Energy Community

ENERGY COMMUNITY

Energy Transition Tracker

ENERGY COMMUNITY SECRETARIAT / July 2022

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Energy transition tracker

Unforeseen disturbances in the global and European energy markets over the last twelve months, intensified by the invasion of Ukraine, affected also the Energy Community. While the energy landscape in most of the Contracting Parties became even more challenging, the energy crisis gave rise to strengthening market integration and paving the way to decarbonization in the Energy Community.

Framing of political willingness and legislation to support market integration and decarbonization started with the adoption of the Decarbonisation Roadmap[1] and five key legislative acts stemming from the EU's Clean Energy for all Europeans package (CEP) at the last Ministerial Council of the Energy Community in November 2021. It is expected to be completed by the adoption of 2030 targets for the Energy Community together with remaining pieces of CEP, Network Codes and Guidelines, at the next Ministerial Council in December 2022.

At the same time, the energy transition continues to unfold in the Contracting Parties, showing positive trends with regard to boosting renewables, investing into energy efficiency and reducing emissions, even though it was not driven by political or business decisions to phase out coal.

To reflect on these developments, the Energy Transition Tracker evolved to cover qualitative and quantitative assessments of the progress made and the challenges ahead in all Energy Community Contracting Parties. For the first time, the Tracker also features Georgia, Moldova and Ukraine.

This edition of the Tracker also provides a first glimpse into the challenges that the Contracting Parties might face should the European Commission's proposal on the Carbon Border Adjustment Mechanism (CBAM)[2] be adopted. The proposal assumes putting a carbon price on imports of a targeted selection of products, including electricity. The proposed CBAM Regulation provides the possibility for third countries to be exempted from the application of CBAM on the importation of electricity into the Union, however, only if all conditions listed in Article 2(7) of the proposed Regulation are met.

Reducing the carbon footprint

- Electricity production from coal fired power plants dropped from 2020 to 2021 in all Contracting Parties resulting in an average decrease of 13%.
- Carbon emissions from fossil fuel fired plants dropped by 11% in the Energy Community.
- Emissions of SO_2 and NO_x have decreased by 15% and 10% respectively in the Contacting Parties considered, while there was an overall 3% increase in reported dust emissions compared to 2020.
- None of the opted-out plants have stopped their operation yet despite some of them having reached the end of the opt-out timeframe.
- Non-internalization of costs of CO_2 emissions, worth 3,8 billion euros at average EU ETS price in 2021, distorts the level playing field between EU Member States and the Contracting Parties.
- The avoided costs of CO_2 emissions would have amounted to close to 1,5% of the Energy Community's GDP and could have been invested into the energy transition.

Making the energy market fit for decarbonisation

- The energy crisis triggered short-term emergency measures in the wholesale and retail markets in some of the Contracting Parties.
- Average day-ahead market prices in SEEPEX tripled in 2021 in comparison to 2020 and doubled in the first half of 2022 in comparison to the 2021 average.
- The energy crisis slowed down the development of the retail market. Electricity prices for industrial customers, without taxes and levies, continue to follow the EU average price in 2021, while prices for households were kept at levels ranging from 22 to 41% of the EU average.
- Commercial exchanges of electricity between Ukraine/Moldova and Continental Europe started with a capacity of 100MW which is to be gradually increased based on monthly assessments by the transmission system operators.
- Interconnection capacities in the Energy Community continue to be largely underutilized with maximum Net Transfer Capacity (NTC), ranging from 24% to 45% of the nominal transmission capacity of interconnectors.

Boosting deployment of renewables

- The number of renewables projects keeps growing, with 979 MW of solar and 611 MW of wind capacity added in 2021.
- Self-consumption has taken off resulting in 33718 active self-consumers across the Contracting Parties with installed capacity of 934 MW in 2022.
- Albania and North Macedonia continue with renewables auctions. In other Contracting Parties the first auctions are yet to come.
- Albania, Moldova and Montenegro achieved their 2020 renewables targets. As the deadline for reaching 2020 targets has been extended until the end of 2021, it remains to be seen whether some of the other Contracting Parties will follow.
- The regional project implemented by the Energy Community Secretariat resulted with nine electronic registries and regional system to trade guarantees of origin. The signing of direct agreements for registers to go-live is now eagerly awaited.

Making energy efficiency the first fuel

- The Energy Community has achieved the 2020 headline target for energy efficiency set by the Energy Efficiency Directive.
- The amount of investments in building renovations in the Energy Community reached almost 1.3 billion EUR in the period 2021 to June 2022, yet was insufficient for the overall needs.

Reaching a decarbonized energy future

- All Energy Community Contracting Parties signatories of the Paris Agreement and the UNFCCC, except Serbia, have submitted their revised Nationally Determined Contribution (NDC2). The submission of the Serbian NDC2 is kept on hold until work on the NECP is finalized.
- Albania and North Macedonia were the first Contracting Parties to adopt their NECPs, while they are yet to be adopted in other Contracting Parties.

1 https://www.energy-community.org/dam/jcr:c28b58eb-22db-4ad5-9ed1-4e93b5b613b7/19thMC_Decarbonisation_Roadmap_301121.pdf
2 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0564&from=en

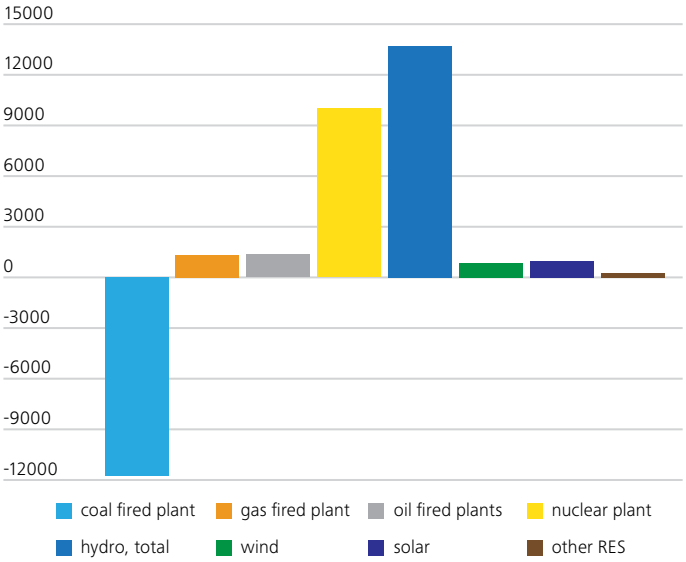
EU CBAM: Meeting the exemption criteria for electricity trade

Conditions for exemption from CBAM on electricity import in the EU (proposed CBAM Regulation)		**Status and prospects of meeting the conditions**
Concluded agreement with EU on obligation to apply EU acquis on energy, renewables, environment and competition		The Energy Community Treaty is an agreement signed between the EU and the Contracting Parties that obliges the latter to apply EU acquis on energy, renewables, environment and competition.
Implemented electricity legislation	Electricity market acquis	The Contracting Parties have mostly transposed and implemented the Third Energy Package electricity market acquis currently in force in the Energy Community. The transposition and implementation of the Clean Energy Package has started with the incorporation of the Electricity Directive and the Risk-preparedness Regulation in the Energy Community, to be finalized by 31 December 2023. By incorporating the remaining pieces of the Clean Energy Package together with Network Codes and Guidelines in the Energy Community legal order (expected in December 2022), the Contracting Parties would be able to align with EU legislative developments.
	Renewables acquis	The Contracting Parties have largely implemented the renewables acquis currently in force in the Energy Community. The deadline to transpose and implement the RED II Directive is end of 2022.
	Market coupling	No electricity market coupling between a Contracting Party or with an EU Member State has taken place yet. The envisaged adoption of the CACM Regulation in the Energy Community will set a legally binding framework.
Submitted roadmap to the European Commission		All Contracting Parties are yet to prepare the roadmap to be submitted to the European Commission, with respect to the deadlines set in the adopted CBAM Regulation.
Climate neutrality by 2050	Undertaken commitment	All Contracting Parties have committed to climate neutrality with the adoption of the Decarbonization Roadmap adopted by the Energy Community Ministerial Council in 2021.
	Submitted long-term low GHG strategy	Only North Macedonia and Ukraine have submitted long-term climate strategies to the UNFCCC.
	Implemented in national legislation	No Contracting Party has implemented the climate neutrality commitment in its national legislation.
Implementation of roadmap	Alignment of domestic legislation with EU climate law	Several Contracting Parties are working on aligning their climate legislation with EU rules. Albania, Montenegro and Serbia adopted climate change laws. North Macedonia has a finalized draft. Georgia and Ukraine are also developing climate framework legislation.
	Introduction of carbon pricing with price equivalent to the EU	Only Montenegro and Ukraine have carbon pricing in place but at a level much lower than the price under the EU ETS.
	Implementation of ETS with price equivalent to EU ETS by 2030	Only Montenegro had introduced an ETS (now under revision).
Implemented a system to prevent indirect import of electricity into the EU from other third countries		No system is designed yet, as it will depend on the exposure of the Contracting Parties to imports from third countries.

The generation mix

Although no formal policy measure or decision was put in place to reduce electricity production from coal, the production and the share of electricity from coal in total produced electricity in the Energy Community significantly dropped in 2021.

Change in production 2020 to 2021 [GWh]



Source: compiled by the Secretariat based on CPs reports

The amount of installed generation capacity and its structure in the Energy Community did not change notably in 2021. Total installed capacity increased for 1,9 GW (2%), mainly due to new plants based on renewable sources, with 979 MW of solar photovoltaic and 611 MW of wind added. Although the quantities in absolute terms are not significant, biomass capacity grew by 2,5 times mainly due to new biogas plants in Ukraine.

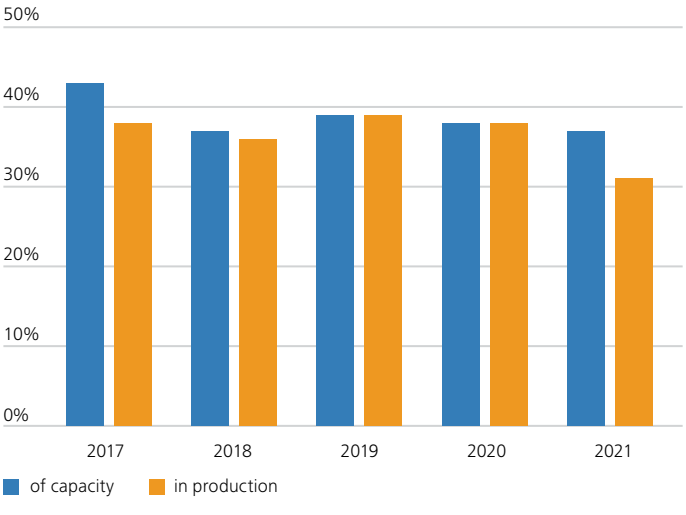
No new coal-based capacities were added in 2021 and their share continued to decline at a rate of 1%. Nevertheless, coal-based capacities still reached 37% of the total installed capacity. With respect to gas-fired plants, 194 MW of new capacity was added in Serbia.

