

GREEN AGENDA EXPLAINED

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INTRODUCTION

The Green Agenda for the Western Balkans is an instrument for achieving the European Green Deal in our region. The European Green Deal represents a milestone in fighting climate change and a comprehensive growth strategy of the Union, and its implementation should lead to the European Union's climate neutrality by 2050. By signing the Sofia Declaration on the Green Agenda for the Western Balkans on November 10, 2020, the region's countries committed to implementing the Green Agenda as a "road map" for a series of concrete actions and measures to lead to low-carbon development and economic growth in line with the principles of sustainable development. The Green Agenda for the Western Balkans covers five areas: climate, energy and mobility; circular economy; pollution prevention; sustainable agriculture and food production; and biodiversity.

WHAT IS THE GREEN AGENDA FOR THE WESTERN BALKANS?

To grasp the Green Agenda for the Western Balkans, we need to understand the European Green Deal. The latter is a long-term development strategy of EU countries, which aims to prevent climate change. We can already see the consequences of climate change in nature today, from the melting polar caps and glaciers, through the rapid rise of sea levels, to intense heat waves, emergence of new diseases and the mass extinction of various plant and animal species. The main culprit for these side effects that affect our environment is the emission of greenhouse gases, namely those that, like a blanket, retain heat in the Earth's atmosphere and thus warm the planet. Therefore, the main goal of the Green Deal is to achieve carbon neutrality by 2050, i.e. to completely neutralize the amount of greenhouse gases that we emit into the atmosphere.

WHAT DOES ALL THIS MEAN FOR THE BALKANS?

Our region is one of the most vulnerable to the negative consequences of climate change.

TEMPERATURE INCREASE

If you invented a time machine and returned to the different spots in the Western Balkans 100 years ago, you could still experience extremely high temperatures. Imagine experiencing 44.9 degrees Celsius in Belgrade (on June 18th, 1918)? If that's not enough, add a bit more and stop by in Mostar on July 31st, 1901 - 46,2 degrees! 100 years later, these extreme temperatures have become more common. In the 20th century, Sarajevo residents were experiencing extreme temperatures merely a half a day per year in average (0.6 day). In the 21st century, they are faced with 4,3 days a year with extreme heat. Similar situation is in Tirana, were during the previous century you could experience 1,6 days with extreme heat a year, and now it is up to 6,6 days a year. However, if we want to use our time machine and travel to the future at the very end of the 21st century, we would witness a scene from science fiction movies. Given the current increase in greenhouse gas emissions, the Western Balkans region will be hit by an

astounding temperature increase of 5 degrees. This would imply warming the likes of which the Earth has not seen since the last Ice Age, as today the planet is 5°C warmer than during that period. In the near future, we expect a gradual emergence of a subtropical climate in the north of the Western Balkans region, while the southern and coastal regions will be affected by prolonged periods of heat waves, as well as an extended summer, for up to



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two months. This might sound fun to sea and swimming enthusiasts, but the chain reactions that accompany such changes (such as droughts and floods, lack of drinking water and food) are certainly not; in addition to buying summer clothes, we need to get waterproof ones, as well.

FLOODS

Namely, extreme temperatures are accompanied by summer storms, so we are already witnessing daily rainfall equal to the total average amount of precipitation during the entire month. The infrastructure of the countries of the Western Balkans cannot withstand such sudden precipitation; it causes

firefighting equipment. Droughts have been affecting the region for several years now, causing great material consequences. Due to reduced water levels in natural and artificial lakes, North Macedonia was forced to import electricity from abroad last year, which cost close to €3.5 million. Between 1950 and 2000, only three extremely dry years occurred in Serbia, whereas the next twenty have seen as many as seven. Concerning this 20-year period, Serbia has suffered an incredible €7.5 billion damage due to extreme weather conditions¹. The consequences of the gradual rise in temperature occur as a chain reaction and bring about great changes in ecosystems, and in all plant and animal species, especially with regard to their prevalence and abundance. It is predicted that extreme weather conditions and any increase in temperature of 0.5 °C will double the prevalence of mosquitoes infected with the West Nile virus².



