production was estimated by IRENA. Biomass potential is not easy to assess since it is dynamic and can be influenced by human activity but also due to possible competing use of biomass and sustainability issues that surround the use of biomass. Estimations are nevertheless clearly showing that it is possible to produce more electricity in absolute terms than we consume. Due to intermittency of resources this condition is obviously not sufficient to enable continuous and uninterrupted supply of electricity on a minute by minute basis. Different studies on regional and national levels showed that is also possible<sup>4</sup>.



Figure 11 Electricity consumption and renewable electricity production potential (GWh (Novaković, Igor et al, 2018)

More than half of the renewable capacity added in 2019 achieved lower electricity costs than new coal, while new solar and wind projects are also undercutting the cheapest and least sustainable of existing coal-fired plants. Auction results show that these favorable cost trends accelerate, reinforcing the case to phase-out coal entirely (IRENA, 2020b).

The levelized costs of electricity from different sources represent global weighted averages. Local costs of capital and technology and local conditions that dictate capacity factors further affect the costs of renewable energy projects in concrete locations. Recently (New Climate Institute, 2019) it was estimated that if measures are applied to reduce risks of financing of wind energy project in Serbia, the cost of equity may be lowered from 14.5 to 7.9 percent while the costs of debt may be lowered from 4.6 percent to 2.3 percent. The levelized cost of electricity from a wind project could be lowered from 6.7 euro cent per kWh to 5.4 euro cent per kWh.

<sup>&</sup>lt;sup>4</sup> See for example SEERMAP: South East Europe Electricity Roadmap South East Europe Regional report 2017 https://rekk.hu/downloads/projects/SEERMAP\_RR\_SEE\_A4\_ONLINE.pdf

Energy Community Secretariat in its recent study (EnC,2019b) estimated the full cost of electricity from lignite at 6.75 euro cent per kWh including carbon costs calculated at 20 euro per ton. It seems that the times of cost advantage of lignite is behind us. The balancing costs of renewable power remain the last unknown dimension, but it is certain that those costs will not hamper the proliferation of renewable power.



Figure 12 Costs and prices of electricity produced with different technologies (USD/kWh). Source: IRENA, EnCT Secretariat

#### Climate challenge: Zooming on Kosovo

Electricity in Kosovo<sup>\*</sup> is entirely about lignite. Almost 90% of electricity is generated in two large thermal power plants on five generation units put in operation in the period from 1970 till 1984. Coal accounts for more than half of the total primary energy supply in Kosovo.



Figure 13 Kosovo\* Total Primary Energy Supply in 2017. Source: IEA

Total  $CO_2$  emissions in Kosovo<sup>\*</sup> in 2013 were 8.31 Mt (Government of Kosovo, 2018). It is estimated that emissions from Kosovo A and Kosovo B plants in 2020 will amount to 5.68 Mt (Energy Regulatory Office, 2019).

The operational costs of Kosovo<sup>\*</sup> lignite industry are estimated as lowest in the region (EnCT, 2019). So was the case with the cost competitive potential of renewable energy (IRENA, 2017) estimated several years ago. Still, as already presented in the text, levelized costs of different renewable electricity technologies (global averages) are becoming competitive even under conditions valid in Kosovo<sup>\*</sup>. Current EUA prices are above 25 EUR and under such conditions numerous technologies are able to compete with lignite in Kosovo<sup>\*</sup>. 36 years of attempts to build new lignite fired power plant in Kosovo<sup>\*</sup> have not yet yielded any results. Given numerous open questions surrounding such project, the Green Deal transposition might be an excellent opportunity for Kosovo<sup>\*</sup> to re-think its energy future.



Figure 14 Renewable electricity consumption, production, cost competitive and technical potential. Sources: IRENA, IEA

## Lowering the height: air pollution from large combustion plants, key #2 to the Green Deal

From climate challenge we move on to another key challenge for the transposition of the Green Deal.



Figure 15 Green deal elements constituting key#2 for the translation of the Green Deal to the WB (EC, 2019 a)

We have seen the carbon intensity gap and its relevance for the region that is to be possibly even amplified in the context of the Green Deal. There is another gap and another challenge for the region in the context of the Green Deal and its predecessor that hangs around the chimney: local air pollution.



Figure 16 Pollutant emissions and emission ceilings according to national NERPs, from large power plants in the Western Balkans in 2019. Source: EnCT Secretariat

16 years after the Athens Memorandum when signatories agreed to implement the Large Combustion Plants Directive the WB plants emitted 6 times more sulphur dioxide than allowed by the provisions of the Directive they chose to use as an implementing tool. While gap was closed in nitrogenous oxides emissions and narrowed down in dust emissions, the sulphur remained almost untouched. The reason is simple: almost nothing has been done to reduce sulphur emissions from the power plants in the region. What is required based on current plans of the operators and countries is large capital investments in 40 or more years old plants, reduction of plants capacity to sell electricity, increase in overall carbon emissions and creation of large resource stream in gypsum with unclear mechanisms for marketing or storing it. The issue is as follows: de-sulphurization, being preferred option for the signatories to the EnCT requires instalment of expensive equipment that consumes electricity. This reduces the plant output and requires increased production to meet the demand. By-product of the process are large quantities of gypsum which would be measured in million tonnes across the region if all plans materialize. While there is no firm data on the current size of gypsum markets in the region it is safe to say that such quantities surpass the entire demand in the region. The possibility to sell such quantities of gypsum to the external markets is vague. Currently, the EU market is well supplied by the FGD gypsum from the EU plants. This supply will gradually diminish as EU pursues its decarbonization goals which brings us back to the 'Ka-boom' issue if the WB plants would like to search for the position in the EU markets. In addition, there is an issue of transport infrastructure that wodul need to ship millions of tonnes of gypsum from the plants. Entire railroad transport of goods in Serbia is slightly over 10 million tonnes while gypsum production alone would exceed two million tonnes.