However, the Energy Community witnessed a significant change in the generation mix. 2021 saw total production increase by 7%, due to increased production from hydro by 13,7 TWh, an increase of 36% from the previous year, and Ukrainian nuclear by 10 TWh. This helped to cover the 7% increase in energy demand with net imports of 1,5 TWh. Bosnia and Herzegovina exported by far the most electricity, with net exports reaching 4,8 TWh.

As opposed to the EU-27 where production from fossil fuels increased in 2021, coal-based production in the Energy Community dropped in all Contracting Parties, diving to a five-year low and an average decrease of 13% from 2020 to 2021. Natural gas-based production was at a five-year high, as the use of this fuel for power production increased in Moldova, North Macedonia, Serbia and Ukraine. The increase was the highest in North Macedonia, where its share grew from 15% in 2017 to 29% in 2021.

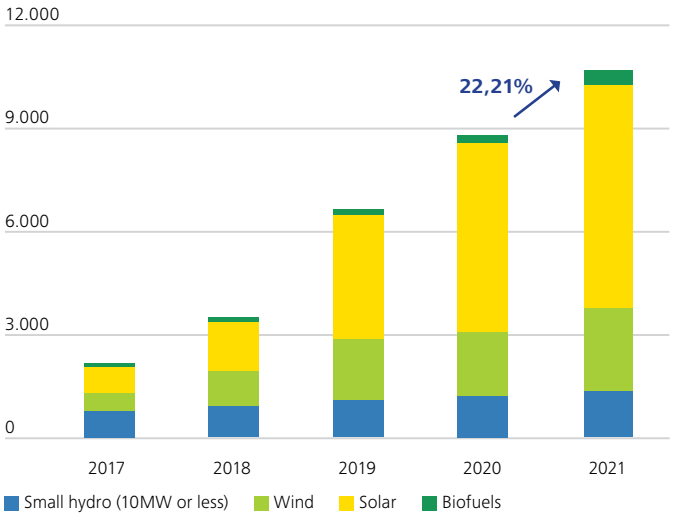
Exceptionally, North Macedonia and Ukraine turned to fuel oil for electricity production, making up a negligible share of less than 1% of total production.

Share of coal-based capacity/production in total Energy Community capacity/production



Source: compiled by the Secretariat based on CPs reports

Installed electricity generation capacities from RES (excl. large hydro) [MW]



Source: compiled and calculated by the Energy Community Secretariat.

Reducing the emission footprint

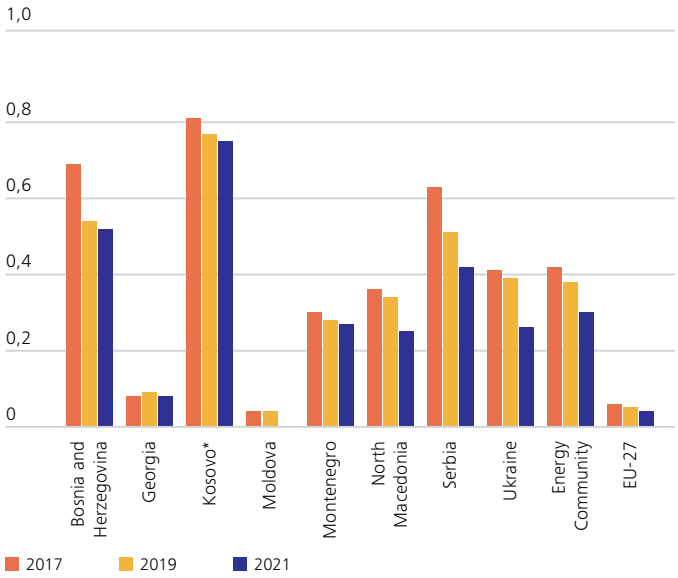
Carbon dioxide emissions from electricity production

Carbon emissions from fossil fuel fired plants dropped in the Energy Community, from 98 mil tonnes CO_2 in 2020 to 88 mill tones in 2021.

Key drivers that led to the emission reduction include lower production from coal-based plants and slightly higher use of less carbon intensive fossil fuels (oil and gas), as well as an overall drop in the production of electricity from fossil fuels. In 2021, the production of electricity from coal decreased in all Contracting Parties compared to the previous year and was below the five-year average in all Contracting Parties, except in Kosovo*. This is a consequence of poor operational planning and maintenance of coal-based generation units and mining assets, including continuing the supply of coal from depleted mines.

The carbon intensity of the electricity sector per unit of GDP showed an annual declining trend from 2017 to 2021. However, it was still seven times higher than the EU average in 2021.

CO_2 emission from electricity production per GDP [kg CO2/EUR GDP]



Source: EUROSTAT database, Contracting Parties submission, compiled by the Energy Community Secretariat

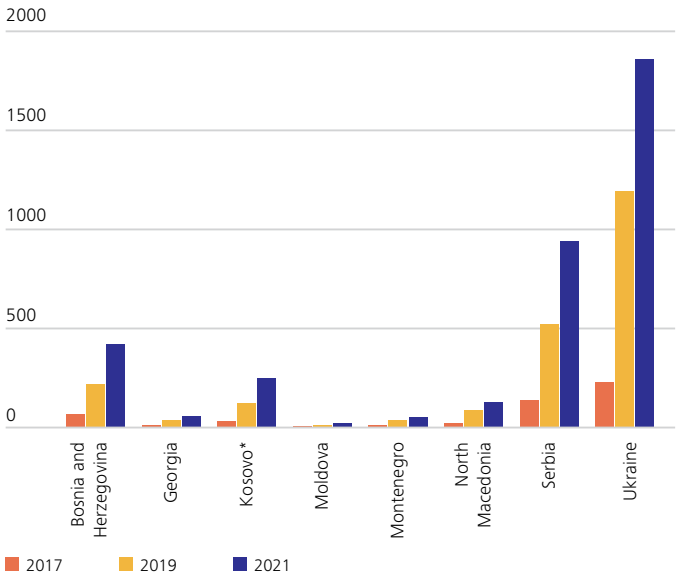
Putting a price on carbon

In contrast with the EU, power producers from the Energy Community still do not have to internalize and recognize costs of carbon emissions, except in Montenegro and Ukraine.

An estimate of the costs of carbon emissions shows that only in 2021 the cost of emission allowances for power produced in the Energy Community would have reached EUR 3,8 bill, calculated at an average EU Emission Trading Scheme (ETS) price of 42 EUR/ton in 2021.

If internalized, the avoided costs of emissions would have amounted to close to 1,5% of the Energy Community's GDP in 2021 and could have been used to offset, at least partially, the costs of the energy transition.

Avoided costs of emission at EU ETS price [mio EUR]



Source: Calculated by the Energy Community Secretariat

* Throughout this Report, this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

Phasing out coal subsidies

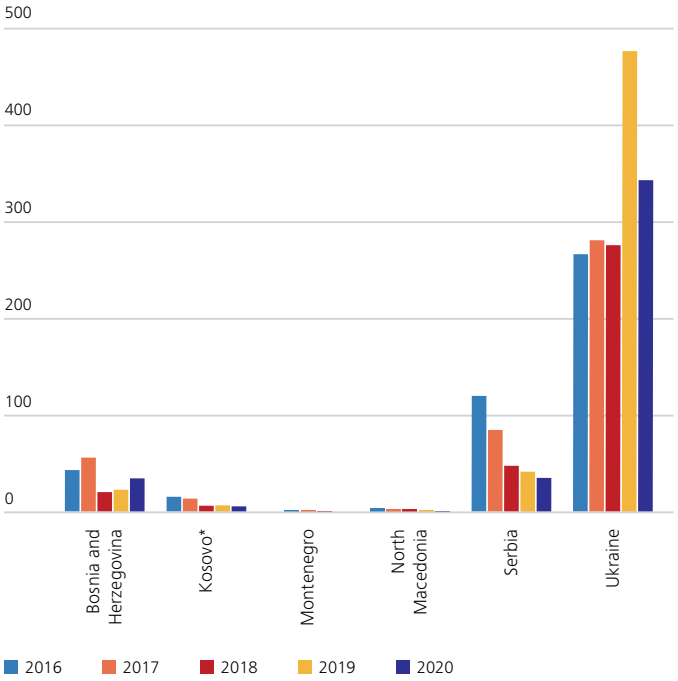
Instead of targeted support to facilitate the energy transition, the Contracting Parties continue to subsidize coal mining and generation of electricity from coal.

The level of subsidies to coal mining and generation of electricity from coal, while still significant, appears to be on the decline in all Contracting Parties that rely on coal for electricity generation with the exception of Bosnia and Herzegovina. The total amount of direct coal subsidies in 2020 fell by 25% compared to 2019 and 5% compared to the 2016-2020 average.[3]

The amount of subsidies to coal based production continuously declined from 2016 to 2020 in Kosovo*, Montenegro, North Macedonia and Serbia, suggesting that these Contracting Parties may have reached a turning point in their coal subsidy polices. On the other hand, the data for Bosnia and Herzegovina and Ukraine cannot confirm any policy shift as subsidizing coal based production still seems to persist as an important policy measure.