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floods, affecting transportation, the health system, as well as agricultural production. Citizens of the Balkans still remember the catastrophic 2014 floods that affected entire settlements in Serbia, Bosnia and Herzegovina and Croatia. In addition to heavy rainfall, the chain phenomena caused by climate change include fires and droughts. Intense fires hit Albania, and an additional problem was due to the inaccessible areas, difficult to reach by

HOW DOES THE GREEN AGENDA RESPOND TO THESE CHALLENGES?

Due to all of the above, the fight against climate change is a matter of our survival, and the Green Agenda is a way to carry it out and adapt to changed climate conditions.

The Green Agenda for the Western Balkans consists of 5 pillars:

- 1) Decarbonization: action for climate, clean energy and sustainable transport
- 2) Circular economy
- 3) Fight against pollution
- 4) Sustainable production of food and sustainable rural areas
- 5) Biodiversity: protection and restoration of nature and ecosystems

1. DECARBONIZATION: ACTION FOR CLIMATE, CLEAN ENERGY AND SUSTAINABLE TRANSPORT

Decarbonisation implies gradual reduction and, finally, the complete phase-out of the use of fossil fuels for energy production, and the transition to clean, renewable, unlimited and sustainable energy sources. By burning fossil fuels, we increase the concentration of greenhouse gases and thus contribute to climate change, while producing enormous amounts of pollution that is emitted into the air, water and soil, endangering the health of all citizens, stability of natural ecosystems, supplies and access to water and food production.

Climate action has therefore become a hot topic (figuratively and literally). You have probably heard of the Paris Agreement, which was signed by almost all countries in the world, who have agreed to keep the global average temperature increase below 1.5-2°C. Why are these numbers important? Science says an increase in global temperature of 2°C will mean that an additional 411 million people in urban areas will be exposed to water shortages. That is a population almost 24 times larger than today's

1. https://www.klimatskepromene.rs/wp-content/uploads/2020/04/cir_screen-06-04-2020_DRAFT-Study-on-the-Socio-economic-Aspects-of-Climate-Change-on-the-Republic-of-Serbia_UNDP.pdf
2. <https://klima101.rs/virus-zapadnog-nila-klimatske-promene/>

population of all countries in the region combined. A 2°C increase in global temperature means that one fifth of the total number of insects will be exterminated, which will have irreversible consequences for agricultural production. An increase in global temperature of 2C means that 37% of the population of our planet will be exposed to severe heat waves³.

Emissions of harmful gases – and the pollution of water, air and land – are largely influenced by coal, which in the Balkans we mainly use for energy production. This sedimentary rock is crucial for the production of electricity as well as heat. However, coal is one of the dirtiest sources of energy and the transition to renewable energy is a key principle of the Green Agenda. Have you ever seen what the landscape looks like during and after coal mining? Huge basins of black coal waste, dark clouds of smoke hovering over the smokestacks of power plants and citizens suffering from asthma and other diseases. On the other hand, the same devastated landscape could be covered with blue solar farm panels that absorb solar energy, overlooked by an endless army of white wind turbines. Clean energy from renewable sources, such as wind and sun, available to everyone, which does not pollute the environment, does not endanger human health or the climate system – that is the goal of the Green Agenda. In this second picture, you do not need to be only a passive observer, you can get directly involved in energy production! So, for example, you can join forces with your fellow citizens, establish an energy cooperative in your city and build a solar power plant together. This way, you get energy for your homes and over time reduce your cost of electricity, as it is self-produced now. This is also an opportunity to democratize the energy system, because citizens become active participants and owners of energy instead of mere consumers, which has been the case so far.

