



**Challenges and Policies
of Environmental and Climate Protection
in the Western Balkan Region**

BACKGROUND PAPER

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Abbreviations

BiH	Bosnia and Herzegovina
BREF	Best available techniques reference document for large combustion plants
CAP	Common Agriculture Policy
CMO	Common Market Organization
CO ₂	Carbon dioxide
EC	European Commission
EEA	European Environmental Agency
EIA	Environment Impact Assessment
EIP	EU Economic and Investment Plan for the Western Balkans
ENTSO-E	European Network of Transmission Systems Operators for electricity ()
EMAS	EU Eco-Management and Audit Scheme
EU	European Union
EU ETS	EU emissions trading system
GA	Green Agenda for the Western Balkan
GDP	Gross Domestic Product
GHG	Greenhouse gases
IPARD	Instrument for Pre-accession Assistance for Rural Development
IUCN	International Union for Conservation of Nature
JRC	Joint Research Centre
KOSTT	Kosovo transmission system operator
kW	Kilowatt
LPIS	Land Parcel Identification System
MW	Megawatt
NO _x	Nitrogen oxides
PM	Particulate matter
RES	Renewable energy sources
SEA	Strategic Environmental Assessment
SEE	South East Europe
SO ₂	Sulfur dioxide
TAP	Trans-Adriatic Pipeline
WB	Western Balkan

Executive summary

The European Union (EU) Economic and Investment Plan for the Western Balkans (EIP) accompanied by the Green Agenda for the Western Balkans (GA) adopted in October 2020 put sustainability and the green growth at the heart of the EU support to the post-pandemic recovery and development process in the WB region, which is an integral part of Europe and comprises the EU's closest neighbours. Both documents offer comprehensive policy orientations that are inspired by the EU Green Deal while reflecting the region's specificities and potentials. This paper aims to support internal and external policy dialogue on the optimal implementation of these European Commission (EC) proposals for actions by analysing their consistency with national policy priorities in the WB countries. The key findings are as follows:

Decarbonization

All existing and ageing coal-fired plants need to be terminated as soon as possible and no new constructions to be started. For the existing plants, Large Combustion Plants Directive should be enforced considering the Best available techniques reference document (BREF) for large combustion plants to better protect public health and avoid the need for additional investments. New gas infrastructure, including the extension of the Trans-Adriatic Pipeline, needs to be constructed in order to diversify the gas sources to the European market and bring gas to the region to speed-up transition and provide security. Solar and wind potential should be utilized to complete the mix with current hydropower and bioenergy. Expansion of the hydropower sources should be aligned with the EU directives, especially the EU Habitats Directive.

The EU Platform for Coal Regions in Transition could be extended to the WB to facilitate the exchange of best practices, strategies and projects of transition towards climate neutrality. Emissions Trading Scheme and consequent carbon pricing will be an important instrument in achieving climate goals. These economic incentives should smoothen the transition to climate neutrality. It would require significant technical assistance and administrative capacity building from EU partners. Strategies and legislation from economic, energy and environmental sectors should be more connected to streamline the process including transparency to experts and the general public and their participation.

Biodiversity (including sustainable food systems and rural areas)

The main challenges in the agriculture sector are similar to those in the EU countries:

- a) to decrease a negative impact of agriculture on soil erosion and use of chemicals;
- b) to support of local business instead of large corporations with no direct relation to the used land (esp. arable one);
- c) to ensure, that subsidies are used to achieve a neutral or positive environmental impact incl. that on biodiversity and not the opposite direction.

Specific challenge in the WB is on how to modernize the agriculture efficiency while keeping higher employment in the agriculture sector and stop depopulation of the countryside. Usually, the only way is to produce also local-specific products or those with added value, and offer them in markets abroad. That could bring more sustainability to the sector in the WB and also to increase its attractiveness.

In general, there is a lack of biodiversity monitoring and available data that could be possible to interpret it at regional or countries level sufficient accuracy. Specificity of the WB region is its high biodiversity caused by various biotic conditions despite the fact that geological background is quite united there. Advantage is that biodiversity is still in a good shape in many places, but under increasing pressure during last twenty years. Therefore, we still can find pristine or old growth forests there, and also to see that non-forests habitats are managed in a traditional way with no need for direct subsidies in many countries.

It is obvious that the WB countries will not have sufficient national financial capacities to conserve biodiversity per se (except for protected areas and specific actions on species recovery, esp. endemic ones). A solution is to harmonize rural and agriculture development with biodiversity needs. E.g., instead of starting full price payment schemes for 'landscape and nature maintenance', to keep a system in which conservation actions serve also for a production. That is valid mainly for active conservation measures.

Circular Economy

The latest European Commission (EC) policy orientations well match the need of the WB countries for the construction and maintenance of waste management infrastructure – i.e. effective separate collection schemes for at least paper, metal, plastic, glass and bio-waste, which are key to quality recycling, and establish built-in economic incentives to reduce waste generation (e.g. pay-as-you-throw schemes) and better waste treatment (e.g., landfill/incineration charges). When it comes to other more ambitious recommendations that the green agenda makes – i.e. developing circular economy strategies looking at the entire lifecycle of products, waste prevention, modern waste management and recycling, re-use, repair and remanufacturing – the region however currently does not appear to be ready yet for such systematic approach. These aspirations will require an active engagement of the key EU industries in dialogue on the most suitable circular economy arrangements within key EU industrial supply chains – such as agricultural product chains, transport-automotive, and textiles.

Overall conclusion

The EU Green Deal introduces a new growth strategy based on a competitive and sustainable economy having a minimal emission and material footprint. The Green Deal-inspired interventions in the EIP and GA promote an economic transformation processes that addresses the looming risks related to climate change and resource depletion and seizes the emerging opportunities that arise in more sustainable production and consumption patterns. As such the Green Deal cannot rely only on public interventions alone– it requires a whole-of-society approach with the engagement of the private sector at its core.

To this end, the key proposal coming from this background paper is to move away from the traditional separation of development and economic cooperation and experiments with hybrid processes involving private sector (including key European industries active in the region) into the cooperation dialogue with governments on the most effective interventions to support the transition to new models of green growth. Such engagement may be best organized through the engagement of the key industry representatives or the European chambers of commerce into the future Team Europe Initiatives in respective WB countries. In other words, the green agenda for the Western Balkans will require integrated approach to economic cooperation and pre-accession process.

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1 Purpose and methodology

Purpose

Aim of the background paper is to cover the most important issues related to the state and protection of the environment and to provide in-depth background analyses to the topic of the International Workshop planned to take place at Prizren / Kosovo during June / July 2021.

Methodology

Authors were focused to the key issues laid down in the recent EC staff document presenting the Green Agenda for the Western Balkans (October 2020).

The Green Agenda for the WB mirrors the European Green Deal, as these are countries aspiring for EU membership. The paper is structured following four pillars of the Green Agenda for the Western Balkans:

- Decarbonisation (climate change, clean energy, smart mobility),
- Circular Economy (resources, waste management, energy efficiency),
- Biodiversity, and
- Pollution (Air, Water, Soil).

The paper also addresses key problems of the region including heavy reliance on fossil fuels, low energy efficiency of industry and housing, and severe air pollution.

