

Bosnia and Herzegovina *Country Profile*



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1. Introduction

Quick Facts		
	Population	3,301,000 ¹
	GDP per capita	6,073.3 ²
	10-year average annual GDP growth	2.2% ³
	CO2 Emissions per capita	6.4 ⁴
	Renewable energy consumption share	40.75% ⁵
	Unemployment rate	15.7% ⁶
	Global Gender Gap Index 0-1 (gender parity)	0.614 ⁷

¹ The World Bank, 'Population, total – Bosnia and Herzegovina', <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=BA>, accessed on 30 July 2020.

² The World Bank, 'GDP per capita – Bosnia and Herzegovina', <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=BA>, accessed on 30 July 2020.

³ CEIC Data, 'Bosnia and Herzegovina Real GDP Growth', <https://www.ceicdata.com/en/indicator/bosnia-and-herzegovina/real-gdp-growth>, accessed on 31 July 2020.

⁴ The World Bank, 'CO2 Emissions (metric tons per capita) – Bosnia and Herzegovina', <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=BA>, accessed on 30 July 2020.

⁵ The World Bank, 'Renewable Energy Consumption (% of total final)', <https://data.worldbank.org/indicator/EG.FEC.RNEW.ZS?locations=BA>, accessed on 30 July 2020.

⁶ The World Bank, 'Unemployment, total (% of total labor force) (national estimate) – Bosnia and Herzegovina', <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?locations=BA>, accessed on 30 July 2020.

⁷ World Economic Forum, *Global Gender Gap Report 2020*, Geneva: World Economic Forum, 2020.

2. Policy and Regulatory Framework

In Bosnia and Herzegovina (BiH), there is no state-level law on environmental protection. BiH's highly decentralized government is inhibiting policy coordination and reform, leaving the policy framework fragmented and devoid of executive power. Most environmental protection has been integrated at the level of the separate entities.

The country has a specific internal organization structure. BiH is divided administratively into two separate entities, the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS), and the autonomous region of Brčko District. The FBiH is divided administratively into 10 cantons, which in turn are divided into municipalities. There are 79 municipalities in the FBiH. RS is divided administratively into 62 municipalities. Brčko District is a separate administrative unit under the sovereignty of BiH.⁸ Each entity and unit are responsible for its own business registration processes.¹³

The law on environmental protection in the FBiH dates back to 2003, without any introduced amendments up to 2011. The main adjustment that year has been the establishment of a functioning permitting system.¹⁰ In December 2019, after five years of procedure in the FBiH Parliament, the House of Representatives adopted a revised law on environmental protection. However, to date, this law has not been adopted by the House of Peoples (upper house of the FBiH Parliament). The law incorporates EU provisions, such as the strategic environmental assessment (SEA), the environmental impact assessment (EIA), the industrial emissions directive (IED), the Seveso-III-Directive (prevention of accidents involving hazardous materials), and the EU eco-management and audit scheme.⁹

The RS adopted the law on environmental protection in 2012, which has been revised in 2015. According to the Environmental Performance Review of BiH, this revised version contained more details on the SEA. Besides that, the main improvements were to be found in more elaborated provisions on environmental permits and eco-labelling, as well as advanced provisions on the access to environmental information and public participation. Nevertheless, the integration of practices around environmental permitting, eco-labeling, and strategic environmental assessments have remained challenging.¹⁰

The law on environmental protection in Brčko District dates back to 2004 with no recent amendments.¹⁰ According to the UN Review on the implementation of the sustainable development goals in BiH, the laws on environmental protections in RS, the FBiH, and Brčko District require an environmental impact assessment as well as a strategic environmental assessment for the issuance of a work license, in accordance with the Directive EU 2008/99/EC on the Protection of the Environment through Criminal Law.⁸

There are no clearly defined environmental policies targeting SMEs in the FBiH. The FBiH does not have a public agency to co-ordinate SME policy implementation or to facilitate SME-related

⁸ United Nations. Sustainable Development Goals, *Voluntary Review. Implementation of Agenda 2030 and the Sustainable Development Goals in Bosnia and Herzegovina*, Geneva: United Nations, 2019.