The key step should be to “remove” coal from our payroll. Of course, this cannot be done overnight. An hour in the morning is worth two in the evening, so one needs to think carefully about how communities dependent on the coal industry can have a fresh start. The gradual reduction and eventual elimination of coal subsidies is in line with the Green Agenda, given the socio-economic consequences that such a transition would have on the population that is directly or indirectly dependent on the coal industry. This means that it is not enough to just support companies that are transitioning from fossil fuels to renewable energy sources – it needs to be made sure that many residents in coal-producing regions who might lose their jobs in the energy sector can now be employed in other industries. A former miner whose work entailed breathing bad air, causing his health to deteriorate day by day, can now work on growing biofuels in the near future, in the sustainable forestry sector, as a solar technician, or in rural tourism – these are all branches of the economy that can fill the gap created by an abandoned coal mine. In addition to sending coal “into a well-

earned retirement”, we must “forcibly evict” fossil fuels from our homes, too. The Green Agenda also envisages help for citizens in the transition to cleaner alternatives for household heating and in overcoming energy poverty, which is one of the main causes of air pollution in the region.

The financial savings that are achieved with the use of coal for both electricity production and heating is merely an illusion because we do not have a realistic view of all the costs caused by coal use. There are hidden costs, which manifest themselves as impaired health and shortened life expectancy of our citizens, reduced productivity at work, days spent on sick leave and pressure on the health system – and this bill for the Western Balkans could reach up to €8.5 billion⁴. We are not rich enough to keep on using cheap solutions!

“Retirement” of coal will not slow down further economic development, as some believe. Improving the standards of the entire region can be achieved faster, cleaner and safer with renewable energy sources. For example, the European Union has reduced its greenhouse gas emissions by almost a quarter in the last 30 years, while achieving economic growth of 60%⁵.



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There is a long way to go to fulfill the goal of decarbonization, so it is important to make it as comfortable as possible. Construction of regional railway routes, improvement of river transport and implementation of smart transport systems in order to improve logistics and reduce pollution – these are the principles of the Green Agenda aimed at improving road infrastructure. Lately, it has become common for us to use our phones to make an ID card appointment – we are already familiar with such benefits of digitalization. However, imagine that you are planning a business travel route to a neighboring country on your smartphone, which involves booking an electric bus that

stops in front of your house. Then on the way back you decide to avoid the crowds at the border crossing by scheduling a boat trip on the Danube to get to your city. You get out right at the bike stop and unlock your bike via the app, and after some well-advised physical exercise, you get home refreshed in the evening.

Another important step when it comes to climate change is to adapt to the climate change that has already taken hold. It is already causing high-intensity weather disasters, and the citizens of our region often face severe floods and long droughts. Adapting requires people to think ahead. Thus, there is a necessity of assessing which areas could get flooded, which rivers might overflow, in order to build higher walls to prevent floods or reduce their intensity. Also, as droughts have become very frequent in the Western Balkans region, one should employ good planning and use flood seasons to build up water reserves, which can be later used by farmers to irrigate their

3. <https://www.ipcc.ch/sr15/chapter/chapter-3/>

4. Health and Environment Alliance, “Unpaid Health Bill – How thermal power plants in the Western Balkans make us sick”.

5. https://ec.europa.eu/clima/eu-action/climate-strategies-targets/progress-made-cutting-emissions_en

fields. The Green Agenda provides a framework for these activities in the region.

2. CIRCULAR ECONOMY

In nature, everything circulates; everything once taken is returned and used again. In nature, everything has its purpose and nothing is waste, everything is used to the full. For example, during its lifetime, one large oak tree takes water from nature (which it releases into the atmosphere through its leaves), uses sunlight, and numerous minerals from the soil. When a tree falls in the forest, it slowly decomposes and becomes food for insects, fungi and then for microorganisms. Microorganisms decompose the remains of the tree, turning it into food, minerals, humus and fertile soil in which other trees can now grow. And the cycle of life continues.

Unlike nature's economy, ours does not return resources to nature. On the contrary, we take them, use them and throw them in landfills, where resources become waste and a danger to health, polluting the environment. We see the consequences of such an economic model and waste management across the Balkans, from rivers full of 'plastic islands', fields and forests turned into illegal dumps, to landfills that are increasingly prone to fires and cause serious air pollution issues, like the Vinča fire in the summer of 2021.