Its main substantive parts are as follows:

- Relevant global, European and regional the environment-related legal frameworks: the paper recaps the key provisions of the Green Agenda for the WB;
- Implementation on country and regional levels, obstacles and stumbling blocks for smooth implementation;
- Discussion about obstacles and stumbling blocks for smooth implementation;
- Recommendations for potential actions or future inputs to the regional processes.

2 Decarbonization

2.1 Introduction

Energy production is heavily dependent on coal in the WB, accounting for around 70 % of electricity produced in the region (in some countries even 97 %). The only exception is Albania, with strongly developed hydropower (EC, 2020). Whilst the region has high solar and wind potential (SEERMAP, 2017), locally mined coal and lignite are still the main supplies of energy (EEA, 2010). There are even other opportunities to support the transition to the energy-efficient power sector and low-carbon economy. The distribution network suffers of high losses, energy intensity of the economy is high, space heating is often provided by electrical heaters and buildings lack proper insulation (EC, 2020; CEE Bankwatch, 2020).

Five of the Western Balkan countries (except for Kosovo) ratified the Paris Agreement (in force from 2016-2018), committing to reduce the share on the global average temperature increase and are supposed to start transforming their societies accordingly (CEE EC, 2020).

While Montenegro and North Macedonia are staking on renewable energy through scaling up solar and wind power, and hydropower-dependent Albania is also diversifying mainly with solar, Serbia and Bosnia and Hercegovina (BiH) still support coal power plants constructions. The termination of the Kosova e Re coal power project in March 2020 can bring alternatives to the mix (CEE Bankwatch, 2020).

The reasons for the coal projects diverting resources from renewable energy alternatives are affordable loans and no obligation to pay for carbon emissions. Only China's state banks, among the few sources still willing to finance coal, are unconcerned as long as they can obtain state loan guarantees. Underestimated carbon pricing and coal prices in the Kostolac and Tuzla 7 feasibility studies conceal the questionable profitability of these coal projects (CEE Bankwatch, 2020).

Even though enhancing the energy-efficiency of buildings is crucial for reducing energy wasting, reducing consumer electricity bills and for public health improvement, buildings are not perceived as part of the critical infrastructure in the area. There is significant room for improvement considering that residential and public buildings account for more than 40 % of energy consumption in most of the SEE region (Agora Energiewende, 2018).

WB countries committed to work towards the 2050 target of a carbon-neutral continent together with the EU through reforming the transport sector beside the energy production. However, the transport sector is strongly connected to the energy production.

2.2 State and actions at national levels

Albania

Albania has unique emission profile with relatively low total greenhouse emissions (8,4 M tons in 2009, of which roughly 60 % is of the CO₂ emissions) supported by hydro power (95 %) with other RES emerging (INDC, 2014). Dependency on hydropower make the country vulnerable to unfavourable hydrological conditions in the summer and also considering the climate change impacts. In addition, Albania is also a

net importer of electricity, as the hydropower does not meet the needs (EC, 2020). The level of decarbonisation of the electricity mix is significantly ahead of the rest of countries, which also means that there is limited opportunity for further policies and measures in this sector to reduce emissions (INDC, 2014). Nevertheless, the other renewable sources of energy have a great potential in the country (AKBN, 2019). Maintaining the low greenhouse gas emission content of the electricity generation in defiance of economic growth and GHG emissions from other sectors are the main mitigation contributions (INDC, 2014).

Albania has committed to 38 % of the gross final energy consumption generated from RES by 2020 within the National Renewable Energy Action Plan 2018-2020 (document in Albanian). Schemes have been introduced in order to support renewable-energy producers above 2 MW for solar power and 3 MW for wind power through a competitive procedure based on 'contracts for difference' support, to be paid on top of the market price for electricity. A feed-in tariff and net metering scheme for photovoltaic or wind energy with a capacity of up to 500 kW have been incorporated (EC, 2020).

The electricity system is connected with neighbouring systems in Greece and Montenegro. Progress has been made in reducing electricity distribution losses in the power grid. The Trans-Adriatic Pipeline (TAP) project is completed. TAP AG Albania has been licensed as transmission operator by the Albanian Regulatory Authority (EC, 2020).

Bosnia and Herzegovina (BiH)

According to national plans and the age of the power plants, more than 35 % of current fossil fuel generation capacity in BiH is expected to be decommissioned by 2030 and nearly 85 % by 2050. The potential of renewable energy is significant as shows the South East Europe Electricity Roadmap (SEERMAP) models which presume the EU emissions trading system (EU ETS) carbon price could shift the fossil fuel-based electricity generation towards renewables (CEE Bankwatch, 2019).

For now, the country remains at an early stage of preparations in this area. Tuzla 7 power plant financed by China Exim bank loan is backed by an illegal state guarantee, and at least four more new coal plants are planned (CEE Bankwatch, 2020). Legislative and regulatory framework is fragmented and inconsistent (EC, 2020).

The share of renewable energy sources (RES) reached 36 % in gross final consumption. However, the development of small, dispersed renewable energy projects and in particular small hydro power plants raises concerns. With regard to this, the authorities started to amend legislation in terms of river and environment protection and small HPPs approval process. Work of the Operator for Renewable Energy Sources in the BiH has raised concerns due to low transparency of the management (EC, 2020).

The energy efficiency issue remains at strategic planning level with low implementation of the legislation. The South gas interconnection pipeline with Croatia (Zagvozd – Posušje – Novi Travnik with a branch to Mostar) is at the stage of project documentation (EC, 2020).

Kosovo

Kosovo's energy production system is unreliable and undiversified relying on two outdated lignite thermal power plants, which account for around 90 % of its electricity production. The energy sector is the main source of greenhouse gas emissions (EC, 2020). The new 500MW coal-based power plant

("Kosova e Re") project is terminated. This situation could cease the coal power production and enhance the renewables implementation (CEE Bankwatch, 2020).

New investments in wind (34 MW), solar (10 MW) and hydropower (76 MW) were completed by the end of 2019. A new biomass heating plant is in preparation. There are concerns about the environmental impact of development of small hydropower plants, which face strong public resistance (EC, 2020).

The Energy Regulatory Office excessively uses fixed feed-in tariffs, which is weakening the competitive bidding procedures for renewable energy projects. The use of biofuels in transport is not implemented due to legislative obstacles (EC, 2020).

Legislation on the energy performance of buildings has been implemented and municipalities are developing action plans. However, the monitoring capacity controlling the implementation is very limited (EC, 2020).

Kosovo transmission system operator (KOSTT) and the European Network of Transmission Systems Operators for electricity (ENTSO-E) approved new Connection Agreement. While entering into force it should lead to the operationalisation of the recently built 400kV interconnection line between Kosovo and Albania. A gas pipeline between Kosovo and Albania (Alkogap), based on the Trans-Adriatic Pipeline (TAP) project, has been assessed as well as a gas pipeline from North Macedonia to Kosovo (EC, 2020).

Montenegro

The Pljevlja II power plant was presented as an imperative by the government. However, the Czech Export Bank declined to finance the project and situation has changed, as the affordable loan was no longer accessible. This could be the reason to turn the energy sector to cheaper renewables (CEE Bankwatch, 2020).