⁹ Personal interview with Nermina Suljevic (City of Sarajevo), 7 August 2020.

¹⁰ United Nations Economic Commission for Europe, *Bosnia and Herzegovina. Environmental Performance Reviews*, Geneva: United Nations, 2018.

activities.¹³ The FBiH's Waste Management Strategy (2008-18), however, includes environmental policy elements that are relevant to SMEs. Examples are promotional activities on waste prevention and recycling and guidance regarding cleaner production practices.¹³

The RS has environmental policies tailored to SMEs. The SME strategy (2016-2020) of RS, aims to improve the environmental performance of SMEs. Information campaigns and training programs to raise awareness on environmental issues have been the focus of governmental actions. The introduction of eco-labeling has been envisaged.¹³ Currently, eco-labeling is mainly used for defining organic produce.⁹ Another topic that has been raised by this strategy, is energy efficiency, for which financial resources have been made accessible. The implementation of the activities under this strategy have been rather slow, mainly caused by delays in fund mobilization combined with donor support reliance.¹³ According to the environmental performance review of BiH, BiH does lack proper monitoring on the implementation of SME greening policies and measures. Evidence on the implementation levels in sectors such as agriculture, transport, and infrastructure are therefore not widely available.¹⁰

The FBiH has introduced fees on plastic bags, packaging, and electronic waste. However, the measures that have been put in place, such as deposit refund schemes and economic incentives could use reinforcement. The Environmental Protection and Energy Efficiency Fund in RS, collects fee revenue coming from a special fee on packaging, mainly paid by importers.¹¹ The fund carries out activities related to the protection of the environment and energy efficiency in cooperation with the Ministry of Town Planning, Civil Works and Environment and the Ministry of Economy, Energy and Development.

The complexity of the system with separate entities is seen as a large burden for the development of green or circular economy businesses by the local experts since there is no central authority that carries out the full responsibility on the integration of strategies related to the environment. It is in fact the local UNDP office that is working on a national framework for SDG integration to be used as a national strategy. The framework will be finalized in a couple months from now.¹²

The Strategy for Rural Development (2018-2021) is currently one of the few state-level strategies that includes some environmental protection measures that could be relevant for businesses, such as the promotion and certification of organic produce and the carbon footprint of agricultural production.¹³ Another strategic nation-wide document created in the past is the Emission Reduction Plan of BiH by the Council of ministers established in 2015.¹⁴

BiH does have a Framework Energy Strategy until 2035, which places at its core a competitive sector, security of supply, sustainable development and the reduction of negative impact on the environment.¹⁵ Besides that, BiH started drafting the National Energy and Climate plans in line with the EU Green Deal, together with a national working group which includes 90

¹¹ Environmental Protection and Energy Efficiency Fund of the Republic of Sprska, 'Waste Decorates the Planet with Waste. Results of the Competition 'Garbage Starts from Us' and 'Master and Apprentice', <http://ekofondrs.org/>, accessed on 2 August 2020.

¹² Personal interview with Emir Adzovic (SDG roll-out at UNDP), 13 July 2020.

¹³ OECD, 'SME Policy Index: Western Balkans and Turkey 2019', https://www.oecd-ilibrary.org/development/sme-policy-index-western-balkans-and-turkey-2019_g2g9fa9a-en, accessed on 4 August 2020.

¹⁴ Arnika and EKO forum Zenica, *Environmental Permitting System Bosnia and Herzegovina. From fragmented to integrated pollution prevention and control: comparative analysis of permitting systems and methods*, Prague: Zenica, 2016.