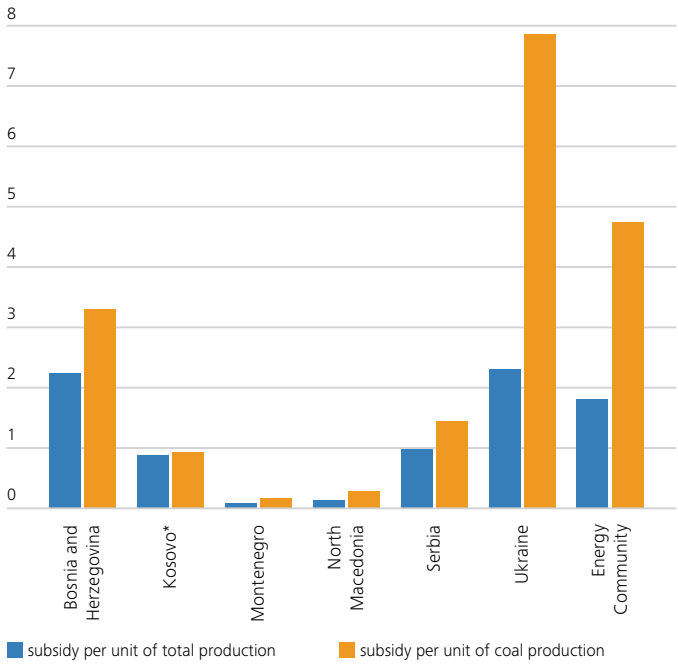
Although both Ukraine and Serbia recorded a decrease in direct subsidies in 2020 compared to the previous year, a substantial portion of that decrease resulted from falling market interest rates on government bonds and comparable commercial loans used to calculate direct subsidies. Ukraine remains the largest provider of subsidies both in absolute and, by far, in relative terms.
Unlike all other Contracting Parties, Bosnia and Herzegovina has increased the level of direct subsidies in 2020. The increase primarily results from issuing additional state guarantees for loans to thermal power plants and continuing the policy of tolerating non-payment of due liabilities for taxes and contributions by coal mines.

Subsidies to coal fired production of electricity 2016-2020 [mio EUR]



Source: Calculated by the Energy Community Secretariat

Coal subsidies per unit of electricity production [EUR/MWh]



Source: compiled by the Energy Community Secretariat on the basis of the Coal subsidies study 2022, Eurostat database and Ukrstat

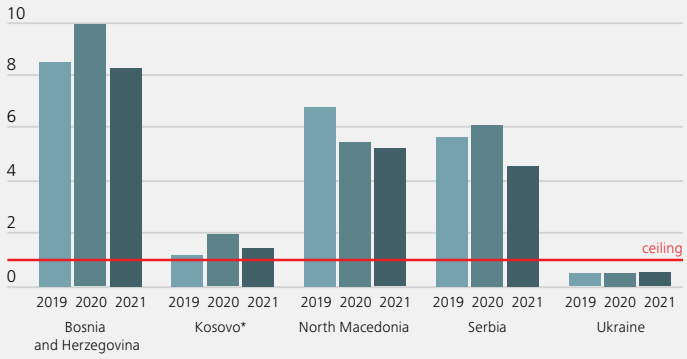
3 For additional details, please consult Miljević, Analysis of Direct Subsidies to Coal and Lignite Electricity Production for the year 2020 in the Energy Community Contracting Parties

Implementing the Large Combustion Plants Directive

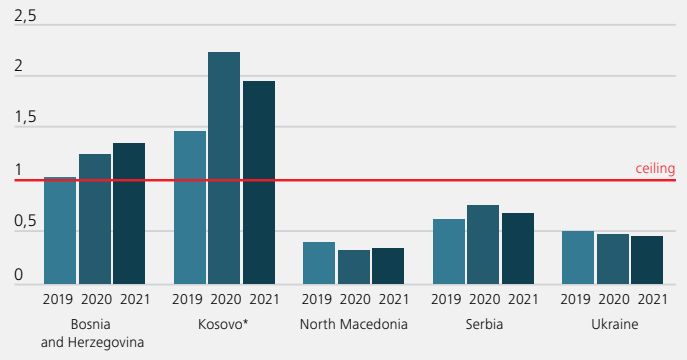
Starting in 2018, the Large Combustion Plants (LCP) Directive imposed binding emission limits on sulphur dioxide (SO_2), nitrogen oxides (NO_x) and dust from existing thermal power plants. The most recent emission inventories for 2021 show that the Contracting Parties are still far away from the transformation needed to remove the threats to human health and the environment posed by plants failing to meet one or more of the emission ceilings. This is reflected in the rising number of dispute settlement cases launched by the Energy Community Secretariat. To the extent that emission reductions occurred, it cannot be said that all were linked to investments in pollution reduction measures triggered by the LCPD. Most of the investments needed to improve the environmental performance of the plants are still pending.

LCP emissions versus NERP ceilings

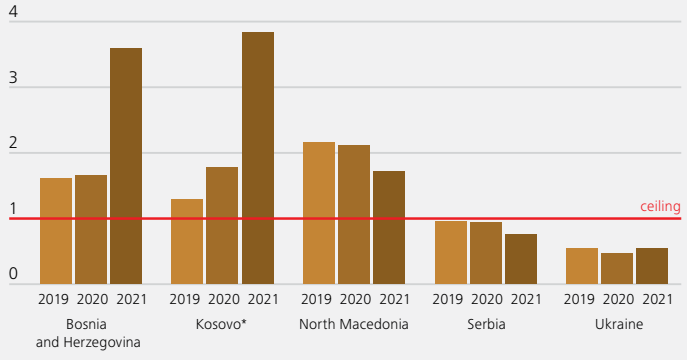
National Emission Reduction Plans (NERPs) are an instrument to comply with the LCP Directive, under which emission reduction ceilings for sulphur dioxide (SO_2), nitrogen oxides (NO_x) and dust are set for a group of plants. The Western Balkan parties using this implementation alternative (Bosnia and Herzegovina, Kosovo*, North Macedonia and Serbia) are yet to achieve the reductions needed to comply with the emission ceilings in the vast majority of cases. Ukraine achieved compliance with the ceilings for all three pollutants in the 2021 reporting year, largely due to the low amount of operational hours of the plants caused by lower demand triggered by the Covid-19 pandemic.



In 2021, the breach of the SO_2 emission ceiling continued in all the WB6 parties implementing NERPs. The breach was most severe in Bosnia and Herzegovina, which surpassed the ceiling more than eight times, while Serbia and North Macedonia have done so by approx. five times.



Bosnia and Herzegovina and Kosovo* did not comply with their ceilings for NO_x emissions. The fact that NO_x ceilings are to decrease gradually by approx. 50% between 2018 and 2023 will make compliance increasingly difficult in the coming years for all Contracting Parties.



The breach of the dust ceiling limits reoccurred in all three parties concerned (Bosnia and Herzegovina, Kosovo* and North Macedonia). The breach is most striking in Bosnia and Herzegovina (more than double the limit) and Kosovo* (more than four times the limit). Serbia met the ceiling limit in the 2021 reporting year and has achieved a reduction of dust emissions compared to 2020 mainly due to the lower operation ratio of TPP Nikola Tesla and the positive side-effect of the SO_2 reduction measures at TPP Kostolac B.

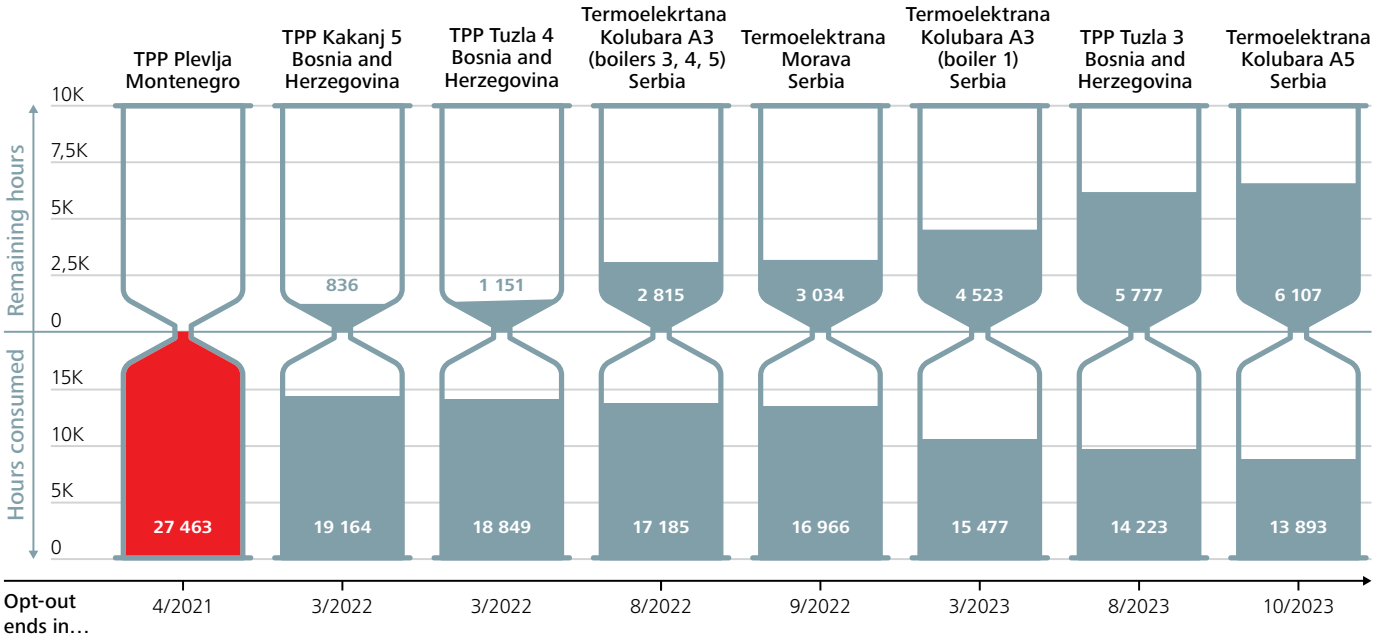
Source: Compiled and calculated by the Energy Community Secretariat.

Limited lifetime derogation (opt-out)

Another implementation alternative of the LCP Directive, known as opt-out, provides the possibility for Contracting Parties to exempt individual plants from the Directive's compliance regime. Opted-out plants cannot operate for more than 20,000 operational hours between 1 January 2018 and 31 December 2023 after which they have to cease operation. TPPs Tuzla 4 and Kakanj 5 in Bosnia and Herzegovina and Unit 4 of TPP Burshtyn in Ukraine are coming to the very end of their opt-out timeframes, while several other plants are rapidly approaching it as the final deadline of 31 December 2023 draws near.

If the rules on opt-out are not respected, the Secretariat takes infringement action. This is the case with TPP Pljevlja in Montenegro, which remains operational despite reaching the end of its opt-out period. In March 2022, the Parliament of the Federation of Bosnia and Herzegovina approved the continuation of the operation of thermal power plants Tuzla 4 and Kakanj 5. Should the plants remain in operation after the end of the opt-out period, the Secretariat will have to take infringement action.

Expected closure of opted out plants



Source: compiled and calculated by the Energy Community Secretariat. The calculations are provided by the reported data of the Contracting Parties with a reference date of 31 December 2021.