The second pillar of the Green Agenda is circular economy, which implies striving to be frugal and careful with the resources we take from nature. Circular economy means that what we take from nature as a raw material stays in use for as long as possible and that afterwards, it is either used for other purposes or recycled. Or, as a last resort – we leave it in the landfill, as waste. This means that when we plan a product, we consider its entire life cycle and ask ourselves: how much raw material do we need for that product,



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how much energy and water do we use for its production, how much waste do we make during the production and what will we do with that waste. We are considering, for example, how to make a refrigerator that will last as long as possible, that can be repaired in case of malfunction, and whose components will be used for other purposes when repair is no longer a possibility. We plan in advance the use of all raw materials for other purposes, too, e.g. as spare parts for the repair of other refrigerators; we plan the used metals for the production of new refrigerators, and some parts can be used for energy production. And only the absolutely non-reusable materials will end up in a landfill.

In order to have a circular economy, we need modern waste management (separation of paper, metals, plastics, glass and bio-waste). In terms of recycling, Serbia lags behind the EU average, since the average inhabitant of our region recycles less than 3% of the products he or she comes in contact with⁶, while the European average is as high as 44%. Slovenians, for example, recycle as much as 42.5% of the products they use⁷.

Circular economy treats waste as a resource. This way of functioning of the economy has numerous advantages, both for nature and for people. First of all, it prevents generation of waste that we see all around us, in landfills along roads, in rivers or forests. It then enables the creation of new jobs (for example in repair, recycling, or other sectors) and promotes the use of locally available raw materials. Further development based on the principles of circular economy has great potential for the countries of the Western Balkans. With new jobs, through the application of the principles of circular economy, our region's economy will also become more productive. We are currently lagging behind the European average, since for the same amount of used natural resources, we produce up to 7 times less economic value⁸.

3. FIGHT AGAINST WATER, AIR AND SOIL POLLUTION

Today we are able to launch a mobile application and see the icon of a smiling person, or more often lately, of one wearing a gas mask, which indicates that the air is excessively polluted and that we should not go outside. Citizens of the Western Balkans are much more exposed to air pollution than citizens of other parts of Europe. Over 30,000 people in the Western Balkans lose their lives prematurely each year due to high concentrations of suspended particles in the air⁹.

Citizens often ask themselves – how can we be sure that we are getting accurate data? The Green Agenda envisages the establishment of reliable and modern air quality monitoring systems, their harmonization with European standards, as well as the formalization of regional cooperation on the monitoring of pollutants. The Green Agenda gives us support to reduce emissions of pollutants into the air and to apply standards that protect the environment and citizens' health. However, apart from technology, standards and regulations, the Green Agenda insists on the regional governments' political commitment and cooperation.

Also, it is not enough to limit these obligations to air. We must apply the

6. https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/green_agenda_for_the_western_balkans_en.pdf, p. 8

7. <https://balkangreenenergynews.com/slovenia-ranks-third-on-list-of-top-10-countries-with-most-recycled-waste/>

8. https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/green_agenda_for_the_western_balkans_en.pdf, p. 7

9. EEA – Air Quality in Europe in 2020, p. 108

same principle of regional cooperation and monitoring to water and soil. Take, for example, the inhabitants of a rural area around the Danube. Due to the proximity of the river, they have access to drinking water, but they are generally not included in the wastewater collecting and treating system. Therefore, their wastewater goes directly to underground reservoirs or surface water. They use water from the same sources for drinking and field and orchard irrigation, but they are often unable to do so due to excessive nitrate levels or improper bacteriological composition. Therefore, it is necessary to develop wastewater and sewage treatment technologies, which would contribute to the protection of entire river flows, and to the population having access to drinking water. In this case, the regional cooperation of countries that share a particular river is of great importance, so that joint projects and solutions can help maintain the quality of watercourses. On the other hand, soil is destroyed by erosion many times faster than natural processes regenerate it. Serbia, Montenegro and Albania are particularly affected by erosion. Albania loses about 45 hectares of land a year¹⁰, while 80% of agricultural land in Serbia is endangered¹¹. Finally, in



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Montenegro, even the Bay of Kotor is endangered due to various influences caused by human activity. The Green Agenda emphasizes the importance of afforestation as one of the ways to combat the erosion process. Forests regulate water outflow, its absorption and its permanent retention.