Environmental improvements of the existing large combustion plants were agreed 17 years ago. Major work still remains to be done. This particular area is regulated in detail already in the EnCT, but given

the large implementation gap, magnitude of efforts to implement and consequences of implementation, possible protests from compliant competitors in the single energy market, as well as unknown enforcing power of the EncT this may become another key topic in the Green Deal translation.

In the words of the EC (EC, 2019a): 'The Commission will review EU measures to address pollution from large industrial installations. It will look at the sectoral scope of the legislation and at how to make it fully consistent with climate, energy and circular economy policies. The Commission will also work with Member States to improve the prevention of industrial accidents.' The case of large power plants in the Western Balkans will be difficult to handle unless the same approach of policy integration is applied.



Figure 17 Reducing the pollution from large combustion plants: Green Deal key#2

## Industrial pollution challenge: Zooming on Kosovo\*

Industrial pollution challenge is closely related to climate challenge as power sector is the main industrial polluter and main emitter of GHG. Kosovo\* failed to meet the obligations to reduce emissions of dust, NOx and SO2 from large combustion plants by January, 1<sup>st</sup> 2018. Moreover, its reporting on emissions and content of its NERP remain unclear. NERP even contains some internal contradictions when prescribed ceilings for dust are in question.



Figure 18 Emissions from large combustion plants in Kosovo\* and NERP ceilings. Source: ENCT, ERO

#### Landing: residential energy challenges, key #3 to the green deal

We have described the conflicts between the current electricity production mix in the region with the requirements of the Green Deal. We have seen its climate aspects and air pollution related aspects. We present here the third set of key challenges for the transposition of the Green Deal.



Figure 19 Green deal elements constituting key#3 for the translation of the Green Deal to the WB (EC, 2019 a)

Residential and transport sector dominate in final energy consumption in all contracting parties of the EnCT. These sectors do not provide for a large GDP creation or employment. This is one of the reasons for high energy intensity of the societies in the WB along with the structure of energy production and low efficiency.

The Green Deal calls for an energy transition that involves and benefits consumers. It also urges that energy poverty issue is addressed.

So where will the Green Deal land? What is the situation related to household energy consumption in the WB? Which fuels are used? How much does it cost? Which share of disposable income goes to housing and energy? Can families across the WB afford enough energy? Is that affordability stable? If so, is there a trade-off involved? Where do we see the consequences of the trade-offs made? Can individuals be actors in the energy production?



Figure 20 Share of network energy in total household energy consumption in 2017. Source: IEA

Network energy in the WB has less significant role than in the EU. Still the structure is very different: relative share of electricity in total household energy in the WB household is almost twice as large as in the EU-28 household while natural gas share is almost 10 times lower. Those numbers seem to be frequently overlooked when thinking about the Green Deal in the WB. It is also important to note that according to the available data, a citizen of the EU spends 72% more final energy than a citizen in the WB in household. All of this is important to remember when thinking about translation of the Green Deal to the WB.

The WB region has some of the lowest European prices for electricity for households (situation is somewhat different for non-households). Howevdr, the region has relatively high share of electricity produced in the old large hydro power plants that provides a very cheap electricity.



Figure 21 Household electricity prices, EU, WB and selected third countries 2019. Source: EUROSTAT

Still, the share of energy costs represents significant burden for household budget. They range from 10.9 % in Albania to 29% in Kosovo\*. Data on the share of electricity costs alone are not universally available. In Serbia, they reach 6%. Housing costs do represent a burden to household budgets. In instances where SILC data are available, we find that the share of households who feel that housing costs represent either a heavy financial burden or financial burden ranges from more than 70% in Bosnia and Herzegovina to 98% in Serbia.

Another specificity of the WB is the large share of biomass consumption in total household energy consumption. Obviously, data on biomass energy consumption are less reliable than data on network energy consumption which has to be taken into account. The framework in which renewable energy targets were created provided for incentives to manipulate with these type of data. Combining data from different sources and analysing them still points to the large volumes of biomass being consumed in households across the region. Key characteristic of that consumption is its low efficiency. Almost entire volume of biomass energy is spent in individual household heating devices which real life efficiency is around 30% and whose emissions are huge even when proper fuel is burnt in a new device. On the other end of the spectrum we have the situation in which households use old and technologically outdated devices as some kind of household incinerator.



Figure 22 Biomass share in total household energy consumption in 2017. Source: IEA

Largest share of households with central heating, around 40% is in Serbia while only 12 percent of households in Kosovo\* had radiators in their homes in 2017.



Figure 23Central heating installations in households. Sources: SILC, Household budgetary surveys. No data for Albania

Countries in the region are therefore fulfilling their renewable energy targets by burning wood in outdated devices. This is where the Green Deal is supposed to land in the WB. We believe that there is a space for immediate action to improve sustainability of heating practices across the region. Accelerated adoption and implementation of the Eco-design directive requirements for individual devices accompanied by the support to the local producers, incentive schemes for the users and direct intervention by the state and civil society actors in most vulnerable households seems to be an action that may deliver multiple benefits across the domains. It is also important to understand that such an

action may have temporary adverse impact on the share of renewable energy in final energy consumption. This should be clearly understood by all actors including IFIs, EnCT and the EC.

There is more to it. The walls around the stoves and windows of the houses and apartments do not provide optimal framework for efficient heating. Secretariat of the Energy Community Treaty found another gap: the overall investment level in household energy efficiency remains very low compared to the needs. The volume of investments in building renovations amounted to approximately EUR 1,060 million between 2010 and 2020. This represents only 30% of the estimated investment needs (approx. EUR 3,543.75 million) for 2011-2020 (EnC,2020).