Making the electricity market fit for the energy transition

Getting the price signal right

Despite electricity end-user prices in Ukraine, Georgia, North Macedonia and Serbia having increased during 2021, the gap between end-user prices in the Energy Community and the EU-27 does not shrink. The reluctance to increase prices in the regulated part of the retail market, coupled with market interventions increasingly witnessed in the course of 2021, had a negative impact on competition development and failed to provide a price signal for customers to invest in energy savings, energy efficiency and renewables.

With only 7% of gas in the electricity production mix and no effective carbon pricing, the rising prices of natural gas and CO_2 emission allowances in the EU had virtually no impact on the cost of electricity production in the Energy Community in the course of 2021. However, the price increase had spilled over to the only functional day-ahead market in the Western Balkans, SEEPEX, and later also to the bilateral markets across the Western Balkans region. The average base and peak prices on SEEPEX in 2021 fully coincided with HUPX prices at a level of 114 and 126 EUR/MWh respectively. In Ukraine, where day-ahead market prices were capped, the average base price reached 57 EUR/MWh and peak price 67 EUR/MWh. Other Contracting Parties do not have a functioning day-ahead market.

With long-term supply contracts in place and a major part of retail markets subject to price regulation, the rising wholesale electricity prices were only partially reflected in the end-user prices.

For market exposed industrial customers at the retail level, prices of electricity alone (without network costs and levies) continued to follow the EU average or even exceeded it, as in North Macedonia. End-user prices with all taxes and levies for non-households saw a rise of more than 50% in North Macedonia and Georgia. End-user prices for households[4] were kept at levels significantly lower, ranging from 22% to 41% of the EU-27 average, even though prices in the second semester 2021 increased in Ukraine (34%), Georgia (16%) and Serbia (10%) compared to the same period in 2020.

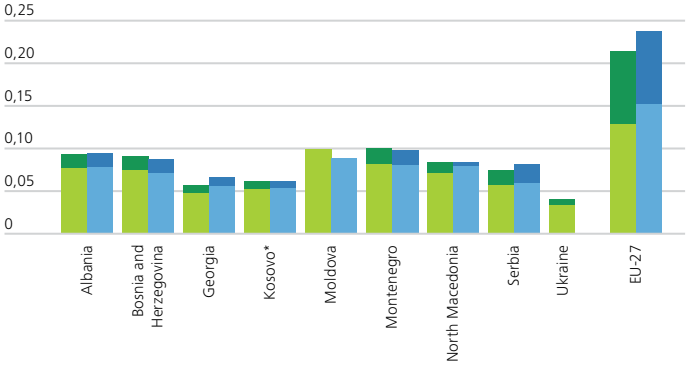
The development of retail market competition has slowed down and the market share of the three largest suppliers remained mostly at the same level, with the exception of North Macedonia where it dropped for almost 12%. Due to customers switching back to the incumbent supplier, the Serbian incumbent EPS saw its market share rise to almost 100%.

Those Contracting Parties which relied on electricity imports were most impacted by the high and volatile wholesale electricity prices throughout the winter 2021/2022 and further exacerbated by the war in Ukraine. Short-term measures were imposed to shield companies from financial difficulties and help affected end-users[5], including wholesale and retail market interventions. In Albania, the incumbent electricity producer KESH was obliged to sell all produced electricity to the universal supplier. Serbia issued recommendations on the price for customers supplied in the open retail market until August 2022. In Federation of Bosnia and Herzegovina, suppliers were prohibited from increasing the retail price in the competitive market by more than 20%.

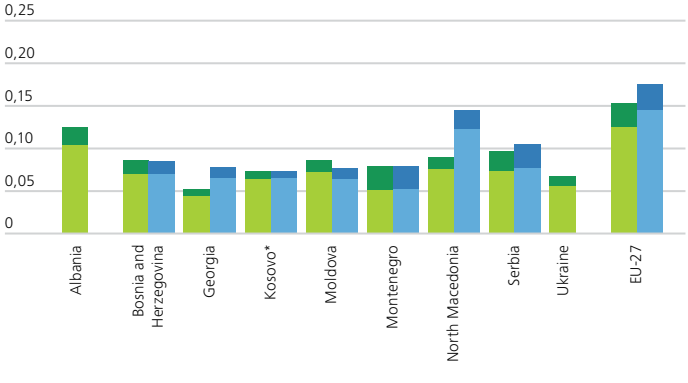
In 2022, regulated tariffs for universal supply were increased in few Contracting Parties only. In North Macedonia, prices for households and small customers increased by 11,6% on average since 1 January 2022. As of 1 July, a block tariff was introduced as a temporary measure. As a result, regulated tariff for a household consumption in the first three tariff blocks will decrease, whereas the tariff for consumption exceeding 1050 kWh/month will increase, up to estimated 68%. For universal supply in Kosovo*, a block tariff for customers with monthly consumption of 800 kWh was in force as of February 2022. In Moldova, electricity prices for households increased by 55% on average since 1 January 2022.

The Energy Community Secretariat will assess imposed short-term measures in all Contracting Parties and request the introduction of timelines for the phase-out of market interventions.

Household prices in EUR/kWh
band DC consumption 2500-5000 kWh



Industry prices in EUR/kWh
band IC consumption 500-2000MWh



2020 All taxes and levies | 2020 Excluding taxes and levies | 2021 All taxes and levies | 2021 Excluding taxes and levies

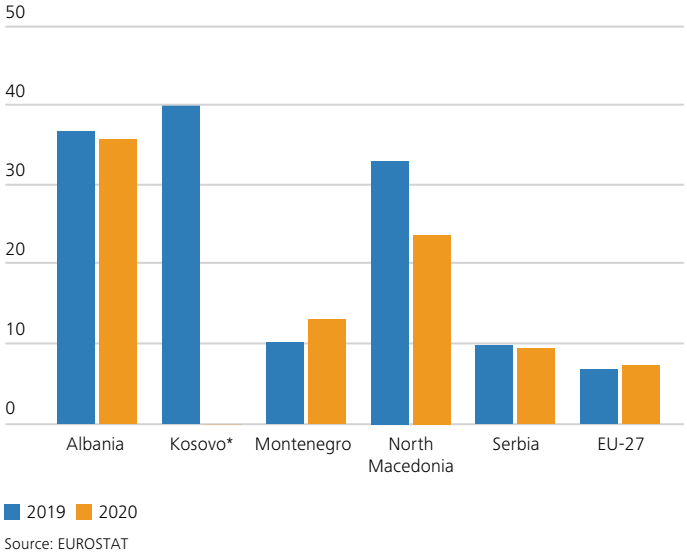
Source: EUROSTAT

4 For consumption band DC consuming between 2500 and 4999 kWh p.a.
5 https://www.energy-community.org/dam/jcr:1388d596-0ce8-432f-a615-aa3d67d6238e/ECRB_EWG_EL_pricesurge_042022.pdf

Energy poverty

Energy poverty levels in the Contracting Parties are among the highest in Europe. The Covid-19 pandemic and the unprecedentedly high energy prices further exacerbated the situation.

Share of households unable to keep homes adequately warm in 2019 and 2020 [%][6]



Source: EUROSTAT

According to EUROSTAT, the share of households in the Energy Community unable to keep homes adequately warm is much higher than the EU-27 average, with the highest levels in Kosovo*, Albania and North Macedonia, followed by Montenegro and Serbia. In the Contracting Parties for which this indicator is not available at EUROSTAT, energy poverty levels are equally high. National statistics revealed that 23% of households have insufficient means to keep homes warm in Ukraine and around 25% of households over- or under-spent on energy due to energy inefficient homes or lack of sufficient financial resources in Georgia. For Bosnia and Herzegovina and Moldova, adequate energy poverty statistics are not available. Estimates suggest that 60% of Moldova's population lives in conditions of energy poverty[7].

The study on addressing energy poverty published by the Secretariat in December 2021[8] provided new insights on the number of energy poor households. The study pinpointed the data gaps that need to be addressed in order to accurately measure the actual extent of energy poverty in all Contracting Parties, as a basis for effective mitigation policies and measures.

The study also revealed that all Contracting Parties have in place short-term measures for the protection of vulnerable energy consumers, such as assistance for paying energy bills and protection against disconnection. They primarily aim at reducing the consequences of energy poverty but do not address its root causes. Only North Macedonia has assistance in the form of energy efficiency and promotion of renewable energy programmes targeted at vulnerable consumers.

In order to support the development of appropriate policies and measure for reducing energy poverty and provide a platform for discussion, the Energy Community Secretariat established the Centre for Alleviating Energy Poverty in 2022. The Secretariat will publish a guidance on measuring and addressing energy poverty later this year, following consultations with platform stakeholders.

The legal framework for the protection of vulnerable and energy poor consumers in the Energy Community will be strengthened by the new Electricity Directive to be transposed and implemented by the end of 2023.

6 Only Contracting Parties for which EUROSTAT data is available are displayed.
7 https://energy-community.org/dam/jcr:343b8b68-4fd1-4177-b3c1-1533fe0ff3b2/WSPOV_Moldova_0622.pdf
8 https://energy-community.org/dam/jcr:f201fefd-3281-4a1f-94f9-23c3fce4bbf0/DOOREIHP_poverty_122021.pdf

Creating an integrated energy market

As the call for the uptake of renewables intensified with the onset of energy crisis, the need for short-term markets and their integration in the Energy Community Contracting Parties came to the fore. A recent proposal of the European Commission on the Carbon Border Adjustment Mechanism (CBAM), which sets market coupling as one of the conditions for its exemption, further amplified the urgency of setting up day-ahead markets. Yet, they come at a slow pace and their launch has continuously been delayed.

In Georgia, the start of the day-ahead market has been postponed once again, most recently to 1 September 2022. The power exchange company GENEX has put in place all necessary preconditions for day-ahead market operation. All companies with a public service obligation will be obliged to trade in the day-ahead and intraday market to boost liquidity. It means that approximately 75% of annual demand will be procured through trading in the short-term markets.

Across the Western Balkans, progress was made in setting up day-ahead electricity markets, however, the launch of new trading platforms is still uncertain. Power exchange companies in Albania (ALPEX), entrusted to operate also the Kosovo* market, in Montenegro (MEPX) and most recently in North Macedonia (MEMO) have completed tender procedures and concluded agreements with selected service providers for establishing the day-ahead market, including clearing and settlement services. ALPEX's agreement assumes also the establishment of an intraday market in Albania and Kosovo*. Launch of the day-ahead market in Albania is planned in November 2022, and in Kosovo* two months later along with the coupling of these two bidding zones. The start of operation of day-ahead markets in Montenegro and North Macedonia is expected in Q4 2022 and Q2 2023 respectively.