After the revision of biomass data, the gross final consumption of renewable energy reached 38.8 % in 2018 exceeding the 33% target for 2020 under Montenegro's national renewable energy action plan. The Možura wind farm with 46 MW of installed capacity was put into operation in November 2019. The wind farm on the site of Brajići in Budva and Bar municipalities will have a minimum installed capacity of 70 MW (EC, 2020). Considering the ecosystem damages and low contribution to the mix, the government announced a ban on small hydropower projects in December 2020 and plans to adopt a declaration of permanent force (Energy Community, 2020).

Rules for auctions granting support to renewable energy and regulation making it easier for individual producers to invest in the creation of small-scale generation facilities is lacking. The regulation on implementation and incentives for electricity produced from renewable sources and high-efficiency cogeneration has been amended in 2019, as well as the Law on efficient use of energy (EC, 2020). Creation of the day-ahead market and moving renewable electricity production to market-based support schemes have made a progress in modernisation of existing production capacities (EC, 2020).

Electricity interconnections with Serbia and Bosnia and Herzegovina are planned while connection with Italy was put into operation in November 2019 (EC, 2020).

North Macedonia

North Macedonia as the first country in the region plans to cease the coal-based energy generation by concrete dates (Bankwatch, 2020). The gross final consumption of renewable energy reached only an 18.12% share in 2018 while there are binding targets of 23 % by 2020 and 24 % by 2025. EU Renewables Energy Directive is fully adopted. 62MW solar power plant auction was performed for the first time. There is similar problem with small hydro power plants as is in the other countries of the WB. In order to meet the 2020 renewable energy target, it is necessary to remove the capacity cap per type of renewable energy technology (EC, 2020).

Lack of human and technical resources at the Ministry of Economy's energy department and the Energy Agency slows adoption and implementation of energy efficiency legislation aligned with EU. Energy efficiency measures should be promoted by financial programmes at municipal level as well as by establishment of Energy Efficiency Fund (EC, 2020).

Serbia

The China Engineering and Machinery Corporation is building a new coal unit at Kostolac B. Ceased Kolubara B coal power project has been reopened as the state-owned utility EPS signed a preliminary agreement with PowerChina (CEE Bankwatch, 2020).

Bio-fuels are not yet used in the transport sector. Renewable sources accounted for a share of 20.32 % of gross final energy consumption, with target set at 27 % for 2020. Feed-in tariffs system needs to be switched into an auction-based scheme. Implementing legislation to enable prosumers to interact with the energy market should be adopted. Any further development of hydropower should be in line with EU environmental acquis (EC, 2020).

Energy labelling rules are adopted. Consumption-based metering and billing in district heating on a large scale needs to be implemented in order to implement energy efficiency measures in residential buildings (EC, 2020).

2.3 Discussion and recommendations

All existing and ageing coal-fired plants need to be terminated as soon as possible and no new constructions to be started. For the existing plants, Large Combustion Plants Directive should be enforced considering the Best available techniques reference document (BREF) for large combustion plants to better protect public health and avoid the need for additional investments (CEE Bankwatch, 2019).

The EU Platform for Coal Regions in Transition could be extended to the WB to facilitate the exchange of best practices, strategies and projects of transition towards climate neutrality (EC, 2020).

EU ETC and consequent carbon pricing will be an important instrument in achieving climate goals. These economic incentives should smoothen the transition to climate neutrality. It would require significant technical assistance and administrative capacity building from EU partners. Revenues from additional aviation allowances could be an additional source of income (EC, 2020).

Solar and wind potential should be utilized to complete the mix with current hydropower and bioenergy. Expansion of the hydropower sources should be aligned with the EU directives, especially the EU Habitats Directive (EC, 2020).

Strategies and legislation from economic, energy and environmental sectors should be more connected to streamline the process including transparency to experts and the general public and their participation. Tariff and non-tariff barriers (regulatory, administrative etc.) need to be lifted in order to increase of the RES deployment. Countries of the region should cooperate, as it is a low-cost and simple way of achieving the desired security of electricity supply (CEE Bankwatch, 2019).

Natural gas could be used as a stepping stone in the gradual decarbonisation (EC, 2020). New gas infrastructure, including the extension of the Trans-Adriatic Pipeline, needs to be constructed in order to diversify the gas sources to the European market and bring gas to the region to speed-up transition and provide security (EC, 2020).

3 Biodiversity (including sustainable food systems and rural areas)

3.1 Introduction

The WB has a wealth of animal and plant diversity, including many endemic species and habitats. This biodiversity has faced a series of threats, including a sprawl of built-up areas in urban and coastal zones, mining activities and unregulated hunting and timber cutting. At the same time, governments in the region have taken a series of steps to protect species and habitats, and in particular they have increased the share of their territory designated as protected, though the total area of protected land is still insufficient and very little of marine territory was designated to protect biodiversity (or to keep fishery in a sustainable manner) (EEA, 2019).

The state in rural development (incl. food systems) has gradually improved in most WB countries, but many steps on the way to European Union (EU) accession remain. The situation differs from country to country depending on a national importance of the agriculture sector. E.g., agriculture land varies from approx. 17% of territory in Montenegro to 45% in Serbia (JRC, 2016).

Both topics are closely connected. Biodiversity has been so rich in the region thanks to a long-term sustainable agriculture and other kind of human activities. Therefore, food systems and rural areas development is one of the main tools either to improve the biodiversity status or to deteriorate it in case of inappropriate intensification.

WB is one of European biodiversity hot spots, esp. when it comes to species richness.

Main challenges are:

- Lack of political commitment to improve and also implement biodiversity policies combined with often unsystematic approach in the implementation of measures;
- Lack of financial and technical resources (except for Serbia regarding expert level);
- Impact of economic development activities (esp. agriculture, forestry – deforestation and illegal logging, fisheries, and in lesser extent also transport, tourism, and energy infrastructure).

- Regarding food systems and rural areas, although the natural base of the region is rich, rural areas (and agriculture) face numerous challenges (in fact, deeply rooted long-term structural problems):
- Low average size of farms;
- Low labour and yields productivity;
- Insufficient compliance of the production with the EU standards esp. in food processing and animal welfare;
- Last, but not least, increasing unemployment and depopulation of rural areas interlinked with decreasing contribution of agriculture and related sectors to the GDP (EC, 2020).

The GA lists three main EU strategies that shall be a background for specific implementation in the WB region, all approved and released during 2020:

- 1) [EU Biodiversity Strategy for 2030](#);
- 2) [EU Forest Strategy](#);
- 3) [Fork to Farm Strategy](#).

All three policies are a part of the Green Deal as its action plans. Besides the GA agenda, the WB region is also united in its effort by several international platforms incl. the [SEE Biodiversity Task Force](#) that serves as a tool to coordinate activities among countries in the WB (recently led by the IUCN).

All countries except for Kosovo are parties of the CBD Convention under which they have developed their national Biodiversity Action Plan. These documents analyses the recent state of biodiversity and actions needed as well as actions needed to maintain or restore the nature. Another long-term activity is designation of so called [Emerald Network](#) under the [Bern Convention](#). Nonetheless, the most important topic for the harmonized and effective implementation of the biodiversity conservation in WB is transposition of the EU Nature Directives, especially continuing designation of the [Natura 2000 network](#) and [species protection standards](#).