¹⁵ Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, *Framework Energy Strategy of Bosnia and Herzegovina Until 2035*, Sarajevo: Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, 2018.

representatives.¹⁶ The government has been planning on revising the Climate Change Adaptation and Low Emission Development Strategy for BiH.¹⁷

The preparation of the BiH Environmental Strategy and Action Plan (ESAP) 2030+ has started September last year and will be worked out until April 2022. This project is financially supported by the Swedish Embassy and focuses on assessing the current state of the environment in BiH, supporting the definition of environmental policy in BiH, capacity building of organizations, institutions, networks and other relevant actors in BiH to design, implement and monitor environmental policy measures, particularly in the area of cooperation with EU institutions, assessing and defining needs for financial resources and the human capacity for BiH ESAP 2030+ implementation, and awareness-raising related to environmental issues, with a focus on the general public.¹⁸

According to the Regional Country Specific Report on circular economy, the term “Circular Economy (CE)” is not incorporated as a self-standing term in regulatory or policy frameworks. Only in RS, CE principles have been used in the waste management strategy, based on EU directives 2008/98/EZ.¹⁹

The accession process of BiH to the EU has resulted in endeavors to adapt certain EU standards and regulations. One example is the Small Business Act (SBA). The Ministry of Foreign Trade and Economic Relations is responsible for the implementation of the SBA principles, amongst which the principle on SMEs in the green economy.¹³ Integrated permits, such as regulated by the EU Directive 2010/75/EU on industrial emissions (IPPC Directive), have not yet been issued in BiH since the provision has not been fully transposed. The result of this is that operators of installations which have several environmental impacts (e.g. air, water, and generation of waste), would need to apply for multiple individual permits at different ministries. The polluter pays principle is mentioned in several laws and strategies in both entities. In practice, however, the use of economic instruments to protect natural resources and to incentivize green economy growth has limited results and is often not compliant with the principle.¹⁰

¹⁶ V. Spasić for Balkan Green Energy News, 'EU to focus on Green Deal diplomacy; preparing Green Agenda for Western Balkans', <https://balkangreenenergynews.com/eu-to-focus-on-green-deal-diplomacy-preparing-green-agenda-for-western-balkans/>, accessed on 5 August 2020.

¹⁷ UNDP. Bosnia and Herzegovina, 'Climate Change Adaption and Low Emission Development Strategy for BiH', https://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/environment_energy/climate-change-adaptation-and-low-emission-development-strategy-.html, accessed on 5 August 2020.

¹⁸ Stockholm Environment Institute, 'Development of the Environmental Strategy and Action Plan of Bosnia and Herzegovina', <https://www.sei.org/projects-and-tools/projects/bosnia-herzegovina-environmental-policy/>, accessed on 5 August 2020.

¹⁹ Env.net, *Circular Economy. Regional Report*. Env-net, 2020.

3. Market Demand

The law on Public Procurement of BiH, adopted in 2014, complies a fully decentralized public procurement system, which grants the responsibility for public procurement to contracting authorities. According to the Law, technical specifications, which are part of the bidding documentation, shall be determined in the form of performance or functional requirements that may include environmental features and energy efficiency features. The Law also provides for the use of the most economically advantageous tender (MEAT) criterion, which integrates and assesses environmental characteristics. Nevertheless, according to the Regional Circular Economy Country Specific Report, public procurement mechanisms in different sectors are currently prone to corruption.¹⁹ In February 2020, a new framework has been proposed for green public procurement that is currently being decided up on at the national level.⁹ According to the review of the 2030 agenda on the implementation of the SDG's, there is a lack of awareness concerning the importance of ensuring the rational use of natural resources, respect for nature and the need to keep the environment clean and unpolluted for future generations.⁸

According to the Third National Communication and Second Biennial Update Report on Greenhouse Gas Emissions of BiH, content on environmental issues is underrepresented at schools. Besides that, when the topic is addressed, it is done in an isolated matter, neglecting the value of an interdisciplinary approach. Strengthening public awareness has been addressed by entity-level ministries, public discussions, media publications, and individual civil society initiatives. However, activities in this field have been limited thus far. According to the same report, there is a need for a higher level of awareness and knowledge among decision-makers and the general public.²⁰ According to the "Regional Circular Economy Country Specific Report", people in BiH who are not informed or educated on CE concept, confuse CE with the definition of recycling.²¹