Outside of the households there is a cloud of smoke and particulate matter to which such heating systems contribute. Household heating is by far the dominant source of primary PM emissions based on available data.



Figure 24 PM 10 emissions from selected sources

Recent World Bank studies claim that heating is overall the largest contributor by far to PM2.5 pollution in Bosnia and Herzegovina, Kosovo and North Macedonia for which studies are completed (World Bank, 2020; World Bank, 2019a; World Bank, 2019b; World Bank 2019c). As those studies feature source apportionments done for the first time for major cities in the region, we should wait for peer reviews of the models used, or for different verifications before we fully embrace the findings. Still, those findings are not unexpected, and we do not anticipate major deviations in further results.

The Green Deal communication promises: 'The smart integration of renewables, energy efficiency and other sustainable solutions across sectors will help to achieve decarbonisation at the lowest possible cost.' We believe that integrating roof-top based photovoltaic installations is a no regret measure in the entire region that contributes to the decarbonization at the lowest possible cost but also to the creation of wider demand for achieving the Green Deal goals. Removing existing barriers and developing targeted support for massive deployment of the roof top solar installations could be seen as a way to go. In general, barriers for the deployment of small scale distributed solar generation still exist across the region. Long procedures and costly connection requirements as well as lack of the net metering/billing effectively prohibit development of small scale solar in particular in jurisdictions with low electricity prices.



Figure 25More sun less wood: Green Deal key#3 households as efficient prosumers

#### Residential energy challenge: Zooming on Kosovo\*

Residential energy challenge in Kosovo<sup>\*</sup> is significant. Household budgetary survey and other surveys do not provide for the exact shares of heating modes among households in Kosovo. Only 14% of households have central heating installation while biomass represents large share of total primary energy supply. Combinign these data with the available data of electricity consumption profiles for households provided by ERO we conclude that individual heating with solid fuels is the main mode of heating for households in Kosovo<sup>\*</sup>. As much as 43% of households reported that they were not able to keep their home adequately warm in 2017 while share of housing costs (includes also estimated rent) amounted to 29% of all household costs. Households who would like to be part of the energy transition and become solar prosumers are facing numerous barriers as well as in other parts of the WB region.

We believe that there is a strong case for immediate interventions in improving the efficiency and sustainability of residential heating. The first line of activity would be replacement of outdated devices as given the largest marginal benefits of such intervention and smaller capital costs. The measure should be accompanied with the accelerated adoption of the Ecodesign standards.

Support to building energy efficiency in residential sector is needed as well. Those measures can be implemented simultaneously with the installation of solar roof-top equipment.

Only efficient households would be able to sustain the possible costs of the energy transition in the short term. It is possible to make households more resilient to the change if energy, environment, climate and social policy are integrated. Such integration would facilitate transposition of the Green Deal to Kosovo\*.

## Where do we stand - country by country brief overview of the current processes

We have seen the challenge that lies ahead and the snapshot of current situation in the region in the selected areas. This chapter offers country by country overview of ongoing processes, mainly representing excerpts from the EU progress reports or EnCT implementation reports. It provides a shapshot of the ongoing processes and how they fit into the translation of the ambitious Green Deal in the WB region.

#### Albania

#### Climate change

Albania submitted its INDC and ratified the Paris Agreement in 2016. In the same year it submitted its third National Communication on climate change to the UNFCCC and is currently developing its fourth National Communication. Work on the first Biennial Update Report is also ongoing. Process to update the NDC in line with the National Climate Change Strategy and National Energy Strategy has started with efforts to kick-off the process in mid-2019 (New Climate Institute and GIZ, 2019).

#### Renewable energy

Implementation in the renewable energy sector of Albania is well advanced (EnC, 2019). With the adoption of the Law promoting renewable energy in 2017, Albania increased its compliance with the acquis. This Law introduced schemes to support renewable-energy producers above 2 MW (for solar power) and 3 MW (for wind power) through a competitive procedure. The procedure is based on the support scheme 'contracts for difference' to be paid on top of the market price of electricity. The Law incorporates a net metering scheme for photovoltaic (PV) or wind energy with a capacity of up to 500 kW. By the end of 2018, there were 2.106 MW of renewables installed, notably an additional 10 MW of solar PV. A second round of auctions is expected during 2020. Also, a sustainability regime for biofuels is still not in place (EnC, 2019).

## Energy efficiency

Implementation in the energy efficiency sector of Albania is moderately advanced (EnC, 2019). The main target of the energy efficiency action plans for 2017-2020 is a cumulative saving of 6.8% of the energy used in Albania by 2020. A working group has been set up within the Ministry of Energy and Infrastructure to prepare the establishment of the energy efficiency fund. However, full compliance with the Energy Community acquis has still not been achieved so the Energy Community's Ministerial Council adopted a decision stating that Albania was in breach of its obligations. The second annual report due in June 2018 was submitted in March 2019. A law on energy performance in buildings entered into force in 2016 (EC, 2019b). However, Albania remains non-compliant in too many areas including the adoption of the missing by-laws implementing the Energy Performance of Buildings Directive and update legislation to transpose Directive 2012/27/EU on energy efficiency (EnC, 2019).

## Air pollution/LCPD

Albania has only one large combustion plant (TPP Vlora), which is currently not in operation. The plant is capable of complying with the emission limit values of the Industrial Emissions Directive. Should the plant start operating, the Albanian authorities must ensure the continuous monitoring of the plant's emissions (EnC, 2019).
## Bosnia and Herzegovina

## Climate change

Bosnia & Herzegovina ratified the Paris Agreement in 2017. First NDC was submitted in 2017 while the second NDC is under preparation (New Climate Institute and GIZ, 2019).

The countrywide 2013 climate change adaptation and low emissions development strategy for Bosnia and Herzegovina covering the period 2013 – 2025 is currently being updated (EnC, 2019).