Rural development and food systems are in responsibilities of national ministries of agriculture, which in majority of WB countries are different sectors than those responsible for biodiversity. National standards differ from country to country and thus also a speed of transposition of the EU standards.

3.2 State and actions at national levels

Albania

Rural development and food systems

The main financial tool triggering changes is the Instrument for Pre-accession Assistance for Rural Development (IPARD), but it should not be seen as a substitute for national support. Albania still has not established a farm register and the Land Parcel Identification System (LPIS), the common market organisation (CMO) had not been improved as well. Direct payments coupled to production and not subject to cross-compliance rules decreased overall, but still accounted for 85% of the farm support. The decrease in the national agriculture budget is of concern, because it turns country to the opposite direction than a successful transformation. Albania adopted a new Law on quality policy, which is partly aligned with the EU acquis and requires subsequent implementing legislation. It establishes quality schemes and responsible bodies for the recognition and protection of quality terms (EC, 2020).

Biodiversity

Transposition of the EU Nature Directives is well advanced, but policy and law enforcement remain generally weak despite numerous capacity building activities and technical assistance coming from the EU. The legislation on strategic investment raises concerns for the protection of biodiversity, as it may allow large tourism and industrial investments in protected areas (esp. power plant installations). This direction is in conflict with other national laws and with international biodiversity protection conventions that Albania has ratified. Good decision was a long-term total ban of hunting at the country level aiming to eliminate wide-spread poaching. Albania should ensure enforcement of the deforestation and logging laws. Environmental crime are linked mainly to illegal deforestation, logging, arson, hunting and sale of wildlife and protected species, gravel extraction from riverbeds, dumping of waste in rivers (EC, 2020).

Bosnia and Herzegovina (BiH)

Rural development and food systems

BiH has not established the necessary administrative structures required for the Common Agriculture Policy (CAP), including a paying agency, nor was there any progress in developing elements of an integrated administration and control system, a land parcel identification system or a farm accountancy data network. To strengthen administrative capacity at all levels is a key challenge. As regards sector-specific common market organisation schemes, the country still needs to prepare and set up the regulatory framework in line with the EU acquis. Reliable countrywide statistics are not available so far. E.g., BiH has yet to deliver the first report on the implementation of its 2018-2021 Strategic Plan for Rural Development – Framework Document, providing a performance measurement that can be used to prepare a new post-2021 policy document. As regards food safety rules and specific rules for feed, BiH has complied with the EU rules and requirements for exporting poultry meat and poultry meat products, as well as industrial eggs, increasing the number of its products of animal origin that are EU compliant and therefore eligible to access the EU market. Nevertheless, sufficient implementation of the hygiene package in a harmonised manner across the country remains a challenge (EC, 2020).

Biodiversity

BiH has not formalised and coordinated an appointment of national focal points for implementation of both conventions and the EU legislation in practice. Alignment with the EU Nature Directives is very limited. There is no progress on the pending adoption of the list of potential Natura 2000 sites and secondary legislation. The planning for and investments in renewable energy, including hydro, wind and solar power plants, requires still lacking compliance with the EU's environmental legislation, including Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA) and the EU Nature Directives. Illegal logging in forest is a challenge to control and eliminate (EC, 2020).

North Macedonia

Rural development and food systems

Progress in alignment with the EU legislation is advanced including stable direct payments in the agriculture sector. The overall assessment of the country is 'moderately prepared' which is in recent regional conditions positive. It includes also a readiness to use other tools (such as LPIS etc.) and utilize the IPARD. Good progress was made also in the food safety sector. In general, the country is in this topic one of the most advanced in the region (EC, 2020).

Biodiversity

Access of public to information, public participation and consultations in decision-making processes is a challenge in the country – more than in others in the region also thanks to proportion of national

minorities. Some progress was made on mapping natural habitats and identifying potential Natura 2000 sites thanks to the EU funded projects. Valorisation studies and management plans have been prepared for several protected areas but long term funding is still missing. A five-year national programme for biodiversity monitoring was developed. In general, state administration in the sector of the environment has very limited capacities (also because of missing national agency responsible for nature conservation within the governmental bodies), and the main bodies implementing activities in the field are from NGO and academic sector. That is in a contradiction with the fact that biodiversity and its value in the country is very high and one of the most important in larger area (EC, 2020).

Kosovo

Rural development and food systems

Although the progress was made, still it is very insignificant compared to plans. The main task remains to develop and align a general system of the CAP supporting farmers. The same is valid in the food safety (EC, 2020).

Biodiversity

No progress was made in the area of nature protection, and the 2016-2020 action plan for biodiversity is only partially implemented. Kosovo became a state member of the International Union for Conservation of Nature, which can play a positive role in the capacity building activities. Yet, those are polluted and poorly maintained. Kosovo has taken steps to start inventories and mapping of natural habitats and biodiversity, but the designation of Natura 2000 sites is still at a very early stage due to a lack of administrative capacity. Some progress on forestry was made on planning and management, with the adoption of relevant secondary acts. Deforestation and illegal logging remain problematic (EC, 2020).

Montenegro

Rural development and food systems

Montenegro has got a smallest proportion of the agriculture land compared to WB countries. It is caused by its challenging geomorphology with better conditions for forestry, which vice versa occupies the largest territory of the country from all WB countries. In other words, rural development plays quite a small role in the country development. Montenegro is moderately prepared. Both legislative transposition and the development of tools (LPIS, Land Register, etc.) is needed. The same is valid for the food safety sector (EC, 2020).

Biodiversity

Due to political pressures, Montenegro faces quite a high number of development projects that are in a contradiction with international obligations incl. alignment with the EU legislation (e.g., unregulated urban development, insufficient protection of forests against illegal cutting or particular cases such as Ulcinj Salina). Mapping for Natura 2000 has continued. Revised National Strategy on Forest and Forestry and a Forest Reduction Plan for forests degraded by the effect of abiotic and biotic factors was adopted. In March 2020, the Parliament ratified the law on Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation to the convention on biological diversity. Main challenges are a lack of the state administration capacities and fast unregulated development linked often to tourism (EC, 2020).

Serbia

Rural development and food systems

Serbia is the most developed country in the WB region when it comes to agriculture sector. Proportion of agriculture land is the largest in the region due to suitable natural and climate conditions.

Nonetheless, only limited progress was achieved in the rural development. Better situation is in Food safety, where status towards the EU accession is assessed as 'moderately prepared'. The advantage is that at the policy level, Serbia has approved action plans for planning the implementation steps both for the agriculture and the food safety (EC, 2020).

Biodiversity

As well as in case of agriculture, also in the nature protection is Serbia the most developed country in the WB region. There are even two institutes for the nature protection (one for Vojvodina, region, and the national one for the rest of the country), and academic bodies offer a high level expertise in the biodiversity conservation. Despite that, enforcement is low and thus alignment with the EU acquis in the field of nature protection remains moderate. Serbia has still not addressed gaps in transposition, allowing hunting of non-hunted birds. Serbia needs to fully incorporate EU standards on prohibited means of capturing and killing wild animals throughout its entire legislation, including in legislation on hunting. Progress on establishing Natura 2000 sites is slow and dependant on the EU projects implementation (EC, 2020).

