

Montenegro became the first Western Balkans nation to introduce legislation on an emission trading scheme for large industrial emitters in 2020. It specifies the operators participating in emissions trading and determines the total amount and minimum price of 24 euros per tonne of carbon dioxide (CO<sub>2</sub>) of emissions credits to be auctioned.

The new Prime Minister of Montenegro, Zdravko Krivokapic, has pledged that his government's programme will be based on a 4E approach, meaning energy, efficiency, economy and ecology, to help turn the small Balkan nation into an ecological state. As well as decades of heavy coal pollution in the town of Pljevlja, the small Adriatic country, with a population of just around 620,000, has seen a wave of public protest against the construction of hydropower plants. Krivokapic said that a green economy would be the first of seven pillars of his cabinet's policy and that Montenegro, besides banning the construction of small hydropower plants, would also reassess concessions awarded previously for hydropower projects seen as environmentally detrimental. He said that hydropower sector has been marred by corruption and nepotism, and that his government will amend the energy law, which was last changed in July 2020.

"So far only privileged individuals benefited from the construction of small hydropower plants, often by corruption and nepotism, by winning concessions for the construction of the facilities on our rivers at the expense of our citizens who paid the costs through their electricity bills," Krivokapic told the parliament.

„Our watercourses...are one of the biggest national treasures of Montenegro and they have to be preserved as our country's natural heritage," he said. Montenegro's rivers are some of Europe's last free-flowing waters.

The sectors of energy, energy efficiency, mining and geological research will be placed under the newly formed Ministry of Capital Investments, said Krivokapic. But he stopped short of mentioning the country's coal sector, based on lignite, the dirtiest type of coal. Nevena Petkovic, project coordinator at Montenegrin non-governmental organization Green Home said that energy transition is still in an „infancy phase" and that „a lot of things still remain on paper, though many regard Montenegro as a frontrunner in energy transition," said Petkovic.

Montenegro established a stabilization reserve, the method of recording allocated emission credits, their transfer and use. The funds raised from emission credits would be transferred into the Environmental Protection Fund and used for environmental protection, renewables support and innovations financing. But Petkovic says that the system has not been implemented yet.

## New renewable energy sources

Montenegro and its Western Balkan neighbours have seen a series of protests over a boom in small hydropower construction that campaigners say threatens irreparable environmental damage while contributing only a negligible share to overall power output. Authorities and investors view hydropower as a green alternative to other sources of energy and say it could help the countries hit the renewable energy targets they need to meet to join the European Union, with Montenegro the first in line amongst its Balkans neighbours to achieve this goal.

The Montenegrin government long ago overshot its 2020 target to source 33 percent of its energy consumption from renewables, mostly due to changes in biomass data. It is currently considering its 2030 targets. There are currently 26 small hydro plants operating and several more under construction, but in 2019 they contributed to a mere 2.3 percent of overall power output and some plants have left locals without water for irrigation or for their cattle. In 2018 incentives for hydropower amounted to *7.3 million euros*, but Montenegro's National Renewable Energy Action Plan expected this figure to reach 26.7 million euros by 2020. The country has pledged to gradually abolish incentives for renewable energy sources starting in 2020, but existing contracts for small plants will remain valid for a number of years.

Over the last two years, Montenegro generated more than 60 percent of its electricity at the ageing Piva and Perucica hydropower plants and around 30 percent at its sole Pljevlja coal-fired power plant, operated by the state-run power utility Elektroprivreda Crne Gore (EPCG). Two privately-owned wind farms contributed to about 10 percent of overall output. EPCG aims to invest 700 million euros by 2024 into its energy sector as the country fosters closer ties with the EU and aims to boost its energy independence.

„It is important to point out that we changed the strategy and concept of the company development three years ago. Through the investment cycle, we have defined the diversification of production and the continuous increase of the share of renewable energy sources,” said EPCG's Executive Manager Igor Noveljic.

Under the plan, EPCG aims to add the 54.6 megawatt (MW) Gvozd wind farm, 250 MW Briska Gora solar power plant near the Adriatic coast, and, more controversially, the 172 MW Komarnica hydropower plant. Negotiations with the European Bank for Reconstruction and Development (EBRD) on financing the Gvozd wind farm, which will be located on the Krnovo plateau near Niksic, are underway. The project is being pursued with Austria's Ivicom Holding at an estimated cost of 58 million euros.

The wind farm which will produce enough energy to supply 25,000 households will be located near the existing 72 MW Krnovo wind farm. The Krnovo wind farm was put into operation in 2017 by the wind power developer Krnovo Energy. It is the largest incentivised contributor to Montenegro's renewable energy output. In 2019, a consortium of Maltese state-owned power utility Enmalta and China's Shanghai Electric Power Company, connected Montenegro's second biggest wind farm, Mozura to the grid. The 46 MW wind park is located near the coastal town of Ulcinj. In 2020 the European Commission asked Montenegro to thoroughly investigate corruption allegations connected to the plant, which had also been the subject of an investigation conducted by Maltese journalist Daphne Caruana Galizia, who was murdered in 2017.

