



FINAL REPORT

Republic of Serbia

Innovative and Just Green Transition as Tool for Securing Systemic Energy Security and Reducing Energy Poverty

(Under the Global project "Support to Collectively Respond to the Climate Emergency and Establish Resilient Development Pathways for Sustaining Human Security and Green Transformation")

31st May 2024



Project Information

Reporting Period	12 months
Start Date - End Date	March 2023 – March 2024
Implementing Partner(s)	UNDP, Ministry of Mining and Energy and Ministry of Environmental Protection of the Republic of Serbia
Total Contribution	1,000,000 USD (including levy \$9,901)
Project Location	Republic of Serbia
Project Beneficiaries	More than 420 direct beneficiaries (representatives of the Government of Serbia, local governments, civil society, business sector (both, public and private companies), UN agencies in Serbia, representatives of the workers in the carbon-intensive industries),

	more than 200,000 indirect beneficiaries (163 vulnerable/socially endangered individuals)
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I. Executive Summary

The Project supported Government's efforts against the energy poverty from the current energy crisis, by enabling affordable and clean energy for vulnerable population. It helped to identify and deploy technologies and innovative business models in priority sectors outlined in the Nationally Determined Contribution (NDC). The project organized/implemented comprehensive national and local stakeholder dialogues process on just transition in communities and regions most affected by increased climate ambition, reskilling of the workforce, as well as adjusting the education and social services in line with the green economy transformation.

Following successful implementation of JSB1 project, UNDP was recognized as a valuable partner to Government in defining the necessary comprehensive public policy document on green and just transition. UNDP became a member of the Government working group on just transition, which are gathering relevant national partners for developing Action Plan for Just Transition in Serbia. Based on the EBRD study "Diagnostic Study of Just Transition in Serbia with Action plan" and UNDP and other WG member's comments, the Government is currently finalizing Action Plan. Furthermore, building on results of JSB2 project, Serbia became a part of regional initiative for further programming and unlocking the funds that could ensure timely policy implementation with the Just Transition action.

All these, give UNDP an important place in 'unpacking' the just transition topic, shaping national policy and framing the most relevant directions of work, enabling the transition to more sustainable and equitable low-carbon economic systems.

Almost all project targets are over-achieved, with key achievements including:

- 15,656 t/CO₂ emissions avoided or reduced in the 1st year for twelve projects co-financed through JSB2 project through investments in renewable energy solutions, with expected emission reductions of 313,125 t/CO₂ for the period of 20 years
- Installation of 324 kW of renewable energy sources in 12 co-financed projects
- Creation of 33 new green jobs through project implementation
- Training of 34 representatives from public and private companies in the Acceleration process for innovative and equitable green transition
- Training of 9 business and institutional stakeholders in the KAIZEN methodology
- 420 of direct beneficiaries (214 men and 206 women) – company employees, cooperative members, representatives of vulnerable/socially endangered groups etc. benefitted through the 12 co-financed projects
- 163 - social endangered people helped by public and private companies through 12 co-financed social-responsible projects

- 9 poor households helped by public and private companies through implementation of energy efficiency improvements in a family houses (Installation of a facade on the family house; donating of individual furnaces to use environmental friendly energy source)
- 23 workshops organized by responsible partners contributed to development of women's entrepreneurship, green jobs, role of agricultural producers through wood waste management in circular economy, fire preventions and reduction of GHG emissions and new job opportunities in mining regions
- 21 public outreach events organized on raising awareness and knowledge on the topic of Just Green Transition and Energy Poverty
- More than 170 representatives of various stakeholders (at national, local level and with corporate sector) included in dialogues on Just green transition and energy poverty.
- Additional project support to the Government through: 1) supporting implementation of energy efficiency and clean energy investment programmes of Energy Efficiency Administration and 2) providing assistance in developing necessary analysis, plans, and systems for setting the appropriate basis for scaling up solar PV systems and standardized models for further replicability.

The Project maintained a strong and collaborative partnership with the Embassy of Japan in Serbia, emphasizing their significant role as a donor and partner in building trust and the opportunity to work with Japanese partners towards a green and just transition and transformation of Serbia. Japanese Business Alliance in Serbia (JBAS) remains a crucial project partner in strengthening cooperation between Japanese and Serbian companies. Two companies in Serbia (Beo čista Energija Ltd. and Toyo Tire Serbia Ltd.), founded by Japanese corporations, directly contributed to the project's objectives by sharing its knowledge, promotion of good practice, and reduction of GHG emissions.