3.3 Discussion and recommendations

Rural development and food safety

Diversity of natural conditions and also traditions in the agriculture is wide in the WB region. On the one hand, there are countries with a limited potential of arable land (such as Montenegro or Albania), on the other hand, there are countries with dominant proportion of that kind of use in its territory (Serbia). That should be taken into consideration when planning future support via specific measures. Those should be tailor made for each country separately.

The main challenges in this sector are similar to those in the EU countries:

- to decrease a negative impact of agriculture on the soil erosion and use of chemicals;
- support of local business instead of large corporations with no direct relation to the used land (esp. arable);
- to ensure, that subsidies are used to achieve a neutral or positive environmental impact incl. that on biodiversity and not the opposite direction.

One specific challenge in the WB region is about how to modernize the agriculture efficiency while keeping higher employment in the agriculture sector and stop depopulation of the countryside. Usually, the only way is to produce also local-specific products or those with added value, and offer them in markets abroad. That could bring more sustainability to the sector in the WB region and also increase its attractiveness.

Biodiversity

In general, there is a lack of biodiversity monitoring and available data that could be possible to interpret it at regional or countries level sufficient accuracy.

Specificity of the WB region is its high biodiversity caused by various biotic conditions despite the fact that geological background is quite united in the majority of its area. Advantage is that biodiversity is still in a good shape in many places, but under increasing pressure during last twenty years. Therefore,

we still can find pristine or old growth forests there, and also to see that non-forests habitats are managed in a traditional way with no need support for direct subsidies in many countries.

It is obvious that the WB countries will not have sufficient national financial capacities to conserve biodiversity per se (except for protected areas and specific actions on species recovery, esp. endemic ones). A solution is to harmonize rural and agriculture development with biodiversity needs. E.g., instead of starting paying full price for 'landscape and nature maintenance', to keep a system in which conservation actions serve also for a production. That is valid mainly for active conservation measures.

4 Pollution (Air, Water, Soil)

4.1 Introduction

The adoption, implementation and enforcement of the EU acquis on Environment is an obligation for accessing countries in the framework of the Stabilisation and association process. Reducing the emissions of air pollutants and greenhouse gases is a priority, which is strongly interlinked with energy, transport and health policies, among others. Successful implementation of the EU air quality legislation in the WB would also help EU neighbouring countries to reach their limit values for some air pollutants (EU Science Hub, 2020a).

Air pollution in the WB remains one of the highest in Europe and has a direct impact on citizens' health so it is a key concern in the region (EC, 2020a; EC, 2020b). Particulate matter (PM₁₀ and PM_{2.5}), sulphur dioxide (SO₂), ozone (O₃) and nitrogen dioxide (NO₂) are the air pollutants whose levels are most frequently above the legislation limits in the WB (EU Science Hub, 2020a).

The very high concentrations of PM pollution are mainly due to emissions from industrial installations (such as coal power plants), domestic heating (notably wood and coal fired stoves and boilers as well as domestic burning of waste) and traffic (older vehicles) (EC, 2020b). In addition, transboundary pollution from within and outside the region makes a considerable contribution to the observed concentrations (EU Science Hub, 2020a).

The 16 coal-fired electricity plants in the region emit more SO₂ than the entire 250 similar plants in the EU. In this region decarbonisation and depollution go hand in hand. Moving away from coal would improve the quality of life of citizens and bring important health-related annual savings to the WB budgets (EC, 2020a).

The main challenge is the implementation gap, as all the WB partners are recording exceedances of air quality standards for at least one pollutant in at least one location (and often for several pollutants at several locations). This implementation gap is most pronounced for PM, NO₂, and SO₂. Addressing these exceedances will require urgent action at different policy levels to reduce emissions from key sectors, identified on the basis of harmonised methodologies (EC, 2020b).

The transposition of the Ambient Air Quality Directive is at a satisfactory level in almost all WB countries. However, implementation is not yet fully effective in all the countries. It is necessary to reduce the fragmentation of air quality monitoring and reporting between national and local authorities and the

complete set of air quality indicators required by the legislation should be monitored (EU Science Hub, 2020a).

Moreover, integrated environmental monitoring systems that provide access to both real time and processed data online should be developed to provide timely and comprehensive analyses of the air quality situation. To develop complete and accurate emission inventories should be a priority in the region (EU Science Hub, 2020a).

The WB are home to some of the last pristine rivers of the continent, but their protection remains a challenge. The region represents 17 % of the population of the Danube River basin and 8.5 % of its area. There is a high share of population in rural areas (30 to 50 %) with only basic sanitary facilities and wastewater collection, while urban areas with collection of wastewater via sewer networks discharge mostly untreated wastewater. The risk of release of nitrates and pesticides into groundwater needs to be further controlled (EC, 2020b).

The main pressures on quantity are water abstraction for industry, agriculture and public water supply. The widespread droughts in the last years in the region have further underlined the importance of securing water availability and resilience in the long-run across Europe (EC, 2020b). Soil erosion or land use degradation is considered as a problem in many mountainous areas of the WB. The EEA concluded in 2010 that erosions affects about 20 % of the combined Serbian and Montenegrin territory. Albania is losing between 20 and 70 hectares of soil annually (EC, 2020b).

Combating land degradation and restoring degraded land include sustainable food production, improved sustainable forest management, soil organic carbon management, ecosystem conservation and land restoration, reduced deforestation and degradation, and reduced food loss and waste (EC, 2020b).

4.2 State and actions at national levels

Albania

Albania has made progress in terms of both legislation and the situation on the ground in recent years (EEA, 2019). However, the Albanian Ambient Air Quality Strategy adopted in 2014 was not yet fully implemented. The Albanian National Action Plan on Ambient Air Quality Management was approved in 2019 but it mostly focuses on transport measures and does not provide for improving the monitoring system and making it fully and continuously functional. Work on the preparation of air quality plans for the main agglomerations and sensitive areas is yet to start (EU Science Hub, 2020b; EC, 2020c).

The key measures proposed by the Albanian Ambient Air Quality Strategy concern (i) ensuring that the existing monitoring networks are reconfigured to be consistent with the basic environmental and programmatic needs for current environmental management; (ii) ensuring that the type of monitoring required is appropriate to the nature and size of the source and the pollutants under consideration; (iii) ensuring integration of various monitoring networks where opportunities for integration exist and (iv) improving the scientific and technical competency of the National Environment Agency to ensure high quality data (UNECE, 2018a).

Moreover, the Strategy proposes measures to reduce emissions of air pollutants from vehicles, industrial installations, agriculture and households, as well as measures to be applied at the local level. These measures are proposed in a general manner without defining competent authorities, terms, conditions and estimation of costs (UNECE, 2018a).

On water quality, the draft Law on water supply and sewerage and the 2020–2030 national strategy for water supply and sewerage should be adopted (EC, 2020c).

The Law on Integrated Water Resources Management, in force since 2013, enabled integrated water resources management as well as transposition of the Water Framework Directive. However, transposition of the several related directives is still at an early stage, including the Directives 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources or 2008/56/EC establishing a framework for community action in the field of marine environmental policy. The Law on Environmental Treatment of Wastewater was amended in 2013 to revise the size of penalties for administrative offenses such as e.g. uncontrolled wastewater discharges or failure to install wastewater treatment facilities (UNECE, 2018a).