The Aarhus Centre Network, which promotes the understanding and application of the Aarhus Convention and which works on the establishment of a number of rights of the public with regards to the environment, such as access to environmental information, public participation in environmental decision-making, and access to justice, as well as cooperation between the relevant authorities, civil society, the judiciary, the private sector, the media and the public regarding environmental issues, has achieved significant cooperation with many environmental non-governmental organizations which provided support for the establishment of the Green Parliamentary Group in the Parliamentary Assembly of BiH.²²

The Center of Environment, which is part of the network above, focuses as a part of their activities on citizen participation through dialogues with individuals and communities. One recent example is a case on a treatment plant that is planned to be constructed in the Karakaj area. The center has presented the case and its impact to the citizens combined with the provision of access to the environmental impact assessment of the plant. To stagnate the process, citizens were requested to comment on this case.²³

²⁰ G. Trbic et al., *Third National Communication and Second Biennial Update Report on GHG Emissions of Bosnia and Herzegovina under UNFCCC*, Sarajevo: UNDP in Bosnia and Herzegovina, 2016.

²¹ Co-PLAN, Institute for Habitat Development, *Regional Circular Economy Country Specific Report*, 2020

²² European Union, *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, Aarhus: European Union, 1998.

²³ Centar za životnu sredinu, 'The Incineration plant in Zvornik is a hazard for its citizens and the environment', <https://czzs.org/the-incineration-plant-in-zvornik-is-a-hazard-for-its-citizens-and-the-environment/?lang=en>, accessed on 6 August 2020.

The UNDP Accelerator Lab in BiH is focusing on consumer awareness related to resource consumption at the UNDP offices with a focus on plastic materials through rewarding challenges, direct conversation, and offering creative solutions for waste disposal. The movement has received a large interest from other organizations and schools.²⁴

Several groups and organizations, which mainly have established their community on social media platforms, have aimed to redefine the relationship between individuals and consumer goods in the last years. Examples of these groups are Trazim- nudim prevoz, a carpooling initiative, and Otpada Bez – Zero Waste. According to the initiator of Otpada Bez, people in BiH feel a strong connection between status and the products they consume, where secondhand goods are connected to a lower socioeconomic status.²⁵ The Humanitarian organization ADRA has launched a project on recycling textile materials in 2015 called “Hljeb od tekstila”. The project employs socially disadvantaged individuals for sewing activities.²⁶ It seems there is a rising trend of community or grass-root developments that are transforming into commercial green enterprises.⁹

²⁴ UNDP. Bosnia and Herzegovina, 'Single-Use Plastic Free Workspaces? It Is Possible!', https://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/Blog/single-use-plastic-free-workspaces--it-is-possible-.html, accessed on 6 August 2020.

²⁵ Personal interview with Nikolina Basic (Otpada Bez), 22 July 2020.

²⁶ Personal interview with Bozidar Mihajlovic (ADRA), 27 July 2020.

4. Startup and Investment Climate

Besides the general lack of investment opportunities in BiH, financial incentives for (small scale) company greening is close to absent. Bank lending is the dominant form of financing across Bosnia and Herzegovina (estimated at 53% of the GDP).¹³ The RS Strategy for the Development of Small and Medium-Sized Enterprises 2016–2020 includes a program for support to small and medium-sized enterprises in preserving the environment, which envisages activities focused on the better use of environmental principles in business operations and respect for the principle of energy efficiency.⁸ It also foresees the introduction of financial incentives for SME greening which will be realized through projects by the Fund for Environmental Protection and Energy Efficiency. To date, however, no activities have been implemented to achieve this.¹³

The Business Community and Sustainable Development Goals Conference was held in Sarajevo on 12 June 2018 with the aim of raising awareness on the role of businesses in delivering on the promise of sustainable and inclusive development.⁸