II. Background

The Serbian Government prioritized the energy transition process, environmental protection and climate change in recent years. It adopted the new Law on Climate Change, new Law on Renewable Energy, updated Law on Energy Efficiency and Rational Use of Energy, and Law on Energy and Law on Mining and Geological Explorations in 2021. These energy laws provide a framework for the energy transition process, while the climate law sets the legal framework for further action in reducing greenhouse gas (GHG) emissions and adapting to climate change, which is one of the EU's five strategic goals (Green Agenda). Although the Low Carbon Development Strategy was adopted in June 2023, adoption of the Integrated National Energy and Climate Plan (NECP) and Energy Strategy is still pending.

In August 2022, Serbia submitted its updated NDCs, setting the target for the GHG emission reduction by 13.2% compared to 2010 level (i.e. 33.3% compared to 1990), by 2030. These ambitious goals have triggered the green business transformation and green recovery in Serbia. The Serbia's revised NDCs put a particular emphasis on decarbonizing of the energy production and consumption sector, including not only the public and residential sector, but also industries and businesses.

The Project aim was ensuring energy security and supporting Government's efforts against the energy poverty from the current energy crisis which is threatening the human security of the most vulnerable. The Project supported Serbia to achieve NDC targets by identifying and supporting technologies and innovative business models that reduced import dependency, diversified electricity generation mix and reduced energy intensity of the economy. Such approach contributed to just green transformation and

decarbonization of the economy, showcased its impact, enabling affordable and clean energy for vulnerable population.

The Republic of Serbia, for now, has limited funds to support necessary energy diversification and efficiency and to address risk from energy poverty, which mostly consists of national budget funds. There is a lack of funding available for small-scale investments and SMEs willing to invest into renewables and energy efficiency. The Project offered unique modality for identification of needs and solutions for green and low carbon investments in industries and SME sector, which could further unlock the opportunities for replication and scale up of green investments in Serbia.

III. Results

Through the Innovation Challenge Call, the Project provided concrete investments by supporting innovative business ideas that can contribute effectively to achieving the NDC's target in reducing GHG emissions while also ensuring financial sustainability. In that way, the Project supported Government of Serbia in addressing key energy related decisions and energy targets in the new NDC, by engaging with Serbian corporate sector impacted by COVID-19.

This Project had a direct impact on achieving country's NDC target through contribution to the yearly reduction of greenhouse gas emissions (GHG) 15,656 t/CO₂, and 313,125 t/CO₂ in the 20-year period.

The Project decreased environmental pollution, encouraged the development of alternatives to the coal industry, and supported the retraining of workers from regions and sectors which are economically dependent on the intensive use of fossil fuels, through development of new skills needed in the modern labour market.

12 innovative business models, from both, the public and private sector, implemented in period 2023-2024 reduced import dependency, diversified electricity generation mix, reduced energy intensity of the economy and enabled access to clean and affordable energy for vulnerable population.

Social impact of the transition to climate neutrality is primarily linked to employment, with direct consequences for the livelihoods of households, social exclusion and important gender implications. The project generated 33 green jobs related to the maintenance of the solar power plants, microgenerators, handling of construction recycling machine, wood chopping machines, women's entrepreneurship, zero emission textile production, tourism.

Concrete project activities are presented:

Output 1: Innovative business models that reduce import dependency, diversify electricity generation mix, reduce energy intensity of the economy or enable access to clean and affordable energy for vulnerable population, intended for individual households (prosumers), public and private business sector, identified and deployed

Activity 1.1: Innovation Challenge Call to support investments and innovative business models that reduce import dependency, diversify electricity generation mix, reduce energy intensity of the economy or enable access to clean and affordable energy for vulnerable population, intended for individual households (prosumers), public and private business sector conducted

The Project Team prepared and launched the ["Challenge Call for Innovative business models that diversify electricity generation mix, reduce energy intensity of the economy or enables clean energy, especially for the vulnerable consumers"](#) on May 25, 2023. The aim of the Challenge Call was to invite Serbian private

and public sector companies to propose innovative solutions that contribute to the green transformation of the economy, energy security of the country and the prevention of energy poverty. The Challenge Call in particular targeted businesses and sectors still relying on the intensive use of fossil fuels. Potential applicants were encouraged to consider integration of just transition elements into their proposals, such as reskilling, upskilling of the workforce, re-employment, support to affected regions etc., but also applications that include elements such as depollution of the environment, economy decarbonization, decreasing energy intensity of the economy, enabling affordable supply of clean energy, especially for vulnerable consumers, and encouragement of women's entrepreneurship and new industry branches as an alternative to the coal industry.