Bosnia and Herzegovina do not have a clearly defined system for GHG emission data collection and processing, quality assurance and control of input data, or a reporting and monitoring system. In February 2019, Bosnia and Herzegovina launched a national working group to work on its National Energy and Climate Plan (NECP). Preparatory work on the analytical and technical aspects of the NECP is at an initial stage, focusing on the identification of the base year for GHG emission reduction and calculation of national targets (EnC, 2019).

## Renewable energy

The national renewable energy action plan was submitted to the Energy Community Secretariat in 2016. The national target is 40% of renewable energy sources (RES) in final energy consumption and an energy share from RES in transport of 10% by 2020. Bosnia and Herzegovina reached a 22.3% share of energy from renewable sources in 2017, which is 2,6 percentage points below the share of 25,3% registered in 2016. The current share of renewables in transport is around 1% and far below the planned National Renewable Energy Action Plan trajectory.

A number of renewable energy projects are licensed in the country. However, the investment framework is hampered by heavy administrative procedures for permitting authorisation and licensing. The existing legal framework requires environmental impact assessments to be drawn up but in practice this is not always properly applied and often challenged by civil society and subject to legal challenges through the courts (EC, 2019b).

## Energy efficiency

Energy efficiency action plans for each entity provide for a final energy consumption savings target of 9% for 2018. The assessment of the current plan based on 2015 data indicates that Bosnia and Herzegovina only achieved a saving of 3.7%. There is no state-level legislation on energy efficiency. (EC, 2019b; EnC, 2019)

## Air pollution/LCPD

The National Emission Reduction Plan (NERP) is in its implementation phase since 1 January 2018. Three plants are being opted out, meaning that they can only remain in operation for not more than 20.000 operational hours and until December 2023 at the latest. Sufficient financing must be ensured by the operators of combustion plants in order to follow through with the implementation of the NERP. The current emissions from large combustion plants under the NERP show compliance with the ceiling for nitrogen oxides and dust, while in the case of sulphur dioxide, there is significant non-compliance which has to be addressed (EnC, 2019).

## Kosovo\*

## Climate change

The integration of energy and climate policies in Kosovo<sup>\*</sup> is at an initial stage. Human and technical capacities remain the main challenges to perform this task adequately, as well as harmonizing energy and climate objectives across sectors.

Kosovo is not a member of the UNFCCC and it has not ratified the Paris Agreement and does not have a NDCThe 2019-2028 strategy and action plan on climate change has been approved by the Government. Kosovo\* started reviewing its national greenhouse gas emissions monitoring and reporting systems and in 2016 adopted two administrative instructions with a view to align with Regulation (EU) 525/2013. A national working group on the National Energy and Climate Plan (NECP) was established in September 2018. The adoption of the draft Climate Change Law is scheduled for 2020 (EC, 2019, EnC, 2019b).

## Renewable energy

Kosovo\* has registered a 22,9% share of energy from renewable sources in 2017, putting the country on the trajectory to reach its 25% target in 2020. However, this was due to the revision of biomass consumption for heating by household customers rather than investment in renewable energy. While the legislation is partially aligned with the acquis, the electricity market should be restructured so as to facilitate the integration of renewable energy generation. Amendments to the existing legislation are needed to introduce renewable energy auctions and enable a cost-effective deployment of renewable energy in Kosovo\*. Also, rules on renewable energy self-consumption for distributed generation to encourage and enable customers to become prosumers have yet to be adopted (EC, 2019b; EnC, 2019).

## Energy efficiency

There was a good progress on alignment with the energy efficiency acquis, with the adoption of the new Law on energy efficiency and a set of by-laws to implement the Energy Performance of Buildings Law. The institutional framework was strengthened in January 2019 with the establishment of an independent Energy Efficiency Fund. The new Law on Energy Efficiency set a final energy cap consumption target for 2020, an energy efficiency obligation with a 0,7% target and a 1% annual central government buildings renovation target. 25 Municipalities have developed energy efficiency action plans. Kosovo achieved only about half of the 9% energy efficiency target by 2018. It is crucial to increase energy efficiency incentives for the private sector and households. The adoption of the final draft NEEAP 2019 - 2021 is pending (EC, 2019b, EnC, 2019).

## Air pollution/LCPD

With regard to large combustion plants, the amendments to the Administrative Instruction on emission limit values from large combustion plants, required to bring the transposing legislation in compliance, and the Law on Industrial Emissions are still missing. As the currently applicable legal framework fails to comply with the provisions of the Large Combustion Plants and Industrial Emissions Directives, the Energy Community Secretariat referred the case to the Ministerial Council in July 2019. The current emissions from large combustion plants under the NERP show slight non-compliance with the ceiling for Sulphur dioxide, while in the case of nitrogen oxides and dust, there is significant non-compliance which has to be addressed. The planned new power plant, Kosova e Re, would fall under

the scope of the Industrial Emissions Directive and therefore would need to meet its emissions thresholds for new plants (EnC, 2019; EC, 2019b).

## Montenegro

#### Climate change

Montenegro submitted its INDC in 2015 and ratified the Paris Agreement in October 2017. As for the UN Framework Convention on Climate Change (UNFCCC), Montenegro has so far submitted two national communications and its second bi-annual report was submitted in April 2019. NDC update is under consideration, but dependent on improved quality of emissions data (New Climate Institute and GIZ, 2019). The energy sector is the main source of greenhouse gas emissions.