In Bosnia and Herzegovina and Moldova, setting up of the short-term markets is still in the discussion phase.

Even though the Regulation on Capacity Allocation and Congestion Management (CACM) has not been officially adopted in the Energy Community yet, North Macedonia has already appointed MEMO as nominated electricity market operator (NEMO) and in Serbia SEEPEX was designated as NEMO in June 2022. .

Fostering market integration between Contracting Parties and EU Member States

A legally binding framework for the establishment of a truly integrated electricity market between the Energy Community Contracting Parties and neighbouring EU Member States, including their market coupling, is in the making. The necessary legal acts are expected to be proposed by the European Commission for adoption in the Energy Community at the Ministerial Council meeting in 2022.

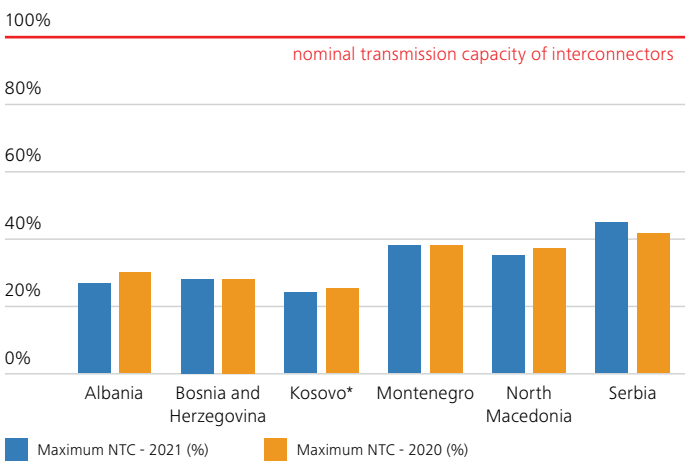
The package consists of the Electricity Regulation, the ACER Regulation, the Network Code on Emergency and Restoration (ER) and four market and system operation Guidelines, namely on Forward Capacity Allocation (FCA), Capacity Allocation and Congestion Management (CACM), System Operation (SO) and Electricity Balancing (EB), accompanied by a proposal of a Procedural Act on fostering regional energy market integration in the Energy Community. All legal acts were adapted in a way that ensures reciprocal application of the Guidelines and the Network Code on the borders between Contracting Parties and EU Members States and allow Contracting Parties' stakeholders to join European day-ahead, intraday and balancing platforms. Following a public consultation in April-May 2022, the package will be officially proposed to the Ministerial Council.

To facilitate cross-border trade, the development of market coupling has to go hand in hand with improving the way how available cross-border capacities are determined and offered to market participants. The adoption of the new package will oblige the Contracting Parties' transmission system operators to implement coordinated capacity calculation and offer at least 70% of the transmission capacity for cross-zonal trade.

At present, the transmission system operators continue to offer to market participants limited amounts of cross-border capacity for commercial trade. The NTC values in 2021 were still relatively low compared with the nominal transmission capacities of the interconnectors, and likely well below the 70% target.

In the Western Balkans, maximum NTC values remained mainly unchanged compared with 2020. Only Serbia recorded an increase of 8%, despite the interconnection with Kosovo* still not being commercially allocated and utilised, which decreases the NTC in general.

Maximum hourly NTC values in 2021 and 2020 for the WB6 Parties in relation to the total nominal transmission capacity of interconnectors



Georgia, Moldova and Ukraine are not depicted due to the specifics of their interconnections and the way how cross-border capacities are calculated and allocated.

Georgian TSO (GSE) calculated NTC values at the borders with Turkey only and allocated capacity up to the full HVDC link's rating of 700 MW in 2021, equally as in 2020.

In 2021, Moldova was operating in the same synchronous area with the larger part of the Ukrainian power system. Only the western part of Ukraine (Burshtyn island) was connected to the synchronous area Continental Europe with restricted net export possibilities of up to 650 MW. Since March 2022, the whole Ukrainian and Moldovan power systems operate synchronously with the Continental Europe, but with restricted opportunity for commercial exchanges due to technical requests which still have to be fulfilled on the Ukrainian side. Ukrainian TSO (Ukrenergo) calculates NTC values on the border with Moldova but joint capacity allocation has still to be organized. The NTC between Ukraine and Moldova after synchronisation is 600 MW.

Commercial exchanges of electricity between Ukraine/Moldova and Continental Europe

After the fulfillment of the technical preconditions set by the transmission system operators from Continental Europe, commercial exchanges between the Ukraine/Moldova power system and EU Member States started on the interconnection between Ukraine and Romania on 30 June 2022, including also Ukraine-Slovakia few days after. The capacity is allocated as daily products based on the allocation process used on the so-called Bursthyn Island in Ukraine, which was already synchronized with Continental Europe. Cross-border capacity, initially limited to 100MW, is set to increase gradually with electricity exchanges taking place also on the interconnections with Hungary and between Moldova and Romania, based on the results of monthly assessments performed by the transmission system operators.

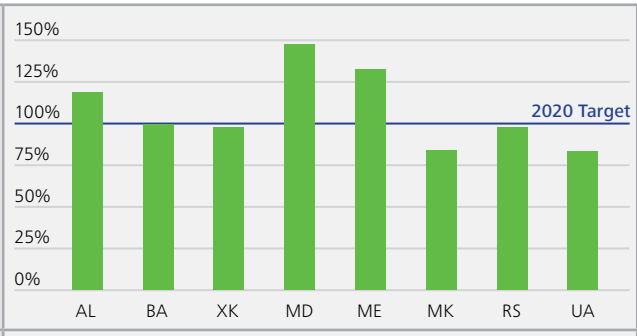
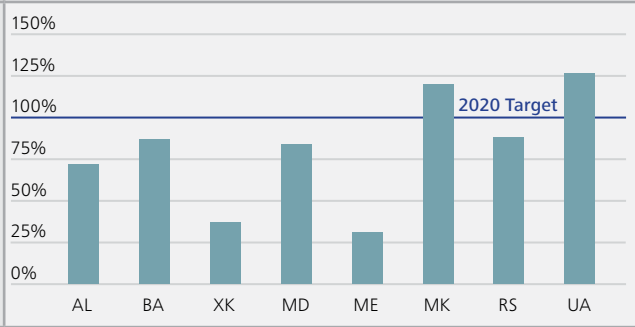
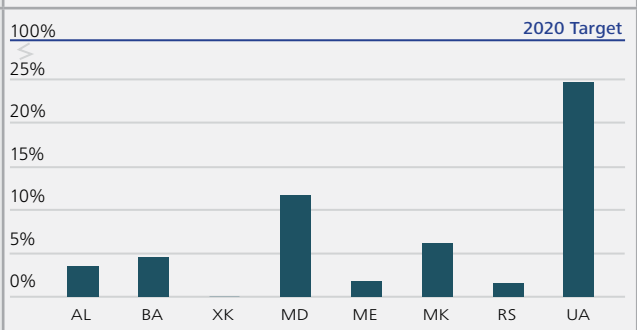
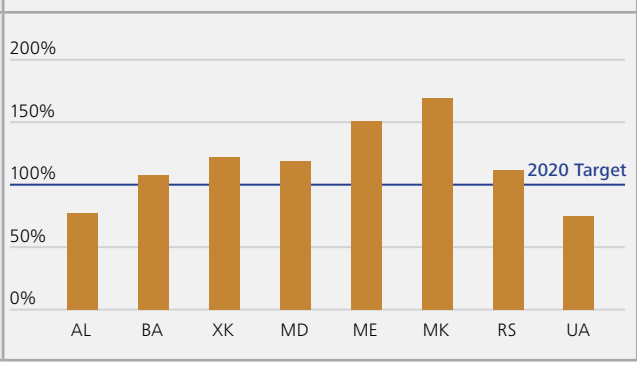
Commercial exchanges between Ukraine and Poland were relaunched soon after emergency synchronisation, however, these exchanges are done on the so-called radial mode and do not have impact on the meshed network.

The Energy Community Secretariat is supporting transmission system operators and national regulatory authorities in ensuring harmonised and efficient allocation and use of cross-border capacity on all Ukrainian and Moldovan interconnections with EU Member States. A roadmap on the implementation of the joint allocation process on all these interconnections is currently being discussed.

Once all the technical and operational requirements set by the transmission system operators from Continental Europe are met by the Ukrainian transmission system operator, coordinated capacity calculation should take place to utilise the full potential of commercial exchanges and unlock economic welfare gains.

Boosting the deployment of renewables

Renewable energy is at the core of tackling GHG emissions and transitioning to a sustainable energy system. The Contracting Parties of the Energy Community continue to punch below their weight when it comes to the uptake of energy from renewable sources. Effective de-risking mechanisms such as reliable support schemes for renewables and liquid day-ahead and intraday markets are needed to mitigate the high capital costs in the region and boost investments in renewables. The new Renewable Energy Directive (REDII) adopted in the Energy Community extended the deadline for reaching the 2020 renewables target until the end of 2021. Given the lack of progress in 2021, it remains to be seen whether the one-year extension will result in all Contracting Parties meeting the target.

Overall RES target		In 2020, Albania, Moldova and Montenegro were the only Contracting Parties to reach their 2020 target for the use of renewable energy in gross final energy consumption, while Bosnia and Herzegovina, Kosovo* and Serbia came close. Reaching the target seems unattainable for North Macedonia and Ukraine despite the extension of the deadline. Georgia, due to its later accession to the Energy Community, does not have a 2020 target.
Electricity		Montenegro and Ukraine remain the only Contracting Parties that have achieved their 2020 indicative target for electricity in 2020. North Macedonia and Serbia came close, followed by Bosnia and Herzegovina and Albania. Kosovo* and Moldova missed their target by a wide margin.
Transport		All Contracting Parties failed to meet the mandatory 10% target by 2020 as well as to establish an operational system to verify biofuels sustainability. With no progress in this area during 2020, all Contracting Parties continue to have only negligible shares of renewable energy due to electrified public transport.
Heating and cooling		In the course of 2020, the status remained unchanged. Most of the Contracting Parties were close to achieving or have exceeded their 2020 indicative target for heating and cooling in 2020 due to the use of solid biomass in the residential sector in previous years. However, data on the use of solid biomass will have to be reviewed following the introduction of sustainability and GHG emissions saving criteria once the REDII is transposed and implemented.

Source: EUROSTAT data, compiled and calculated by the Energy Community Secretariat.