Bosnia and Herzegovina (BiH)

BiH is a relative newcomer to the issue of environmental protection (EEA, 2019). The alignment of the environment and air quality legislation in BiH with the EU acquis is behind the progress of the other WB countries (EU Science Hub, 2020b).

Well-functioning countrywide air quality monitoring network still needs to be established together with the programme for air quality improvement. Air quality management needs to be addressed in a harmonised and consistent countrywide manner to efficiently combat air pollution and reduce as quickly as possible the levels of pollution in exceedance of the limit values in a number of cities (EC, 2020d).

Because of an increasing concentration of pollutant in the air, the Canton Sarajevo adopted an Action Plan for the reduction of PM and the Canton Tuzla adopted an Air Quality Action Plan with measures on air pollution episodes. In Banja Luka the local government has a Local Air Protection Program and an Air Quality Protection Action Plan (EU Science Hub, 2020b).

Progress is needed also in addressing national emissions of main pollutants and establishing national emission inventories and reporting (EC, 2020d).

Essential policy is the 2015 National Emission Reduction Plan for Large Combustion Plants. It envisages the reduction of emissions of SO₂, NO_x and dust from large combustion plants by 95 %, 65 % and 85 % respectively, to gain (overall) levels in the IPPC Directive by 2027 (UNECE, 2018b).

On water quality, the country still lacks a consistent and harmonised countrywide strategy and investment plans on water management that would include implementing legislation and monitoring. There is no water policy for Bosnia and Herzegovina. The sustainability of investments in the supply of water and in the management of urban waste water continues to be an issue. A consistent legal framework needs to be in place addressing water services to provide for sustainable investments (EC, 2020d).

The lack of systematic soil monitoring and information on soil contamination is primarily linked to the lack of specific laws at the state or entity level that address soil protection and/or monitoring. However, in Republika Srpska the Forestry Development Strategy for the period 2011–2021 recognizes the importance of soil protection and it specifies measures for the prevention of pollutant contamination (UNECE, 2018b).

North Macedonia

Regarding the air quality, insufficient coordination between central and local authorities as well as weak inter-sectoral cooperation limits the implementation of measures to reduce air pollution. The national air quality monitoring network has been renewed, but it still requires considerable reinforcement. The number of pollutant exceedances remains well above the EU limits and air pollution is high in major cities during winter. Local air quality plans exist for the cities of Skopje, Bitola, Veles and Tetovo but the pace of their implementation should be increased (UNECE, 2019; EC, 2020e; EU Science Hub, 2020b). Fund of 1.6 M € for air quality improvement measures has been introduced in the 2019 state budget for the first time (EU Science Hub, 2020b).

The National Emission Reduction Programme for Large Combustion Plants has been implemented since 2018. The emission reductions are yet to be carried out in accordance with the timeframes indicated in the emissions reduction plan (EU Science Hub, 2020b).

The goal of the Programme for Reduction of Air Pollution (adopted in 2018) is to achieve reduction of air pollution by 50 % in Skopje and 30–50 % in other urban centres. Measures include improvement of air quality monitoring, increased capacities of environmental inspection, raising public awareness and a reduction of emissions into air from domestic heating, waste management, transport, industry and construction (UNECE, 2019).

On water quality, finalisation and implementation of river basin management plans shall be a priority. A system for monitoring quality and quantity of surface and groundwater is also needed and more efforts are required to reduce non-revenue water (EC, 2020e).

The 2012 National Water Strategy defines the long-term policy to ensure sustainable water development by meeting the demands of all users and covers a period of 30 years. It remains general. There are no fixed requirements about time-specific implementation. In addition, there is no prioritization of the various areas such as water supply, monitoring and flood protection, and no prioritization of the measures mentioned. It provides a guideline for the preparation of action plans by individual ministries and their coordination with each other. No basis for water resources management has been drafted (UNECE, 2019).

As for soil pollution, there is no legislation to address historic pollution of soils. A draft law on soil protection was prepared in 2014 but it was not adopted, largely due to financial implications. The country does not perform soil monitoring systematically (UNECE, 2019).

Kosovo

Air quality continues to pose a major threat to health. The authorities failed to adopt and implement measures to improve it, in particular through the National Emissions Reduction Plan, the implementation of which has started in 2018. The Strategy for Air Quality for period

2013–2022 is still not enforced. Uncontrolled pollution, notably from outdated thermal power plants, household heating, traffic, industrial emission and the incineration of waste and other toxic materials, calls for urgent action. Measures to enforce the ban on coal for heating are not effective and subsidies should be introduced for other forms of heating. Air quality plans have not yet been prepared for zones in which pollutants levels clearly exceed limit values (EC, 2020f; EU Science Hub, 2020b).

Kosovo has a 2017–2036 water strategy, but water resource monitoring networks are still incomplete, in particular for groundwater, and water protection zones are not being monitored or properly managed. No progress was achieved in preparing management plans for all river basins. Some progress was achieved with the planning and construction of wastewater treatment plants. A lack of treatment facilities means that untreated sewage and discharge remain the main sources of water pollution (EC, 2020f).

Montenegro

Regarding the air quality, in 2019 the government adopted the 2018 report on the implementation of the action plan of the national air quality management strategy. During the reporting period, the definition of air quality zones was revised and the number of air quality monitoring stations increased, however, the real-time air quality reporting system is not operational. The pollution levels in Pljevlja exceed on regular basis the mean PM₁₀ concentration limits. A programme for monitoring the quality of liquid fuels of oil origins for 2020–2021 has been adopted (EC, 2020g).

Water management plans for the Danube and Adriatic basins remain to be finalised. The network of hydrological surface stations for monitoring the quantity of surface waters and a network of stations for groundwater monitoring were established, and software for processing the collected hydrological data was acquired. The largest source of pollution of surface and groundwater is untreated wastewater. In order to address this, in 2019, the government adopted the municipal wastewater management plan for 2020–2035. Parliament adopted the law on marine environment protection in 2019 (EC, 2020g).

As for soil pollution, there are two types of soil monitoring in Montenegro: the monitoring of soil contamination by hazardous substances and the monitoring of soil quality. Soil contamination monitoring programme is in place to monitor agricultural land near traffic lines, landfills and industrial facilities (UNECE, 2015a).

Serbia

In the field of air quality, Serbia has not yet developed an air quality protection strategy, despite the 2015 deadline. Serbia also needs to speed up implementation of legislation and air quality plans. While an air quality monitoring network is in place and is being extended, and real-time data are available, the monitoring of air quality still needs to be considerably strengthened. Serbia's annual air quality report for 2018 lists 11 agglomerations with air pollution above the limits: Belgrade, Subotica, Pančevo, Užice, Smederevo, Kosjeric, Valjevo, Kraljevo, Sremska Mitrovica, Kragujevac and Niš. Five of these cities do not have air quality management plans in place. Pollution induced by the Kostolac B thermal power plant needs to be addressed as a priority (EC, 2020h; EU Science Hub, 2020b).