Montenegro has developed relevant climate change legislation, including a Rulebook which transposes the requirements of the Monitoring Mechanism Regulation (MMR) on the establishment of a formal national inventory system was adopted in 2017. The Annual Data Collection Plan for the inventory of GHG emissions was adopted in 2018. It incorporates elements (e.g. allocation of emission credits, MRV, low carbon strategy development) of the EU ETS, the Effort Sharing Regulation and the monitoring and reporting mechanism (MMR). The adoption of a climate change law that incorporates elements of the EU emissions trading system (ETS), the Effort Sharing Regulation and the monitoring and reporting mechanism (MMR) occurred in 2020. Montenegro has a Climate Change Strategy in place but has to intensify its work to ensure consistency with the EU 2030 climate and energy policy framework and to ensure that its strategy is integrated into all relevant sectoral policies and strategies. Montenegro has set up a national working group on the NECP that convened for the first time in November 2018 (EC, 2019; EnC, 2019).

#### Renewable energy

The renewable energy national action plan aims to achieve a target of 33% of energy from renewable sources in gross final energy consumption by 2020. In 2017, 40% of gross final consumption of energy came from renewable sources, largely due to the revision of biomass data and the reduction of energy consumption of the largest electricity customer, aluminium plant KAP. The development of new projects, particularly on hydropower, should be in conformity with the EU acquis on concessions and environment and should take into account the impact on areas of high natural interest. Self-consumption of electricity from renewable energy sources acknowledged in the legislation is not implemented yet (EC, 2019b; EnC, 2019).

## Energy efficiency

The new NEEAP for 2019 - 2021, which includes the overall 2020 cap consumption target and a 1% annual target for central government buildings, was adopted in June 2019. The NEEAP also includes energy efficiency obligation targets, which are yet to be notified. With the amendments to the Energy Efficiency Law, the transposition of the Energy Efficiency Directive was improved. Additional efforts are needed to fully align Montenegro's regulatory framework with the Energy Performance of Buildings Directive and with the Labelling Regulation.

#### Air pollution/LCPD

With regard to large combustion plants, the opt-out of the thermal power plant Pljevlja (the only existing plant in Montenegro) means that the plant will be able to remain in operation for a maximum

of 20.000 operational hours between 1 January 2018 and 31 December 2023. Based on its current load factor, the plant is expected to reach its 20.000 hour limit already in October 2020. This puts focus on the planned replacement capacity, which must meet the emission limit values of the Industrial Emissions Directive for new plants (EnC, 2019).

#### North Macedonia

#### Climate change

North Macedonia ratified the Paris Agreement in 2018. There is no process in place for an update of the NDC. In 2018 the country submitted its second Biennial Update Report on climate change to the United Nations Framework Convention on Climate Change and currently the 4<sup>th</sup> National Communication and 3<sup>rd</sup> Biannual Update Report to the UNFCCC are in preparation.

#### (EC, 2019b; EnC, 2019).

The alignment of the legal framework with the acquis is still at an early stage. The drafting of a separate Law on Climate Action (including transposition of Regulation (EU) 525/2013) was expected to start by the end of 2019. The country has started developing a comprehensive strategy on climate action, consistent with the EU 2030 framework. Work on a Long-term Strategy on Climate Action started in March 2019 and it is envisaged to end by August 2020. In March 2019, North Macedonia created a national working group to work on the National Energy and Climate Plan (NECP). The working group meets regularly, its main objective being the harmonization of the country's energy strategy and the ongoing work on the climate (EC, 2019; EnC, 2019).

#### Renewable energy

The amended national renewable energy action plan is now in line with the binding target of 23 % of energy coming from renewable energy sources by 2020. In 2017, the country achieved a 19,7% share of energy from renewable sources, lower than the 21% trajectory for the years 2017 and 2018. The new Energy Law is fully aligned with the Renewables Energy Directive. The implementing legislation is in the adoption phase. The new Energy Law determines a feed-in premium as a new mechanism for renewable energy sources support that will be granted on a competitive basis. Investment in hydropower should be compliant with the relevant environmental acquis. (EnC, 2019).

## Energy efficiency

The third national energy efficiency action plan is adopted, and the country is on track to meet its mandatory targets. The energy service market still needs to be developed and the existing legislation amended so that energy service companies can be contracted. The country has drafted a new Energy Efficiency Law, aligned with the Energy Efficiency Directive and the Energy Performance of Buildings Directive. Preparing and applying the secondary legislation remains a considerable challenge (EnC, 2019).

#### Air pollution/LCPD

In the area of large combustion plants, the key priority is the proper implementation of the National Emission Reduction Plan (NERP), which started in January 2018. In order to achieve compliance, adequate financing must be allocated for emissions abatement. The current emissions from large

combustion plants show compliance with the ceiling for nitrogen oxides, while in the case of sulphur dioxide and dust, there is significant non-compliance which has to be addressed. There are no plants operating under the opt-out regime in North Macedonia (EnC, 2019).

## Serbia

## Climate change

Serbia submitted National Communications on climate change (2010, 2017) and one Biennial Update Report in 2016. It submitted INDC in 2015, that was followed by the ratification of the Paris Agreement. The NDC will be updated by 2021 (for the period 2021 - 2030). The main responsible entity for climate change on a national level is the Ministry of Environment Protection, while the National Climate Change Committee facilitates the coordination (New Climate Institute and GIZ, 2019).

Serbia's draft Climate Change Law is in line with the climate acquis and the Monitoring Mechanism Regulation contains specific provisions on the GHG inventory, low carbon development strategies as well as policies, measures and GHG projections. Adoption of the National Climate Change Strategy, supported by an action plan, which was drafted in July 2016 is planned for 2020. A national working group on the NECP has not been set up yet and the preparatory work on the analytical and technical aspects of the NECP still needs to be launched (EnC, 2019).