General access to financing is partly facilitated by the introduction of the EU-financed Competitiveness of Enterprises and Small and Medium-Sized Enterprises Programme (COSME), which will help to facilitate access to finance and foreign markets for SMEs. The "Challenge to Change" (C2C), program in BiH has been established by Sida, the agency responsible for Sweden's official development assistance to developing countries and the Embassy of Sweden. It is implemented by the Sarajevo Economic Region Development Agency, SERDA, and the Republic Agency for Development Small and Medium Enterprise (RARS). The program is open to SME's and startups that have innovative business ideas, products or services which may lead to increased employment, increased competitiveness, and sustainable socio-economic development in BiH. Companies that meet the criteria can receive a co-funding grant amounting to a maximum 30.000 EUR, up to 50% of the investment costs (total of 4M euro available).²⁷ According to experts, the program has been well received²⁸, with 110 companies that were provided with support during the first four calls of the program.²⁹

The Embassy of Sweden in BiH is currently working on their new strategy for the next seven years that will be finalized this November. In this strategy, transitioning to a circular economy will be specifically mentioned and prioritized. To identify potential leverage points for activities related to the development of green and circular businesses and the incorporation of SDG's in business development, the Embassy of Sweden has requested local consultants to establish a report on this subject that will be delivered by the end of August.²⁹

BiH has insufficient governmental policies to regulate support, taxes, relevance, and bureaucracy, entrepreneurship programs and education, and R&D transfer, according to the research of the Global Entrepreneurship Monitor, potentially causing the motivation to start a business to descend

²⁷ Challenge To Change, 'About project', <https://c2c.ba/en/project/information/1>, accessed on 4 August 2020.

²⁸ Personal interview with Bojan Cudic (Enterprise Europe Network RS Coordinator; Development Agency RS; European IP Helpdesk Ambassador), 3 August 2020.

²⁹ Personal interview with Emma Bergholtz (Embassy of Sweden in Sarajevo), 11 August 2020.

(2017).³⁰ Nevertheless, according to the same report, entrepreneurship is seen as a good career choice by citizens of BiH.

The UNDP in BiH recently started with a pilot program for entrepreneurs that have integrated CE principles into their business models. The seven entrepreneurs that will be selected will receive funding of 10.000 dollars and support from experts.³¹ The UNDP EU4Business and EU4Agriculture programs are supporting the integration of CE principles into business models through the support of competitiveness and innovation in export-oriented sectors. This August, the UNDP has launched a call with funding from their core fund addressing a better recovery for the current pandemic.³² The pilot programme aims to support the private sector to use the current economic crisis as an opportunity, and reinvent some of their linear business practices to become more sustainable and green. Companies are requested to propose a specific intervention, where after the selected companies will be provided with guidance for long-term transformation and with investment in technology (e.g. specific machinery or renewable energy systems).³³

Foundation Mozaik³⁴ is a foundation that identifies, empowers, and invests in value-driven and innovative social entrepreneurs. It has an online platform called LONAC³⁵, which forms and ecosystem for youth activism, entrepreneurship, and social (impact) entrepreneurship. A list of accelerators, incubators, and training programs that stimulate (green) business development and innovation is to be found in the appendix.

³⁰ Global Entrepreneurship Monitor, 'Entrepreneurial Behaviour and Attitudes', <https://www.gemconsortium.org/economy-profiles/bosnia-and-herzegovina>, accessed on 4 August 2020.

³¹ Personal interview with Kemal Bajramovic (UNDP), 13 July 2020.

³² UNDP. Bosnia and Herzegovina, 'Call for the Expression of Interest by the private sector for participation in a pilot support intervention for circular business practices announced', https://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/presscenter/articles/2020/circular-pilot.html, accessed on 4 August 2020.

³³ Personal interview with Amina Omicevic (Head UNDP Accelerator Lab), 7 August 2020.

³⁴ Foundation Mozaik. Creators of Impact Economy, <https://mozaik.ba/>.

³⁵ Lonac.pro, <https://www.lonac.pro/>.