Work on an action plan for implementing the water management strategy has not progressed. Untreated sewage and wastewaters are still the main source of water pollution. Water quality remains a big concern. Serbia needs to make significant efforts to strengthen administrative capacity, in

particular for monitoring, enforcement and inter-institutional coordination. Work on the river basin management plan is progressing slowly. Improving local governance, in particular for operating and maintaining water and wastewater facilities, remains a priority (EC, 2020h).

In Serbia there is no national system for monitoring soil quality. However, certain collection of data takes place on an ad hoc basis at regional or local levels and through pilot projects with the involvement of donors. The greatest number of registered sources of localized soil pollution is related to municipal waste disposal (43.5 %) (UNECE, 2015b; EEA, 2019).

4.3. Discussion and recommendations

There has been a remarkable progress in depollution of air, water and soil since the 1990s, yet many institutional, legislative, political, financial or technical problems remain.

We consider it necessary to ensure nationwide long-term monitoring programs for air, water and soil pollution levels. These monitoring programs must take place at regular intervals, at a sufficient number of monitoring sites, using modern technology. The data obtained must be thoroughly analysed by a sufficient number of qualified personnel with the help of modern software. Only the information obtained in this way can be the basis for the preparation of effective policy frameworks.

The problem of many recently valid national policy documents is that they are proposed in a general manner without defining financial estimations, estimations of effects of the proposed measures, or exact deadlines and the authorities responsible for implementing them, and thus does not provide enough information on how the agreed goals of the policy documents will be achieved.

The policy documents often also propose measures, the implementation of which would require huge financial investments, but the financing mechanism is not presented, while the budgetary possibilities of the states are limited. The real impact of the policy thus often fails on a simple lack of available funds.

In addition to the above issues, increased efforts will be necessary to focus on the preparation of air quality plans for zones in which pollutants levels clearly exceed limit values, as well as on the completion and adoption of the river basin management plans and also on the improvement of the wastewater collection and treatment system.

In general, the administrative capacity and inter-institutional coordination need to be further strengthened. Furthermore, it is necessary to significantly accelerate the implementation of EU acquis into the national legislation of the WB countries. However, it can be said that the Green Agenda for the WB addresses all major air, water and soil pollution issues in the WB and its implementation would therefore make a significant contribution to improving the environment throughout the region.

5 Circular Economy

5.1 Introduction

The Economic and Investment Plan for the WB (EC, 2020a) suggests a large majority of support to be directed towards key productive investments and infrastructure for the green and digital transition and

the development of connected, competitive knowledge-based, sustainable, innovation oriented and thriving economies in the WB.

To this end, the following interventions are proposed in the EIP (direct quotes):

- Fostering green growth and the circular economy, by scaling up investments in green technologies and reducing their costs of deployment in the region.
- The region also needs to shift towards the circular economy, where recycling and reuse are the rule while the use of natural resources is significantly reduced.
- In the area of waste management, attention must be paid to proper waste collection and separation of key waste streams. Marine litter is a priority issue of concern, affecting all rivers in the West Balkan region that carry disproportionate amounts of litter to the seas and oceans.
- Primary food production and the processing sector, together with forestry and fisheries, still account for a large share of GDP and work force in the region (up to 40% of workers in Albania), with a large potential for further sustainable economic development. EPI shall support the involvement of WB partners in European strategic value chains, including attention to sustainable production patterns and food systems.
- EPI should enable investments into sustainable agricultural production and research to support balanced rural development and to strengthen the competitiveness and viability of the agri-food sector in view of the necessary alignment with the EU food safety acquis and the EU Farm to Fork Strategy. IPARD will boost rural economies, the restructuring of agri-food sectors, and reduction of waste. It will contribute to the circular and bio-economy, and making rural areas more vibrant spaces to live while more resilient to challenges such as climate change and loss of biodiversity.

Key interventions to this end are proposed in areas related to free movement of goods and programme for Green & Circular economy and suggest to build new regional value chains to seize untapped potential (circular use of raw materials, collection and treatment of electronic waste, renewable energy value chains, etc.).

Other potential opportunities open under interventions for the free movement of industrial goods that comply with the essential EU requirements (NB: but this may not cover requirements for production in environmentally sound technologies and processes).

The key implementation instruments for the interventions proposed above include:

- WB Investment Facility
- WB Enterprise Development and Innovation Facility (WB EDIF)
- WB Guarantee Facility
- Existing platforms such as Green for Growth Fund and Regional Energy Efficiency Programme are envisaged to play a potentially important role too
- The European Institute of Innovation and Technology is invited to play an important role in this regard by reinforcing cooperation with its knowledge and innovation communities, in particular those dealing with energy, raw materials, food management and urban mobility.

Green Agenda for the WB

The Green Agenda for the region (EC, 2020b) notes that WB economies currently find themselves at the lower end of resource productivity, with values (i.e. 0.35 euro/kg) much below the EU average (i.e. 2.07 euro/kg¹) and suggests that the WB businesses and consumers should be encouraged to adopt more efficient ways of producing and consuming.

The agenda notes that industrial policy will be key in the achievement of the Green Agenda for the WB and generates the following recommendations to promote more resource efficient economy in the region (direct quotes):

- Since each industry sector is different when it comes to resource use, waste generation and management, WB authorities issuing permit requirements for industrial installations should be encouraged to use the EU best practices in different industrial sectors through the 'best available technique reference documents' (BREFs).
- Improving the uptake of the EU Eco-Management and Audit Scheme (EMAS) should also be encouraged.
- Further efforts will be needed to develop a comprehensive approach to foster sustainable lifestyles and consumption, and to accompany consumers and public authorities towards sustainable choices.
- Integration with the EU internal market means integrating with its industrial ecosystems as they transform in the spirit of the Green Deal of the EU. This implies not only the need for a green modernisation in enterprises, but also investments in the co-operative linkages in the industrial ecosystems such as innovation, inward foreign direct investment, export prerequisites and skills development. Their green focus can be informed by the smart specialisation strategy of the economies and regions.

When it comes to Waste and Plastics, the agenda points out that the generation of waste in the WB has been increasing steadily over the last years due to economic development and increased consumption, currently being at around 1000kg/capita. While this is still lower than the EU average of 1700kg/capita, the very low recycling rates (below 3%, in comparison to the EU average of 44%) result in higher per capita amount of waste not being recycled. Important efforts and investments are needed to establish proper functioning waste management centres and recycling facilities, so that the countries can use the existing resources currently ending up in landfills (over 90% landfilling rate in the region) or incinerators. The agenda suggests the following measures on this front :

- The WB will need to implement effective separate collection schemes for at least paper, metal, plastic, glass and bio-waste, which are key to quality recycling, and

¹ Eurostat

- establish built-in economic incentives to reduce waste generation (e.g. pay-as-you-throw schemes) and better waste treatment (e.g. landfill/incineration charges),
- establish efficient Extended Producers Responsibility Schemes,
- align with the single-use plastic legislation and to fully implement the modernised EU waste legislation, including its recycling and landfill reduction targets.