## Renewable energy

The Renewable Energy Directive is partially transposed into Serbia's law on energy. Serbia's national renewables target for 2020 is set at 27% of gross final consumption of energy. Serbia might not recover from the delay in the implementation of its National Renewable Energy Action Plan, despite 247 MW of additional wind connected to the grid during 2018. In 2017, the share of energy from renewable sources was 20,6%, well below the 25% indicative trajectory for 2017 - 2018. There are no rules on renewable energy self-consumption for distributed generation to encourage and enable customers to become prosumers. Any further development of hydropower should be in line with EU environmental legislation.

## Energy efficiency

Serbia achieved certain progress in energy efficiency through adopting secondary legislation that implements rules on labelling, amendments to the Law on efficient use of energy improving energy audits and energy management, and the implementation of eco-design requirements and secondary legislation implementing this law. Further secondary legislation is necessary to achieve full alignment, in particular with the Directive on Energy Performance of Buildings. (EnC, 2019).

## Air pollution/LCPD

National legislation allows for the proper implementation of the Directives. Four large combustion plants are operating under the opt-out regime since 1 January 2018. These plants will be able to remain in operation for a maximum of 20.000 operational hours between 1 January 2018 and 31 December 2023. Based on their current load factor, three out of the four opted-out plants will reach the end of their 20.000 hours before December 2023. Serbia complied with its reporting obligations under the Large Combustion Plants Directive by submitting its emissions data to the European Environment Agency. Before the adoption of of the NERP that was seriously delayed, it was envisaged

that large combustion plants would have to comply with the emission limit values of the Directive on an individual basis (EnC, 2019).

## Recommendations

## Recommendations for the EU

The pre-condition for possible successful translation of the Green Deal to the WB is clear communication from the EC to the WB. A feedback of the EU on the implementation of the Energy Community Treaty, possibly in the form of the report to the European Parliament could be an integral part of that communication.

Measures that are addressing citizens both as consumers and as prosumers could be prioritized in the EU programming increasing both the appetite for Europeanisation in general and demand for Green Deal inspired policies in particular. Support to efficient heating and deployment of small-scale solar installations may be a promising activity as they deliver across numerous domains and truly reflect the spirit of leaving none behind.

## Recommendations for the WB

Providing recommendations to the governments of the WB on the transposition of the agenda which requires unprecedent amount of resources to implement in an environment in which many external elements are not known is difficult task. Therefore, we stick to several general level recommendations and some more concrete recommendations for the entire WB. Recommendations do not take into account capacities of the WB societies to deal simultaneously with multiple programmes that are demanding to implement.

## Green Deal measure: Increasing the EU's climate ambition for 2030 and 2050

## Green Deal target: Climate neutrality by 2050

Not a single society in the world has ever achieved a comparable goal in the history of mankind as achieving the climate neutrality by 2050 would be. Therefore, an action that pool all our technical and management resources are required. First and foremost, understanding of the challenge, its relevance for the societies has to be broadly discussed. While ratification of the Paris Agreement is a confirmation of understanding of the relevance of the task ahead, this understanding has to be immediately re-affirmed and shared among all the stakeholders.

**Prepare a vision of a 2050 climate-neutral society**. On a **strategic level** society needs to initiate and conduct a nation-wide dialogue on climate neutrality target. The Governments are in the position to operationally lead on the dialogue. The dialogue needs to include all relevant stakeholders: representatives of businesses, all level of governments and civil society organizations. Academia has to have a prominent role in the dialogue as it has to incorporate this goal in curricula of the future practitioners who should deliver and maintain climate neutrality. Governments may wish to conduct a process similar to the process that preceded the preparation and the adoption of the so-called EU Climate Law. The process should result in a Vision of 2050 climate-neutral society. Parliaments have to be involved in the process from the onset. The process may start by a public hearing in the Parliaments where all the stakeholders will be invited to open a nation-wide dialogue and ask the Government to operationally lead on the process with regular reports to the Parliaments. The process should be completed by the adoption of legal act that mandates climate neutrality by 2050 or national consensus of different nature.

Development of a **regional plan** for transition to carbon neutral societies by 2050 should be kept in mind from the onset of the processes. Development of joint vision for 2050 carbon neutral WB should be initiated following adoption of national visions that should also reflect regional dimension.

**Preparations of scenarios for carbon-neutrality by 2050** is a **policy tool** that needs to support the strategic process and inform legal process. Currently none of the countries have up to date **inventory of renewable energy resources** that is nationally produced and that takes into consideration development of technology and of the markets. Preparation of such inventories should precede adoption of **revised spatial plans** as massive deployment of renewable energy and phasing out of coal need different spatial arrangements. Development of such inventories should be accompanied by technical studies on grid management to inform revision of the long-term network plans.

A particular emphasis should be given to the assessment of the possible biomass contribution to the climate neutrality goals. Biomass is the only renewable resource of dynamic nature which means that human activities may increase the volume of resource. Biomass to power technologies can provide for the baseload with a degree of flexibility. Biomass growing requires large quantities of land. For all these reasons biomass is a resource for which sustainability in planning and management is of crucial relevance. A long term **national sustainable biomass management strategy** should be prepared and discussed in the parliaments.

Adopt the Climate Law<sup>5</sup>. Making society climate neutral by 2050 requires binding legal agreement adopted by the representatives of citizens. The law may also contain carbon budgets as a guiding framework consistent with any intermediate targets along the optimal path to 2050 carbon neutrality

Civil society organizations in the WB region should drive awareness raising on the global and the EU developments. They can effectively engage in the field research, advocacy and communication activities and demand an inclusive and transparent decision-making processes. Their direct egagemnt with the communities and citisens is another crutial aspect of their fundamental contribution to the transaltion of the Green Deal to the WB region. Promotion of community based energy decarbonized solutions featuring the use of local renewable resources is one of the key activities in this respect.