Renewables support schemes

The primary goal of market-based support schemes is to meet renewable energy goals in the most cost-effective way. The reform process is ongoing in all Contracting Parties, with Albania and North Macedonia being the only two Contracting Parties to have held auctions so far.

The pre-phase of the first wind auction in Albania is ongoing and the construction of the first solar PV power plant granted market-based support has started. Albania's renewable energy law prescribes that existing priority producers should be balance responsible as soon as the balancing market is established but not later than 31 December 2022, while new producers should be balance responsible from the start. In spite of the balancing market being operational since April 2021, all renewables producers continue to be exempted from balance responsibility.

Until draft amendments enabling renewables auctions are adopted in Federation of Bosnia and Herzegovina, the 2013 law on renewable energy remains in force. Renewable energy producers under feed-in tariffs remain fully released from balancing responsibility as the adoption of the methodology for allocating balancing costs is still pending. Republika Srpska adopted a new Renewables Law in February 2022, which enables market premiums and full balancing responsibility for all projects above 500kW.

In Georgia, the feed-in premium (FiP) scheme covers all renewable power plants with installed capacity higher than 5 MW. Details on how the support will be granted are under preparation and should be embedded in the RES Law, which is currently being amended to transpose the REDII. Existing hydro producers, supported through power purchase agreements (PPAs), are exempted from balance responsibility.

Currently, Kosovo* is preparing, with the support of the Secretariat, a first self-standing renewable law. The law will detail a market-based support scheme. As the feed-in tariff system was suspended by the regulator in 2020, Kosovo plans to have the first auction by the end of this year. Existing renewable energy producers under the feed-in tariff are liable for 25% of their total imbalance costs.

The 2018 Renewable Law in Moldova sets the legal basis for renewable energy support schemes. Administratively set feed-in tariffs (FiT) for small producers are implemented, while amendments to the Law are under preparation to transpose the REDII and provide more clarity on market-based support schemes. Producers under the FiT scheme are relieved of balance responsibility.

In Montenegro, renewable energy producers receiving support are exempt from payment for their imbalances, regardless of whether the support is granted administratively, applied to projects below 1 MW only, or in a competitive procedure. This should change with the new renewables law, which is under development to transpose the REDII. The new law will provide more details on the competitive procedure as well.

In North Macedonia, the last auction, held in October 2021 for 80MW, resulted in a lowest FiP of 0,01 EUR/MWh on top of the price realized by the sale of each kWh on the wholesale electricity market for 15 years. Eight power plants that were awarded with the premium were put into operation so far. Only producers under administratively set feed-in tariffs are exempted from balancing responsibility, while those applying for support via tenders are considered electricity market participants and must be balance responsible.

In Serbia, the 2021 renewables law prescribes auctions for market premiums for all projects with installed capacity above 500kW or 3MW for wind plants. In addition to the support given through the long-term contract with an incentivized price for the off-take of electricity, renewables producers are exempted from balancing responsibility by law until the intraday market is liquid. Although a quota of 400MW and a ceiling price of 5,57 cEUR/kWh for the first wind auction have been defined, the launch of the auction is hindered by the absence of a by-law on balance responsibility of renewables.

From 2020, only wind projects with installed capacity of up to 5 MW and other technologies of up to 1 MW are granted administratively set feed-in tariffs (FiTs) in Ukraine. Auctions are yet to be implemented despite being envisaged by legislative amendments adopted in December 2019. A new draft law introducing a contract for difference mechanism was published for public consultation in August 2021. All producers exceeding 1 MW of installed capacity must pay for imbalances starting in January 2022. However, a tolerance margin applies in case hourly imbalances are below or equal to 10% for wind energy units and below or equal to 5% for solar energy units until 31 December 2029.

System for guarantees of origin ready for use by the Contracting Parties

Under the regional project launched by the Energy Community Secretariat in January 2022, electronic registries for guarantees of origin have been created for Albania, two entities in Bosnia and Herzegovina, Georgia, Kosovo, North Macedonia, Moldova, Montenegro and Ukraine. All nine registries are ready to go-live following the signing of direct agreements between the Contracting Parties' issuing bodies and the service provider Grexel. The registries, including all configurations developed during the project, will be kept ready until June 2023. After signing the agreements, two or more Contracting Parties will be able to trade guarantees of origin through the regional system established by the service provider. This will make guarantees of origin more attractive for renewable producers, suppliers and companies seeking to reduce their carbon footprint.

Renewables self-consumers

Renewables self-consumption allows consumers to play an active role in the energy transition. It can also provide access to affordable and sustainable energy. Shielding consumers from rising energy prices is especially important given the current context of high energy prices. There is now a window of opportunity to establish targeted policies and measures for renewables self-consumption.

While the transposition deadline for the REDII is yet to expire, all Contracting Parties have already put in place, at least partially, an enabling legal framework for renewables self-consumption. Nevertheless, many obstacles remain to be overcome for citizens to fully participate in the energy market.

Albania is yet to adopt the methodology defining the price at which the surplus of electricity from self-consumers is to be redeemed. Despite this drawback, the number of installations using the existing net metering scheme and sending the surplus to the network without remuneration has grown significantly.

While in Federation of Bosnia and Herzegovina there is still no scheme enabling self-consumption, Republika Srpska enabled a net metering scheme for self-consumers with installed capacity of less than 10,8kW and a net billing scheme for installations between 10,8 and 50kW through the Renewables Law adopted in February 2022.

In Georgia, a net-metering system for self-consumption is in place since 2016. In 2020, the installation limit was increased from 100 kW to 500 kW. The scheme so far attracted 411 self-consumers with mostly solar PV plants.

In Kosovo*, any electricity customer connected to the low voltage distribution network with installed capacity not higher than 100kW can apply to its supplier to obtain the status of a self-consumer using the net billing scheme in place. Under this incentive, 128 self-consumers have already been connected and many new applications are in the pipeline. In the draft Energy Strategy, the proposed target for prosumers is 10MW by 2025 and 100MW by 2031.

Moldova enabled a net-metering scheme for self-consumption with an installation limit of 200kW through the Renewables Law. The high purchase price of surplus electricity resulted in 473 mostly solar PV applications with total installed power of 10 MW. The scheme is currently being revised to align with provisions of the new REDII.

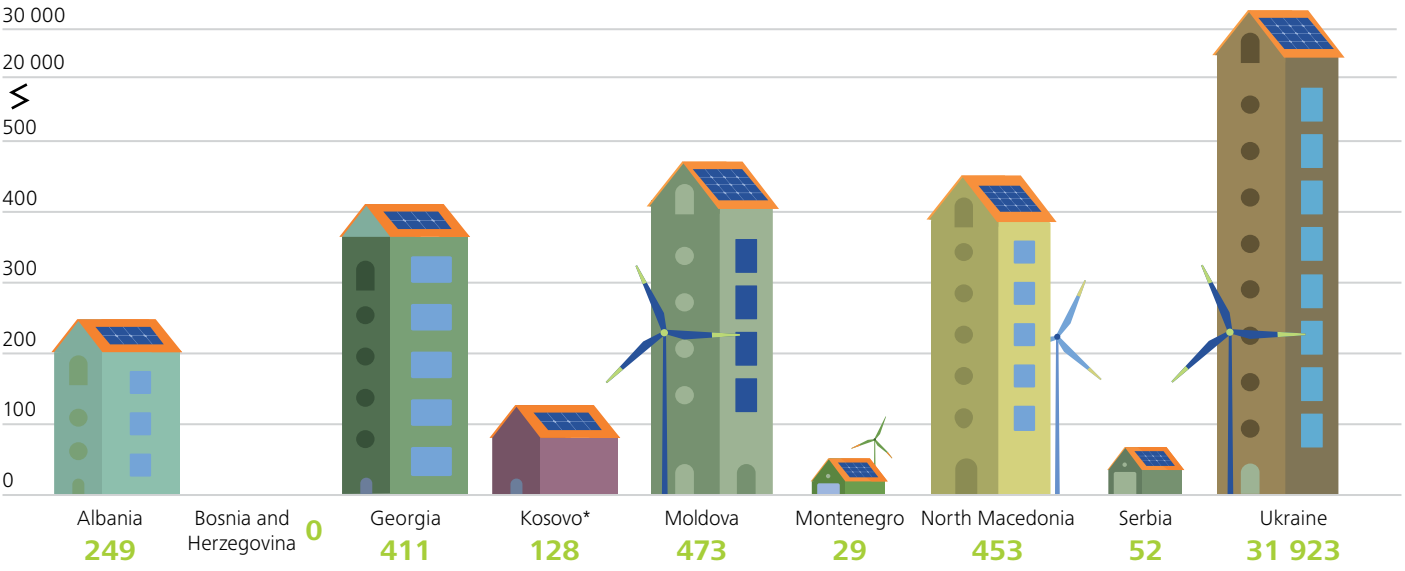
Montenegro has a net metering scheme for self-consumption in place. Final customers who produce electricity from renewables for their own needs have the right to sell surplus electricity to the supplier, which is obliged to buy it. The projects Solari 3,000+ (up to 10kW) and Solari 500+ (between 10 and 30kW) aroused great interest of the Montenegrin citizens. It is envisaged that, for eligible consumers, the power utility Elektroprivreda Crne Gore will provide the solar panels and citizens will repay the equipment in the form of a loan over a period of five to seven years. The power utility and the Investment and Development Fund signed a 30mil EUR contract to finance the project in March 2022.

On 15 June, North Macedonia adopted amendments to the rulebook for renewable energy increasing installation limit for self-consumers using a net-billing scheme from 4 to 6kW for households and from 20 to 30kW for other small consumers. In the recently adopted NECP, the target of 400MW for solar rooftop plants by 2040 is kept.

In Serbia, the Renewable Energy Law enables self-consumption schemes, while a secondary act adopted in August 2021 provides details on the net metering scheme for households. Since the enabling legislation was adopted, 52 self-consumers have emerged.

The Law on the Promotion of the Use of Energy from Renewable Sources in Ukraine enables consumers to install up to 30 kW of wind and solar capacities for own consumption. The surplus of energy not consumed is fed into the distribution grid and purchased by the universal service providers at the green tariff.