4. PRODUCTION OF HEALTHY FOOD

Given that land, like water, is the basis for agriculture of the entire region, this pillar of the Green Agenda is logically followed by the next one, namely the protection of agricultural production.

Agriculture, along with livestock breeding, forestry and fishing, is historically a very important part of people's lives in this area, both for producers and consumers. In the Western Balkans, small producers continue to account

10. https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/green_agenda_for_the_western_balkans_en.pdf, p. 11

11. <https://klima101.rs/kvalitet-zemljista-u-srbiji/>

for a large percentage of the food produced, with agriculture contributing about 10% of the region's gross domestic product. The implementation of the Green Agenda would imply producing better quality food, in a way that does not harm the environment and with the use of technological innovations. Thus, for example, farmers from our region could improve their productivity by monitoring data obtained via satellite images, about potential weather disasters, which would allow them to protect their crops in a timely manner. On the other hand, a detailed analysis of the weather conditions in the Western Balkans, as well as one of plant and animal species and the prevalence of certain pests, can help farmers choose the potentially most successful crop for their fields. Such a principle would also contribute to the reduced use of pesticides, fertilizers and other agents, preventing the pollution of both soil and water, and reducing the negative impact of agriculture on the environment. That way, the quality of the food we eat would improve, and the use of technological innovations would increase the quality of processed agricultural products. Food processing would also need to be accompanied by improvements in the transparent labeling of product

Why is biodiversity important to us? Biodiversity is, in fact, the diversity of flora and fauna that surrounds us, and the greater that diversity, the more resistant nature is to fires, floods, disease, and climate change. The more resilient nature is, the better it is able to continue to provide us with all the ecosystem services on which we depend. So, for example, rich and diverse coastal forests prevent floods or reduce their intensity. A greater variety of pollinating insects can contribute to more successful pollination of fruits and other plants that we grow, and thus increase food yields. The Western Balkans can boast a wealth of habitats and species; this part of Europe is home to many species that live only here, in our region, and which we call endemic species. All of them are necessary to sustain the ecosystem services we depend on.

The fifth pillar of the Green Agenda seeks to halt the loss of biodiversity, further deforestation and land loss, and enable the restoration of ecosystems and biodiversity in the Western Balkans. In order to achieve that, it is necessary for the countries of our region to jointly develop strategic plans



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content, which would allow us, the consumers, to be better informed when choosing the food we consume and buy.

5. BIODIVERSITY: PROTECTION AND RESTORATION OF NATURE AND ECOSYSTEMS

By regulating the use of pesticides, many insects will be less endangered, which is important for the fifth pillar of the Green Agenda, namely the protection and restoration of biodiversity and ecosystems.

Nature enables life on earth as we know it: it provides water, food, clean air, medicinal substances, it protects us from various disasters, such as floods or storms, regulates the change of the seasons and weather conditions on which we depend. All of this comes to us from nature and these ecosystem services that the existence of our society depends on are often taken for granted.

for the protection of nature and biodiversity and implement them together. We also need to create joint plans for the renewal of forest areas, as well as the prevention of deforestation, which is currently a big problem in some of the Western Balkan countries. In order to further improve the preservation of biodiversity and ecosystems, the Green Agenda will encourage cooperation between our countries, particularly between institutions dealing with nature protection and research, with the aim of establishing a joint Biodiversity Information Center of the Western Balkans. The goal of this cooperation, as well as the purpose of the establishment of a joint information center, is to explore the possibilities and ways of preserving biodiversity, as well as the possibilities of developing nature-based solutions to defend against the effects of climate change.

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ОБЕДИНЕТ БАЛКАН
ЗА ЧИСТ ВОЗДУХ

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