A consortium led by German renewable energy firm wpd has also signed a land lease agreement for 100 MW wind farm Brajici near the Montenegrin coastal city of Budva, a project valued at 101.3 million euros.

The Briska Gora solar power plant will be constructed by a consortium of EPCG and Finland's Fortum, each holding a 49 percent share in the project and Sterling & Wilson, with a 2 percent share.

„It is planned to build the plant in phases, the first phase with a minimum installed capacity of 50 MW, within 18 months, and the second phase with a minimum 200 MW, within 36 months from the date of signing the contract,“ said EPCG's Executive Manager Igor Noveljic.

The utility also won rights to build and operate for up to 60 years the Komarnica hydropower plant, Montenegro's first large-scale hydropower project in decades. The government raised the original estimated cost of 246 million euros to build the plant to between 260 and 290 million euros, prompting criticism, but said the final cost will be determined during the procurement process. The plant is expected to produce 213 GWh of electricity annually.

Environmental campaigners have warned the dam could destroy very rare and endemic species in the Komarnica valley, nominated as an Emerald and Natura 2000 site. The site, which borders the unique Nevidio Canyon, protected as a Natural Monument, has so far not been properly researched, so the dam's impacts cannot be fully assessed. EPCG also aims to refurbish the 307 MW Perucica and the 342 MW Piva hydropower plants. So far, EPCG has overhauled five out of seven turbines at Perucica, that was commissioned in 1960. The remaining two turbines will be upgraded in 2021 and the project will improve the plant's efficiency and extend its lifespan by at least 30 years and. EPCG may also add a new 58.5 MW turbine to the plant. The overhaul of the Piva hydropower plant, which started

operating in 1976, started in 2018. So far, two turbines have been overhauled and the contract for the reconstruction of the third one has been signed.

### **Controversial coal project**

For several years the government's energy strategy centred around the construction of a new unit at the Pljevlja coal-fired power plant which was commissioned in 1982 but the plans were scrapped in 2019 because of its health and climate impact, and more importantly due to its unprofitability.

The government instead pledged to carry out a modernisation of the existing 225 MW unit, which along with the extensive use of wood and coal for heating, has been causing alarming levels of air pollution in Pljevlja, a town situated in a depression at around 720 metres above the sea level and prone to temperature inversion.

EPCG has also pledged to rehabilitate the ash and slag landfill created by operation of the plant.

In June 2020, EPCG signed a deal with a consortium led by China's Dongfang Electric International Corporation to refurbish the plant for 54.4 million euros and install a desulphurization system, denitrification, improve the electrostatic filter facility and construct a wastewater treatment system.

The project, set to be completed in 2023, is aimed at bringing emissions below the limits set by Montenegro's regulations and EU directives..

EPCG said the project is also designed to bring district heating to homes in Pljevlja by taking steam from the plant's turbine. New heat exchangers would heat the water and pump it into a pipeline set to reach each home in this northernmost town of Montenegro.

Rajko Sebek, an EPCG spokesman, said there are no plans to expand the existing coal mine for this purpose.

Environmental campaigners say that district heating is being used as an excuse to stick to coal, despite plans to phase it out in most EU countries by 2030 and by 2050 in the rest of the World.

The Pljevlja power plant and the Pljevlja mine employ 1,200 workers and a just transition of the region is needed urgently.

Domestic lignite remains appealing to governments across Western Balkans seeking ways to ensure security of supply while also placating influential mining lobbies.

EPCG CEO Igor Noveljic said the lifetime extension of the Pljevlja power plant would mean steady employment for the workers, as well as for several associated companies.

Nevena Petkovic of Green Home says the project is in many ways controversial.

"We have not yet seen a economic feasibility study for the project," said Petkovic, adding that the plant may already breach a clause of the EU's Large Combustion Plants Directive (LCPD) which limits its operating hours.

The country reportedly sent a formal request to the Energy Community, transposing EU energy standards to would-be members, for additional working hours for the Pljevlja plant, whose working hours were due to expire by the end of 2020.

"The decommissioning of the power plant would be the best way forward, as well as completion of a plan on just transition in the region," said Petkovic.

„It is necessary to start developing a fair transition plan, which would provide a framework for the transformation of all economic sectors in Pljevlja so as to enable new employment and a perspective for Pljevlja without coal," Petkovic added.

### **Oil and gas**

Montenegro produces no oil but initial data has indicated it might have enough untapped reserves to cover its oil and gas needs.

But the first exploratory drilling which should have shown whether there is oil off the coast of Montenegro was put off from 2020 to 2021 due to the coronavirus pandemic, said the country's hydrocarbons administration.

In 2016 Montenegro awarded exploration licences for four blocks covering an area of 1,228 square kilometres to a consortium of Italy's Eni and Russia's Novatek.

A year later another licence for exploration of the blocks covering a combined 338 square kilometres in the Adriatic Sea's shallow waters was awarded to the Greek company Energean Oil & Gas.

For now the new Government's approach to hydrocarbon production in the Adriatic remains unclear, and it is yet to be seen whether its pledge to make Montenegro a true ecological state extends beyond its shoreline.

Source: [just-transition.info](https://just-transition.info)