5. Socio-Cultural Context

There is a general pessimistic consensus regarding the future of BiH. The high unemployment rate and limited job opportunities is causing many young people to move abroad for a brighter future. On the other side, young people that do see their future in BiH, tend to explore entrepreneurial activities as a solution for the absence of job opportunities, even when it is discouraged by older generations.⁹

According to data from the "Global Entrepreneurship Monitor", the percentage of people that has the intention to start a business within the next three years ("entrepreneurial intentions rate"), is far below the global average. The percentage of people who are involved in early-stage entrepreneurial activity that believes that their product is new to costumers or that their product/service is unique ("innovation rate"), is also below the global average. Nevertheless, the percentage that believes entrepreneurship is a good career choice ("entrepreneurship as a good career choice rate") is above the global average.³⁰

The World Bank's Doing Business indicators highlight BiH's particularly poor performance in the areas of starting a business (2016 rank: 175), dealing with construction permits (2016 rank: 171) and paying taxes (2016 rank: 154). These rankings are much lower than Bosnia and Herzegovina's overall rank of 79. Trading across borders (2016 rank: 28), resolving insolvency (2016 rank: 38), and getting credit (2016 rank: 42) are the strongest aspects of the business environment according to the World Bank. Bosnia's rank improved slightly in 2016 from its 2015 rank of 82.³⁶ A detailed description of the factors and phases involved in doing business in Bosnia and Herzegovina is made by the World Bank Group under the Doing Business 2020 report.³⁷

Female participation as business owners or managers is low in Bosnia and Herzegovina; 9% of men are self-employed (entrepreneurial activity) versus 3.3% of women. The reason for this could be that female entrepreneurship is held back because of cultural norms. However, many women find themselves with no other option due to limited employment activities. The participation of women in business is reportedly increasing over time. There are several support programs led by governmental and international organizations. The RS government has also adopted a Women's Entrepreneurship Development Strategy for the period 2018-22. The MI BOSPO – a micro-credit foundation – is an important player in supporting women's access to finance.²⁸

Although migration from rural to urban areas lasted many years, a trend that shows the opposite is currently on the rise. Air pollution levels in urban areas have reached dangerous levels and cancer cases are becoming more frequent. This causes people to turn to rural areas to reclaim a healthier lifestyle which could potentially form incentive for green rural businesses to develop.⁹

³⁶ European Investment Bank, 'Bosnia and Herzegovina: Assessment of Financing needs of SME's in the Western Balkans countries', <https://www.eib.org/en/publications/econ-assessment-of-financing-needs-of-smes-in-bosnia-herzegovina>, accessed on 6 August 2020.

³⁷ World Bank Group, Economy Profile. Bosnia and Herzegovina. Doing Business 2020, Brussels: World Bank Group, 2020.

6. Opportunities and Obstacles

	Opportunities	Obstacles
General economic context and investment climate	Bank lending is the dominant form of financing in BiH. According to the OECD SME Policy Index, the coordination of banking supervision was recently reinforced. ¹³ The NGO sector is developing and supporting projects. ⁴⁰	General lack of investment opportunities and absent financial incentives for green business development. ¹³ Government support is limited. No dedicated framework for venture capital/angel investors. Limited amount of data collected in this domain.
General political context	The decentralized system could form an opportunity to act locally with support of relevant local authorities. ⁹	Highly decentralized government leaving the policy framework devoid of executive power. No central authority that carries out full integration. High levels of corruption. Insufficient data collection due to complex government structures.
Policy and regulatory (both national and regional/local)	There is an opportunity for enforcing and monitoring existing policies and the digitalization of current outdated processes.	No integrated permit structures. Policies generally lack enforcement. Complex bureaucratic systems for new and operating businesses. Besides that, most processes such as tax and bill payments are paper based, which requires large time and energy investments. ⁴⁰
Subsidies and fiscal benefits	There are support mechanisms for new businesses (mainly focused on youth and marginalized groups).	High levels of corruption in the system of allocating subsidies and fiscal benefits. ⁹ There are no specific subsidies or tax benefits on CE. ⁹
Public procurement	Louder initiatives of local authorities in favor of green public procurement.	Public procurement mechanisms are currently prone to corruption. ²¹ No framework on green public procurement.
General knowledge and awareness about CE	The experts addressed clarity on the cost-benefit outcomes as an incentive to change (e.g. agriculture).	Not many people have knowledge on CE. Mainly defined in relationship to waste management. Lack of awareness concerning the importance of ensuring the rational use of natural resources, respect for nature and the need to keep the environment clean and unpolluted. Content on environmental awareness is underrepresented. There is a missing a conjunction between sustainability and business
Consumer demand (linked to previous point)	There is a strong domestic demand for traditional products which could stimulate the growth of local value chains. ³⁸	Modest activities related increasing consumer awareness.