Installed capacity of self-consumers [kW]



Number of self-consumption installations

Source: Compiled by the Energy Community Secretariat

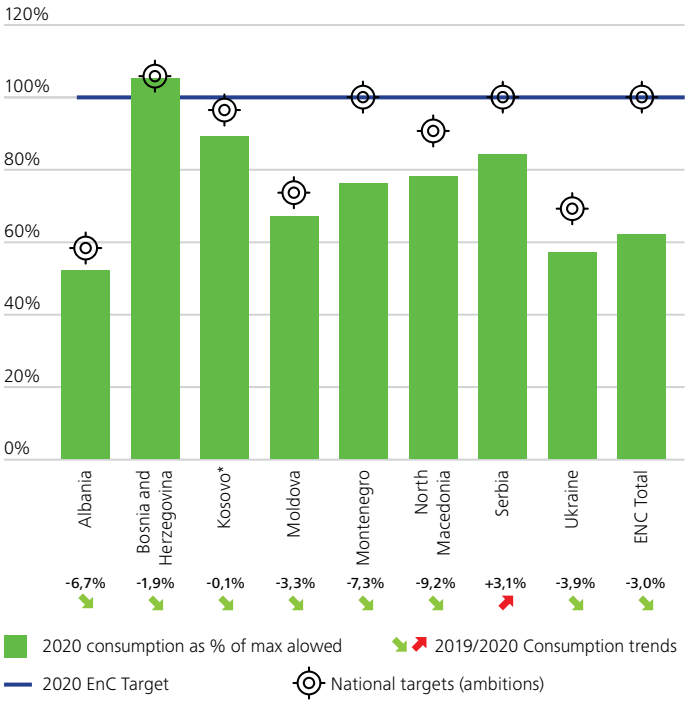
Making energy efficiency the first fuel

Reaching 2020 energy efficiency targets

The Energy Community has achieved the 2020 headline target for energy efficiency set by the 2012 Energy Efficiency Directive. All Contracting Parties' energy consumption in 2020 was below their individual targets, only Bosnia and Herzegovina exceeded the 2020 consumption cap. The majority of the energy efficiency measures were implemented in the manufacturing and building sectors.

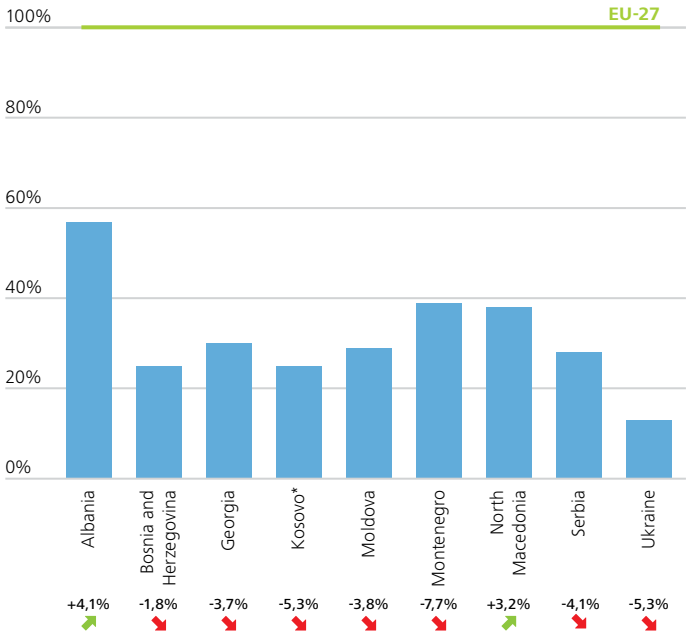
Energy productivity in the Energy Community is significantly below the European Union average, and the gap between Contracting Parties' and EU-27 energy productivity is widening. This means that the Contracting Parties gain less economic benefit from each unit of energy, reflecting the lower level of competitiveness and energy efficiency of their economies. It is also a useful indication of the pace at which they are transitioning towards an energy-efficient future.

Implementation of energy efficiency 2020 targets



Source: compiled and calculated by the Energy Community Secretariat.

Energy productivity in 2020 [% of EU-27 average]



Source: compiled and calculated by the Energy Community Secretariat.

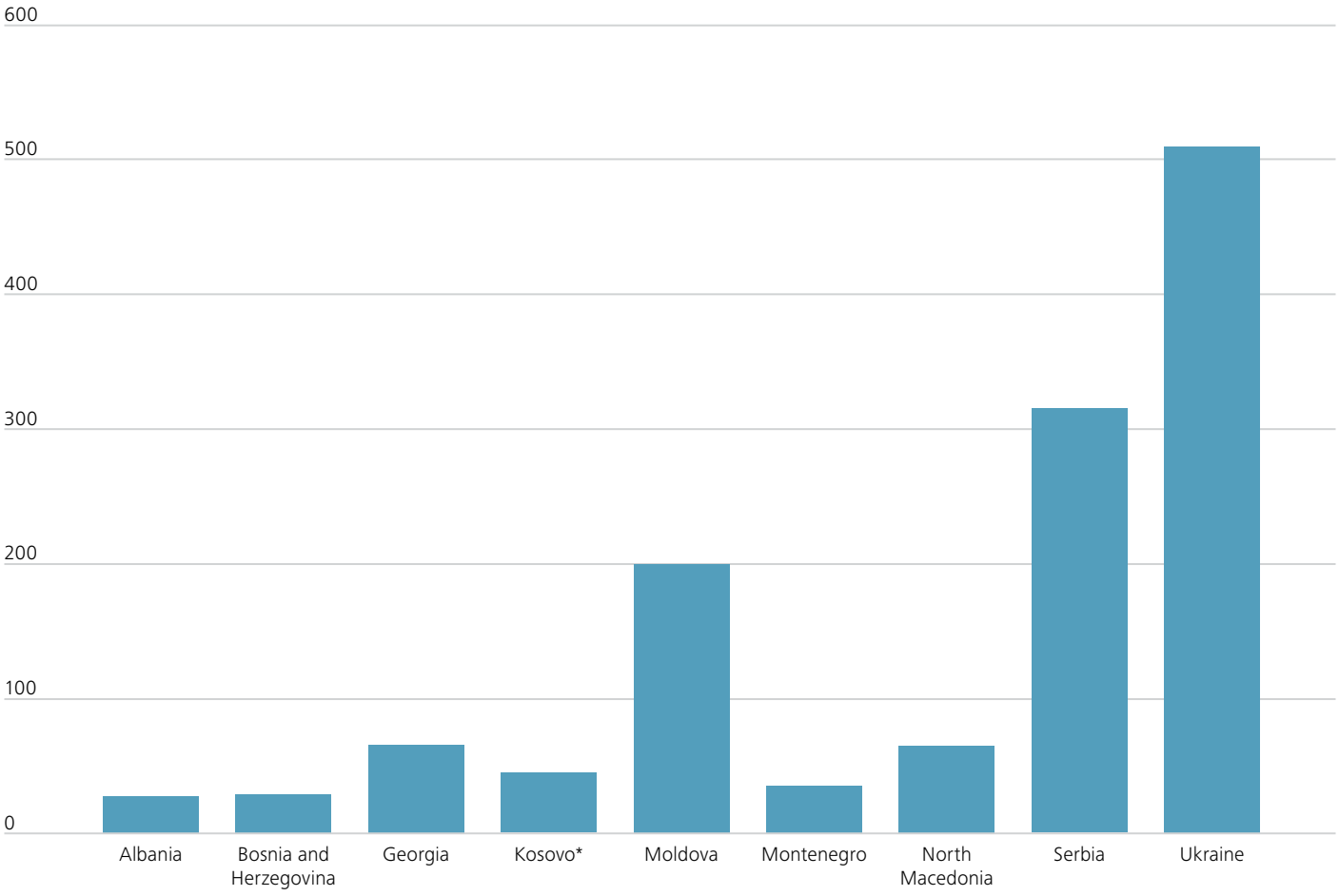
Investing in energy efficiency in buildings

Buildings play a significant role when it comes to the clean energy transition. They are responsible for the largest share of energy consumption and are a big source of GHG emissions. With the largest energy efficiency gains in the buildings sector, it is important that current public and private funding is sufficiently scaled up.

Assessing committed investments, all Contracting Parties have narrowed the energy efficiency in buildings investment gap. The investments in building renovations in the Western Balkans amounted to approximately EUR 514,4 million between January 2021 and June 2022. Further to that, investments between January 2021 and June 2022 were also observed in Ukraine (approx. EUR 510.2 million), Moldova (approx. EUR 199.5 million) and Georgia (approx. EUR 65.2 million). Nevertheless, the overall investment level across the Energy Community remains insufficient compared to the needs.

Once adopted, 2030 targets on renewable energy and energy efficiency are expected to boost investments in buildings renovation, mostly in the public sector. Moreover, the REDII provides an enabling legal framework for the uptake of decentralised heating systems based on solar energy, including rooftop installations.

Investments in Energy Efficiency in Buildings Programmes [mio EUR]



Source: Compiled by the Energy Community Secretariat

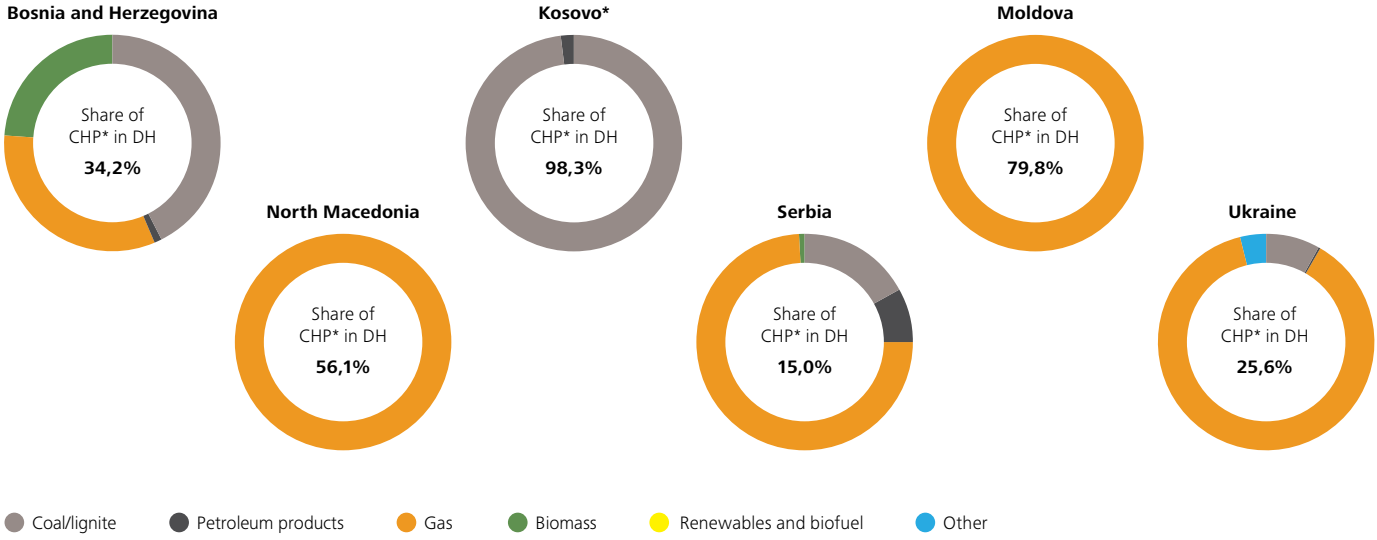
Introducing renewable energy in district heating systems

Developed district heating networks can be a great asset for the decarbonisation of the heating and cooling sector if renewable and other carbon-neutral heat sources are integrated.