In its conclusion on the circular economy, the EC (2020b) proposes the following key interventions:

- Work towards integrating the WB into the EU industrial supply chains, in particular for key industrial ecosystems such as renewable energy, textiles, tourism, digital, mobility-transport-automotive and energy-intensive industries;
- Support the region in developing circular economy strategies looking at the entire lifecycle of products, waste prevention, modern waste management and recycling, re-use, repair and remanufacturing,
- Consumer targeted initiatives raising awareness of citizens on waste, separate collection and sustainable consumption
- Assist the region in preparing and implementing waste prevention programmes, waste management and recycling strategies, and programmes for re-use, repair and manufacturing
- Continue supporting the construction and maintenance of waste management infrastructure
- Develop a regional agreement on the prevention of plastic pollution, including specifically addressing the priority issue of marine litter
- Support the establishment of sustainable development and innovation policies for the economies via the implementation of Smart Specialisation Strategies

5.2 State and actions at national levels

Albania

EEA (2017) reports that waste management in Albania is generally at a low level. There are no data available for industrial waste. The collection of municipal solid waste (MSW) is provided in most cities and towns but rarely in rural areas. The waste is mainly disposed of at municipal dumpsites. There are some managed landfill sites at Sharra, Bushat, Bajkaj, Maliq and Elbasan. In Elbasan there is also an incinerator near the landfill. The latest European Commission report on Albania (SWD(2019) 215 final) highlights the construction of an incinerator in Elbasan and the starting of procedures for the construction of two more incinerators in Tirana and Fier pose concerns in terms of compliance with EU Directives on Waste, the waste hierarchy principle with incineration as the least preferred waste management option, and with the EU targets for recycling.

There is also an imbalance between the new legal framework that complies with EU standards with the limited human and financial resources and waste management practices available (EEA, 2017). For instance, the cost of incinerator (169 million euro) is already quite large compared to the country's GDP of 13 billion euro and to the annual budget for urban waste management, which was just over 2 million euro in 2018. This investment leaves little room for the creation of a better recycling system and the promotion of consumers' waste prevention, for example, by re-using products (IDM (2019)).

The clear priorities are investments into re-use and recycling of waste.

Bosnia and Herzegovina (BiH)

UNECE Environmental Policy Review of BiH (UNECE, 2018b) noted that there are no official data on the amount or ratio of waste recycling or reusing, on either the state or entity level and provided multiple in-depth suggestions for waste management, such as:

- scale up and promote materials recovery from waste through separate collections, reuse and recycling, and foster business development based on circular economy principles.
- accelerate the construction of regional sanitary landfills and the establishment of financially, socially and environmentally sound municipal waste management systems;
- close open dumpsites that are currently being used and remediate their territory.

EC (2020d) highlighted that consistent countrywide strategy for waste management has yet to be developed in BiH. Due to its administrative order, Bosnia and Herzegovina needs to ensure a coordinated and harmonised countrywide approach in dealing with waste management. Bosnia and Herzegovina needs to align with the Landfill Directive, including by adopting a directive specific implementation plan and by closing down or rehabilitating non-compliant landfills. Substantial efforts and awareness-raising measures are required to reduce waste generation and promote reuse and recycling. Alignment is required with the EU acquis on sewage sludge, batteries, packaging, polychlorinated biphenyls/polychlorinated terphenyls and end-of-life vehicles.

Kosovo

EC (2020e) rated solid waste management system as unsustainable. The legal framework is partially aligned with the EU acquis, but secondary legislation is still needed on to extended producer responsibility and the polluter pays principle. The Law on waste needs to be further aligned with the Waste Framework Directive. Implementation is deficient and most waste ends up in landfills that are not properly managed, or illegal. Despite efforts to get rid of illegal dumpsites, they continued to proliferate (from 1,572 in 2017 to 2,529 in 2019) and represent a serious public health risk, in particular due to hazardous waste and groundwater contamination. Waste prevention and monitoring remain a challenge. The current collection rate is 70% and less than 40% of solid waste is disposed of in managed facilities. The report recommended to continue to increase the waste collection coverage, notably with the introduction of separation of waste and recycling, introduce circular economy measures to reduce waste and address the issue of illegal dumpsites;

Montenegro

EC (2020f) pointed out that Montenegro remains partially aligned with the EU acquis. No progress has been made in the implementation of the waste legislation. Considerable efforts on strategic planning and investments are needed to implement the national strategy for waste management until 2030 and the 2015-2020 national waste management plan. Work on the new law on waste management continued. Decisions on separate waste collection were adopted in the municipalities of Berane, Zabljak, Plav, Rozaje, Kolasin, Gusinje, Andrijevica, Ulcinj and Petnjica. The details of the country's waste management model and the modalities of its implementation remain to be clarified. There is an urgent need to remedy illegal waste disposal and the use of temporary waste disposal in all municipalities. Infrastructure for separate waste collection and recycling needs to be established across the country.

Northern Macedonia

EC (2020g) pointed out that the laws on waste management and special waste streams have not been adopted yet. The process of establishing an integrated regional system for waste management continues to face delays due to insufficient administrative and financial resources, and it suffers from lack of ownership. Economic incentives to promote recycling and the prevention of waste generation remain limited. A systematic approach for remediation of environmental hot spots is not in place. This increases the risks to human health and the environment, as illustrated by the uncontrolled leakage of deposited methyl acrylate at former OHIS industrial site.

Serbia

EC (2020h) concluded that Serbia has a good level of alignment with the EU acquis, however the implementation remains at an early stage. In 2019, Serbia adopted a number of regulations and rulebooks, for example, on pharmaceutical and medical waste. Serbia also developed a national waste management strategy and a national sludge management strategy, which are currently in the adoption process. The by-law on treatment of the equipment and waste containing PCB, currently in the adoption procedure, will fully transpose the relevant EU directive. Serbia proceeded with the permanent disposal of historic hazardous waste. Additional economic instruments for special waste streams need to be developed. The proportion of recycled waste in overall waste management is still low, e.g. 3% for municipal waste. Serbia needs to redouble efforts to close its non-compliant landfills and invest in waste reduction, separation and recycling. The remediation of the Belgrade landfill and the construction of a waste to energy facility are expected to start in 2020.

5.3 Conclusion and recommendations

The overview presented above leads to conclusions that the Green Agenda for Western Balkans well matches the need of the WB countries for the construction and maintenance of waste management infrastructure – i.e. effective separate collection schemes for at least paper, metal, plastic, glass and bio-waste, which are key to quality recycling, and establish built-in economic incentives to reduce waste generation (e.g. pay-as-you-throw schemes) and better waste treatment (e.g., landfill/incineration charges).

When it comes to other more ambitious recommendations that the green agenda makes – i.e. developing circular economy strategies looking at the entire lifecycle of products, waste prevention, modern waste management and recycling, re-use, repair and remanufacturing – the region currently does not appear to be ready yet for such systematic approach. These aspirations will require an active engagement of the key EU industries in dialogue on the most suitable circular economy arrangement within key EU industrial supply chains – such as agricultural product chains, transport-automotive, and textiles. In this regard, one can suggest to involve key European industries active in the region into the cooperation dialogue. Such engagement may be best organized through the engagement of the key industry representatives or the European chambers of commerce into the future Team Europe Initiatives for the circular economy or future EU pre-accession cooperation dialogue. In other words, the circular economy agenda will require integrated approach to economic cooperation and pre-accession process.

6 References

Note: The list of references is accompanied by a link to respective document or source of information whenever available. There are also several references that are not directly quoted in the text, nonetheless, help to understand the overall picture provided by this background paper.

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