³⁸ Personal interview with Mirza Agic (Agency of Statistics), 10 July 2020.

Public-private partnerships	Public- private partnerships happen on the margin of existing PPP framework. Rise in awarness of importance of this synergy created between public and private sector.	Public private partnership regulations are complicated and lack enforcement.
Support programs or platforms for green and circular businesses	More opportunities for networking, mentorship, and exchange of knowledge for green and CE businesses. ⁹ A recent UNDP pilot on the introduction of CE principles for crisis recovery could form an incentive for the introduction for CE principles into various sectors. ³²	Limited availability of knowledge to understand the real meaning of existing platforms or programs.
Professional training and education on CE / Skilled labour	Several non-formal entrepreneurial education programs targeting groups such as high school students, university students, women, and youth in general ⁹	Big challenge in terms of human resources. The educational system could provide more young people with stronger skills in the STEM fields (that tend to be associated with innovation). Young people with relevant skills tend to look for opportunities outside of BiH and are not persuaded to stay in the country. Not enough knowledge to understand the real meaning and importance of existing programs or platforms. Lack of courage, Fear of adnminsitrativ complexity. ⁹
Specific economic sectors	The most promising sectors for change according to experts are agriculture and tourism or agri-tourism.	Lack of concrete action in sectors outside of agriculture, tourism, and agri-tourism.
Other socio-cultural factors (incl. gender issues)	Wide areas of untouched natural environment could form a big incentive for protection efforts. Health issues and environmental problems as driving force behind change. ³⁹	Low level of women as business owners. General pessimistic faith on the future of the country.
Other commercial or legal challenges	Increasing the competitiveness could accelerate change and growth.	Inadequate legal framework with complex administrative procedures and taxes as obstacles for the establishment or growth of businesses.
Available technologies and infrastructure		In general, companies are not using innovative technologies. ⁴⁰

³⁹ Personal Interview with Denis Zisko (Energy and Climate Change Program Coordinator at the Center for Ecology and Energy) 8 July 2020.

⁴⁰ Personal Interview with Salko Užičanin (CEO of Solheat), 6 July 2020.