However, in 2020, the six Contracting Parties with developed district heating systems continued to rely predominately on fossil fuels (natural gas ~86%, coal/lignite ~9% and petroleum products ~1%), with a negligible share of renewable energy (0,46%) and other energy sources (3%), with little progress compared to 2019[9]. Given the share of renewables, the Contracting Parties have to put a significant effort into making their district heating systems greener and more energy efficient.

Having in mind the soaring energy prices, and the fact that district heating systems significantly rely on natural gas and coal, Contracting Parties have to strategically consider modernisation and decarbonisation of the systems to remain competitive and affordable.

Fuels used and share of co-generation in district heating [%], 2020



*combined heat and power
Source: compiled and calculated by the Energy Community Secretariat.

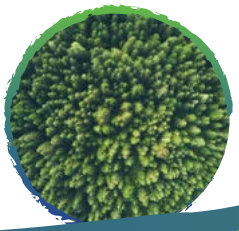
Following the adoption of the new Renewable Energy Directive (EU) 2018/2001 by the Energy Community Ministerial Council in November 2021, the Contracting Parties are encouraged to increase the share of renewable energy in the heating and cooling sector by 1.3 ppt annually (1.1 ppt annually if waste heat is not used). District heating systems need to contribute to this increase by 1 ppt. Moreover, district heating systems that are not efficient in accordance with the Energy Efficiency Directive[10] must enable final consumers to disconnect from the system and are not be eligible for state subsidies.

To date, progress with respect to renewable-based district heating is possible only thanks to international financial organizations.

With the support of the EBRD led Renewable District Energy in the Western Balkans (ReDEWeB) Programme, Serbia will work to develop renewable district heating, starting with projects in 11 cities. In Bosnia and Herzegovina, the work on the development of projects in three cities is progressing. A solar thermal project in Kosovo*, Pristina is ongoing, as well as the first greenfield district heating systems in Albania and Montenegro. All projects have completed pre-feasibility studies, and feasibility studies are under development.

In Moldova, a World Bank supported project aims to improve the energy efficiency of the combined heat and power (CHP) plant Termoelectrica in Chisinau. To the extent possible, the modernisation of CHP plants is ongoing in Ukraine thanks to the support of EBRD.

9 The going online of new biomass-based district heating plants in Gjakova, Kosovo*, Mali Zvornik and Priboj, Serbia and Slavutych, Rivne and Zhytomyr, Ukraine during the heating season 2021/22 is not reflected in the 2020 statistics.
10 A system using at least 50% renewable energy, 50% waste heat, 75% cogenerated heat or 50% of a combination of such energy and heat.



Reaching a decarbonized energy future

Contributing to global climate change efforts

Nationally Determined Contributions (NDCs) summarise countries' plans to reduce greenhouse gas (GHG) emissions under the Paris Agreement. All Contracting Parties, with the exception of Kosovo*[11], ratified the Agreement and submitted their initial NDCs to the UNFCCC. All signatories, with the exception of Serbia, have already submitted their NDC2 to the UNFCCC.

The actions contained in the NDC2 should also pave the way towards meeting the political pledges under the 2020 Sofia Declaration on the Green Agenda for the Western Balkans and the commitments made at the 2021 Third Eastern Partnership (EaP) meeting on environment and climate change in Lisbon, where countries expressed their willingness to work together towards a 2050 climate-neutral continent.

Albania's revised National Determined Contribution (NDC2) was submitted to the UNFCCC Secretariat in October 2021. It includes actions on Agriculture, Forestry and Other Land Use (AFOLU), gender and adaptation, with a focus on coastal zones. The target is a reduction of 20,9% GHG emissions by 2030 compared to the business as usual (BAU) scenario. This target is less ambitious than the GHG emission reduction target proposed by Albania in its adopted NECP.

Bosnia and Herzegovina's NDC2 was submitted to the UNFCCC Secretariat in April 2021. It includes increased investments in coal-based generation capacity, with an unconditional GHG emissions reduction target for 2030 of 12,8% (excluding GHG sinks) compared to 2014 or 33,2% compared to 1990. The conditional target (with more intensive international assistance) for 2030 is 17,5% (excluding GHG sinks) compared to 2014, or 36,8% compared to 1990.

Georgia's NDC2 was submitted to the UNFCCC in April 2021. It includes an economy-wide target and sections on mitigation, adaptation and gender. It sets an unconditional target of 35% below 1990 level of its total domestic GHG emissions by 2030, and a target of 50 - 57% reduction of its total GHG emissions by 2030 compared to 1990, conditional on international support.

Moldova's NDC2 was submitted to the UNFCCC Secretariat in March 2020. It features economy-wide mitigation and adaptation measures and gender crosscutting along the document. The country committed to unconditionally reduce its GHG emissions by 70% of its 1990 level by 2030, and by up to 88% when receiving technical, financial and technological support.

Montenegro's NDC2 was submitted to the UNFCCC in June 2021. It puts forward a target of 35% GHG emission reduction by 2030 compared to 1990. It includes both mitigation and adaptation measures and focuses on disaster risk reduction and calculation of GHG emissions for land use, land-use change and forestry (LULUCF), measures on gender equality and vulnerable groups.

North Macedonia submitted its NDC2 to the UNFCCC Secretariat in April 2021. The document focuses on mitigation, while the adaptation component is still under finalization. Policies and measures on AFOLU are also reflected. The NDC2 echoes the green scenario from the National Strategy for Energy Development up to 2040 and is aligned with the adopted NECP. The NDC2 includes a 51% reduction in GHG emissions by 2030 compared to 1990 levels.

The Serbian NDC2 has not been submitted to the UNFCCC yet. The country postponed its submission until work on the NECP is finalized, in order for the two documents to be aligned. The draft NDC2 contains economy-wide mitigation measures set to contribute to a just transition low-carbon development roadmap and reduction of GHG emissions by 33.3% by 2030 compared to 1990 levels.

Ukraine's NDC2 was submitted to the UNFCCC in July 2021. It includes an economy-wide target of 65% GHG emissions reduction by 2030 compared to 1990. It focuses on mitigation, while actions on adaptation are not featured (part of a separate document). Gender-sensitive actions are crosscutting.

State of Enhanced Nationally Determined Contributions (NDC2) preparation

	GHG other than CO_2 covered	All emission sectors covered	Adaptation strategy	Participatory process	Gender sensitivity	NDC2 submitted to the UNFCCC
Albania	●	●	●	●	●	●
Bosnia and Herzegovina	●	●	●	●	○	●
Georgia	●	●	●	●	●	●
Moldova	●	●	●	●	●	●
Montenegro	●	●	●	●	●	●
North Macedonia	●	●	○	●	●	●
Serbia	●	●	●	●	●	○
Ukraine	●	●	○	●	○	●

● In place ● In progress ○ Not in place Source: compiled by the Energy Community Secretariat.

11 Kosovo* is not a signatory to the UN Framework Convention on Climate Change and to the Paris Agreement, therefore it has not submitted an Intended Nationally Determined Contribution.

Planning for a decarbonized energy future

With the adoption of the Governance Regulation at the 2021 Energy Community Ministerial Council, the development and adoption of integrated National Energy and Climate Plans (NECPs) became a legal obligation for the Contracting Parties. According to the Regulation, the draft NECPs are to be submitted for the Secretariat's review and opinion by June 2023 and adopted by the Contracting Parties by June 2024. NECPs are an important instrument for steering the energy transition, defining a country's energy and climate goals and policies and measures to reach them.

Two Contracting Parties – Albania and North Macedonia – have already adopted their NECPs. Albania is currently updating the NECP it adopted in December 2021 and a new strategic environmental assessment was launched. North Macedonia adopted its NECP in May 2022.
The remaining seven Contracting Parties are in various stages of developing their plans. All seven plan to submit their NECP to the Secretariat by the June 2023 deadline.

Georgia has conducted a series of working group meetings between October 2021 and April 2022 with the representatives of civil society organizations and other stakeholders to present and discuss the details of the draft Georgian NECP. The related strategic environmental assessment is expected to be developed by the end of 2022 and a public consultation is to take place in November 2022.

Montenegro submitted the analytical part and updates to the policy parts of its draft NECP to the Secretariat for information in May 2022. Since there is still no policy decision on the future of the Pljevlja TPP, the draft NECP still incurs a high level of uncertainty regarding its scenarios and essential policies and measures.

In Kosovo*, the NECP will be finalized once the Energy Strategy 2022-2031 is adopted. The Strategy was published for public consultation in June 2022. The draft NECP is planned to be submitted to the Secretariat for review in the first half of 2023.

In the reporting period, Serbia continued working group meetings dedicated to NECP development, finalized the model and produced the first results for the scenarios.

The finalization of Ukraine's draft NECP was linked to the adoption of its Energy Strategy, however, a comprehensive overhaul of the NECP will need to take place due to the war. Energy sector reconstruction that supports the country's decarbonization goals should be in focus.

State of National Energy and Climate Plans preparation

	Legal basis adopted	Working group operational	Modelling capacity exists	Policy section (A) drafted	Analytical section (B) drafted	Submitted to the Secretariat for peer review	Final version submitted to the Secretariat
Albania	●	●	●	●	●	●	●
Bosnia and Herzegovina	●	●	●	●	●	●	●
Georgia	●	●	●	●	●	●	●
Kosovo*	●	●	●	●	●	●	●
Moldova	●	●	●	●	●	●	●
Montenegro	●	●	●	●	●	●	●
North Macedonia	●	●	●	●	●	●	●
Serbia	●	●	●	●	●	●	●
Ukraine	●	●	●	●	●	●	●

● Finished ● Started ● Planned

Source: compiled by the Energy Community Secretariat.

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