## Green Deal target: Increase emission target for 2030 to at least 50%

While 2050 seems distant, 2030 targets are much more tangible for the decision makers. Framework in which the 2030 targets and possible mechanisms for achieving it (even before knowing the targets) are discussed in the region, seems to lack the view to 2050 and also lacks representation and participation. Under the Green Deal, NECPs are crucial policies enabling effective transposition and subsequent transformation of the societies.

On a **strategic level** recommendation are similar to those for the goal of climate neutrality. The two processes cannot be separated if effective transposition of the Green Deal is sought. Therefore, the society needs to initiate and conduct a nation-wide dialogue on 2030 emissions target. The Governments are in the position to operationally lead on the dialogue. The dialogue needs to include all relevant stakeholders: representatives of businesses, all level of governments and civil society organizations. Parliaments have to be involved in the process from the onset. The process may start by a public hearing in the Parliaments where all the stakeholders will be invited to open a nation-wide dialogue and ask the Government to operationally lead on the process with regular reports to the Parliaments. The process should be completed by the adoption of legal act proposing emission targets for 2030. Achieving climate neutrality and increased 2030 emission targets are transformative

<sup>&</sup>lt;sup>5</sup> Many countries are now adopting climate laws that essentially deač

processes that have to be verified by the national parliaments. Discuss **establishment of the Green Deal Council as Parliamentary body** that may serve as the symbol of the commitment to the goals of the Green Deal with the primary function to inspire and inform nation-wide dialogue on the green deal related topics in general, and de-carbonization in particular. Consider regional cooperation or establishment of regional body.

**Policy level.** Currently when we still do not know the modalities in which the EU would like to facilitate transposition of the Green Deal to the WB and the role of the Energy Community in such process we face some uncertainties that affect near term horizons of the societies in the WB when 2030 targets are in question. We recommend that NECPs are prepared in the manner already described. Should NECPs that are currently in preparation in different formats led by sectoral ministries are completed we recommend updating the NECPs in a described manner by 2023. Preparation of mid term national sustainable biomass strategies as part of the NECP or outside of it is recommended as a detailed elaboration of the long-term national strategy.

On **legislative level** a series of actions enabling implementation of the NECPs would be required. Civil society organizations in the WB region should provide a substantial help with the NECPs that is base on their local knowledge stemming from a close interaction with the local level and communities.

## Green Deal target: Ensure effective carbon pricing

Carbon pricing is a tool for achieving the climate targets. Given that the largest shares of emissions in the WB derive from power sector and given that power sector is predominantly owned by the national governments it is perhaps possible to achieve GHG emission targets without putting carbon pricing into operation. A question of compliance with the competitors in the single energy market and lack of even playing field remains open is such a case.

On a strategic level government need to discuss whether GHG emission reduction targets for 2030 could be achieved **without introduction of carbon pricing**. Any such programme should be discussed with the EU.

On **policy level** decision on carbon pricing mechanism and negotiation for its implementation with the EU should be guided by the strategic framework prepared as discussed above.

On legislative level carbon pricing (if decided) should be introduced via legislation packages including possibility that is part of the Climate Law described above.

Civil society organizations in the WB region should provide local level and citizens with the knowledge and promote direct consequences for the WB economies and their deaily life that would result from the lack of climate ambition.

## Green Deal target: Propose a carbon border adjustment mechanism, for selected sectors

Should this novel proposition become part of the Green Deal it might have far reaching consequences.

On a strategic level a discussion steered by the national parliaments to immediately assess the **possible consequences** of introduction of carbon border adjustment mechanism is recommended. Include in the discussion business associations from both affected industry sectors and economy as a whole. **Include** in the analysis the effect of the reduced demand of other goods and services as entire WB will be affected by the mechanism. Discuss the issue with the European Commission.

**On a policy level**, immediate development of carbon and energy intensity reduction programme in selected industries should be designed taking into account the competition and state aid regulations.

A set of legislation on trade, energy efficiency, state aid and other areas required to implement energy intensity reduction programme should be adopted.

Civil society organizations in the WB region should raise awareness on the relevance of the issue and demand an inclusive and transparent decision-making processes. They could provide local level and citizens with the knowledge and promote direct consequences for the WB economies and their deaily life that would result from the lack of climate ambition in relation to the CBAM.

#### Green Deal measure: A zero pollution ambition for a toxic-free environment

In order to protect Western Balkan's citizens and ecosystems, the WB needs to better monitor, report, prevent and remedy pollution from air, water, soil, and consumer products. To achieve this, the WB countries will need to look more systematically at all policies and regulations. Using the wording of the Green Deal we describe the desired situation.

Countries in the region are currently in breach of their own legislation and international obligations when pollution from large industrial installations is concerned. Large number of installations contributing to the non-compliant outcomes are owned by the Governments. In such a situation there are obvious limits in terms of recommendations for policy or legal actions that can be given to the governments.

#### Green Deal target: Review measures to address pollution from large industrial installations

On a strategic level country need to assess the effectiveness of implementation of the policies and legislation that should serve the purpose of pollution prevention and control that are already in place.

Countries should undertake **comprehensive review of their policies to attract foreign direct investments** and revise any provisions that might grant the right to operate to industries whose standard of operation is not in line with national legislation.

Assessment of the implementation of the LCPD and IED directives when large combustion plants are concerned should be done in parallel with the process of NECPs in an integral manner and all recommendations valid for the NECP preparation process are valid for the assessment of the implementation of the LCPD and IED directives for large combustion plants.

#### Green Deal target: Draw on the lessons learnt from the evaluation of the current air quality legislation

Perform evaluation and review of national air pollution policies where they are in place. Assessment based on breach of air-quality standards (EU decided to assess and strengthen EU air policy since many EU air-quality standards were not respected in many regions and cities, and people's health is suffering as a result, with rising costs to health care and the economy). Adopt national air pollution strategies and action plans.