7. Impact Indicators and Other Data

Topic	Numbers	Source
Domestic Material Consumption	11 tons per capita (2017)	https://data.oecd.org/materials/material-consumption.htm#indicator-chart
Environmental protection expenditure	Total expenditure for environment protection in 2017 amounted to 95.402.323 convertible mark (BAM).	https://www.sarajevotimes.com/what-is-the-total-expenditure-for-environment-protection-in-bih/
Waste and Material Management	The estimated quantity of municipal waste generated in 2018 was 1,243,973 tons, i.e., 355 kg per year per capita or 0.97 kg per capita per day. The percentage of the population covered by waste collection services is on average 70%. The remaining population, which is not covered by municipal services, mainly resides in rural areas. The total quantity of waste collected is comprised of municipal mixed waste (90.9%), collected municipal waste separated at the source (4.0%), waste from gardens and parks (3.1%), and packaging waste (2.0%).	http://bhas.gov.ba/data/Publikacije/Saopstenja/2019/ENV_01_2018_Y1_0_BS.pdf
Green Jobs	The main findings of this analysis demonstrate that KM 1 million investment in improving energy efficiency in buildings in BiH can: create net salaries for all categories of workers in the amount of KM 288,492, or 28.84% of the total investment, create taxes and contributions levied on the wage bill in the amount of KM 200,451, or 20.04% of total investment, cover the wage bill in the amount of KM 488,943, or 49% of the total investment, and other project costs (materials, equipment, tools, etc.) in the amount of KM 511,057, or 51%, of the total amount of KM 200,451 for taxes and contributions, create funds.	http://www.ph.undp.org/content/dam/bosnia_and_herzegovina/docs/Research&Publications/Energy%20and%20Environment/%E2%80%9CGreen%20Jobs%E2%80%9D%20Study%20by%20UNDP/zeleni-poslovi-english-pages.pdf
Domestic Material Extraction	In 2014 it amounted to 30 million tonnes, a slight decrease of 2 per cent compared to the previous year. Broken down by category of material resources, the largest shares of DME are fossil fuels (38.1 per cent) and non-metals (36.1 per cent), followed by biomass (16 per cent) and metal ores (9.2 per cent).	https://www.eionet.europa.eu/etc/etc-wmge/products/b-country-profile-bosnia_finalised.pdf

8. Appendix

8.1 List of Interviewees

Name	Role and Organization	Date of Interview
Adzovic, Emir	SDG roll-out support and private sector engagement at UNDP BiH	13.07.2020
Agić, Mirza	Senior Advisor at Short Term Statistics at Agency for Statistics of Bosnia and Herzegovina - Department of Environment	10.07.2020
Bajramovic, Kemal	Head of Experimentation at Accelerator Lab UNDP	17.07.2020
Bašić, Nikolina	Founder of Otpada Bez – Zero Waste	22.07.2020
Bergenholtz, Emma	Embassy of Sweden in Sarajevo	11.08.2020
Crnković, Nataša	President at the Center for Environment BiH	14.07.2020
Cudic, Bojan	Enterprise Europe Network RS Coordinator; Development Agency RS; C2C program	03.08.2020
Omicevic, Amina	National officer at UNEP BiH, Head of Accelerator Lab	10.07.2020/07.08.2020
Lucchesi, Paola	President at Center for Sustainable Development	20.07.2020
Mihajlovic, Bozidar	Director Adra BiH	27.07.2020
Mlinar, Nada	Executive Assistant for International Cooperation at the Department for Environmental Protection Ministry of the Foreign Trade and Economic Relations	13.07.2020
Suljevic, Nermina	Head of Departments for EU funds at Sarajevo	07.08.2020
Užičanin, Salko	CEO of SOLHEAT	06.08.2020
Zisko, Denis	Energy and Climate Change Program Coordinator at the Center for Ecology and Energy	08.07.2020

8.2 List of stakeholders in the entrepreneurial eco-system (accelerator, incubator, training programs related to green business and innovation)

Name	Link
Innovation Center Banka Luka	https://icbl.ba/
BIT Centar	http://www.bitcentar.com/
QLab	https://qlab.space/
Intera Technology Park	https://www.intera.ba/
Grow Up Hub	https://www.unsa.ba/en/doga%C4%91aji/growup-business-innovation-hub-university-incubator-promotion
Munja Hub for Social Innovations	https://www.sarajevotimes.com/more-than-200-students-took-part-in-the-biggest-business-challenge-competition/
MarketMakers	https://www.marketmakers.ba/
Impakt	https://impakt.ba/
Sarajevo Unlimited- Regional Forum on Innovation, Technology and Entrepreneurship	http://weareunlimited.ba/battle.php
Sarajevo Innovation Summit	https://www.pulse.ba/index.php/pulse-events/2255-second-sarajevo-innovation-summit-takes-place-on-friday
Blum Lab	https://cityos.io/blum
Ministry of Programming	https://www.linkedin.com/company/ministryofprogramming

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