Investigate the demand for action (Existing demand for action confirmed by survey in the EU. The Eurobarometer survey on air quality issues showed that more than half of Europeans believe air

quality has deteriorated over the decade. In addition, seven out of ten Europeans said they were unhappy with efforts by public authorities to improve air quality – and four out of five said the EU should propose additional measures to address air pollution) through a nation-wide public opinion poll.

Assess the capabilities of local self-governments to preform legal obligations prescribed in the current legal framework.

# Green Deal measures: Supplying clean, affordable and secure energy, building and renovating in an energy and resource efficient way

The achievement of the climate neutrality and increased targets for GHG emission targets by 2030 is impossible unless supply of clean, affordable and secure energy is provided. Since buildings consume large portion of energy and are responsible for large share of GHG emissions its renovation is also crucial.

## Green Deal target: The clean energy transition should involve and benefit consumers

Deployment of small-scale solar installations prioritized as a strategic goal Development of a programme for support to deployment of small scale distributed solar interventions Developing new legislation and amending existing legislation to remove barriers and create incentives for small scale solar deployment

#### Green Deal target: The risk of energy poverty must be addressed

Eradication of energy poverty prioritized as strategic goal

Development of national programme for eradication of energy poverty including the design of incentives schemes for rapid replacement of inefficient heating devices and direct support for replacement to most vulnerable households

Accelerated adoption and implementation of ECO design directive

## Green Deal target: Engage in a 'renovation wave' of public and private buildings

Incorporate air pollution and social related criteria in the national renovation strategies Learn from the experience of the schemes funded by the Croatian national fund for energy efficiency and Serbian Public Investment Management Office

Examine the role of district heating companies acting as public ESCO companies

Develop programme for empowering housing associations to identify and implement complex retrofit projects

Develop and enforce national standards for indoor environmental quality

Consider establishment of project preparatory facilities for large scale renovation projects and utilise typology tools

## Green Deal target: Enforce the legislation related to the energy performance of buildings

Design a numer of flexible financing mechanisms fro differect stakeholder groups Enable consumers and businesses to make more informed choices to save energy and money Incorporate roust social criteria in the implementation mechanism Promot smart technologies wherever cost-effective and feasible Address health and well-being of building users through the consideration of air quality and ventilation

# Country by country recommendations from existing EU progress reports and EnCT implementation reports

## Albania

- diversify electricity production away from hydropower and promote alternative sources of renewable energy while complying with environmental standards
- fully align its Energy Efficiency Law with the acquis, set up an energy efficiency fund and draft and adopt secondary legislation implementing the Energy Performance of Buildings Directive
- develop integrated National Energy and Climate Plans in line with Energy Community obligation
- the ongoing processes give an opportunity for data and information sharing of upcoming NECP.

## Bosnia and Herzegovina

- adopt state- and entity-level legislation on renewable energy and energy efficiency in line with obligations stemming from the Energy Community Treaty
- start implementing the Paris Agreement by putting in place policies and measures to deliver on its NDC
- update and implement the climate change adaptation and low emissions development strategy
- start to develop an integrated NECP in line with the Energy Community recommendation
- the upcoming NDC update and the NECP development process can be a momentum for combining the envisaged steps into a single process.

## Kosovo\*

- focus on renewable energy, including by introducing market-based support schemes
- address investments barriers
- implement the climate change strategy and the action plan on climate change
- prepare a roadmap for alignment with the climate acquis
- start the work on an energy and climate plan, in line with Energy Community recommendations
- NECP development could potentially be built on the existing Climate Change Strategy and Action Plan by, for example, taking the list of prioritised actions and turning them into concrete emissions reduction targets.

## Montenegro

• develop the National Energy and Climate Plan in line with the Energy Community recommendations

- given that the NDC update is dependent on data available, more precisely on quality of emissions data, the NECP process can be a good window of opportunity to obtain that data and use the established working groups to provide the inputs needed for both the NDC update and NECP processes
- It would be important to harmonize strategies and reporting requirements on climate and energy with the Recommendation on National Energy and Climate Plans (NECPs) and determine the impacts, in terms of costs and benefits, of polices and measures needed to integrate sectors, a task that suffers from a lack of capacity.

## North Macedonia

- adopt the Energy Efficiency Law to align with the Energy Efficiency Directive and the Energy Performance of Buildings Directive
- technical, institutional and administrative capacity remains weak and needs to be strengthened at all levels
- mainstream climate action into other sectors such as energy and transport
- continue efforts to align the work under way with the Energy Strategy and the Climate strategy, ensuring consistency among objectives and preventing adverse incentives
- implement the Paris Agreement by developing a comprehensive strategy on climate-related action, consistent with the EU 2030 framework and start the process of developing a National Energy and Climate Plan, in line with Energy Community obligation
- due to the extensive use of fossil fuels and particularly the dominant share of domestic lignite for electricity production, there is significant potential in the country for policies and measures that lead to GHG emissions reduction. Vulnerable sectors and climate change adaptation measures will be addressed by revised future NDCs.

## Serbia

- promote investment in energy efficiency including through establishing a sustainable financing system and initiate reforms to introduce cost-reflective electricity tariffs fully taking into account investment needs, climate change commitments and social security implications
- enable a cost-effective achievement of the 2020 renewable energy target, Serbia must introduce renewable energy auctions, if possible, technology neutral, and disregard the capacity caps per technology included in its National Renewable Energy Action Plan
- implement the Paris Agreement, including by adopting a comprehensive climate strategy and law, consistent with the EU 2030 framework for climate and energy policies and wellintegrated into all relevant sectors and develop a National Energy and Climate Plan, in line with Energy Community obligations
- development of the Climate Change Strategy with emissions reduction targets for the medium and long-term should inform the NDC update that would support decarbonisation goal that would in addition serve as the basis for the NECP.

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