Seven 'Info Days' were held for promotion of the Challenge Call and discussion with potential project promoters. First 'Info Day' was organized in Belgrade in cooperation with JBAS, with presence of more than 30 Japanese companies that operate in Serbia. Other 'Info Days' were held in different parts of Serbia, Zlatibor, [Zajecar](#), [Pancevo](#), Valjevo, Novi Sad and [Novi Pazar](#), in order to regionally cover all potential applicants.

There are 29 project proposals, of which 28 met the criteria to be part of the **Acceleration process**.

[The Kick off meeting of the Project Accelerator](#) was a high level event, with participation of Japanese Ambassador to Serbia, His Excellency Akira Imamura; Yakup Beris, UNDP Resident Representative; and State Secretary in the Ministry of Environmental Protection, Sandra Dokić, who had the opportunity to hear the [company presentation of each project proposal](#). The private companies in Serbia have never experienced this kind of capacity building and technical support for project development before, by any national or international body and they see more value in this than in the financial component. Direct work of Project Manager and Project Coordination Associate together with the mentors on each idea and with each team directly, contributed to developing of a trusting relationship between stakeholder in the Just Green Transition. Project team held five workshops in different locations, in order to closely understand the circumstances and background of the project proposal in Novi Pazar, Sabac, Kragujevac and Belgrade. Covered topics went from general and informative to concrete and targeted "Preparation of Project Document", "Strategic framework, mechanisms and principles of decarbonization, just transition and energy poverty", "Sources of financing project ideas", "Preparation for the public appearance of the project", "Implementation, reporting and promotion of projects". Companies also had the opportunity to participate in the [Study Visit to Energy Independent Island of City of Sabac](#) and Circular economic centre of Elixir Company.



Another result was reflected through Japanese KAIZEN management methodology and tools training for interested companies to jumpstart their efforts in decreasing their carbon footprint long-term, through process and resources optimization. After successful accomplishment of all program tasks and final

assessment, 8 individuals, 7 from the project partner companies and 1 UNDP member received Kaizen certificates. All participants agreed that Kaizen Program should be offered to all acceleration participants in all projects, due to its inspirational teachings and practical learnings. One participant was so inspired that he wrote a paper on „Integrating Continuous Improvement and Green Innovation Methodologies: A Path to Sustainable Organizations”, together with Kaizen trainer and UNDP team member. This paper was presented at the [37th International Congress on Process Industry-Processing '24](#) in Belgrade and will be published in the Conference proceedings.

Activity 1.2: Financial agreements for the implementation of the projects innovative business models that reduce import dependency, diversify electricity generation mix, reduce energy intensity of the economy or enable access to clean and affordable energy for vulnerable population, complete

The applicants successfully finalized [Twelve \(12\) decarbonization projects](#). These, increased the national Renewable Energy Source installed capacities for additional 324 KW of solar power, and contributed to decreasing CO₂ emissions for 15,656 t/CO₂ year, which will support the Government of Serbia in meeting its NDC target. Additionally, 34 representatives of public and private companies were trained through the Acceleration process for innovative and just green transition and 33 new green jobs are created through implementation of twelve projects for maintenance of the solar power plants, microgenerators, handling of a construction recycling machine, wood chopping machines, for supporting women's entrepreneurship, zero emission textile production and tourism. Companies held 23 workshops and 21 public events, for various groups, with over 400 direct beneficiaries: women entrepreneurs, textile industry workers and managers, agricultural associations, healthcare workers, humanitarian and social workers, construction industry stakeholders, women in mining, elementary school children, college students, Japanese stakeholders. Through energy poverty components, [163 socially endangered citizens](#) and [9 poor households](#) were helped by public and private companies by implementation of energy efficiency house improvements, installation of new heating sources, training and income increase through 12 co-financed social-responsible projects.

Activity 1.3: Public outreach events to disseminate results and encourage replication of innovative solutions conducted

“Effective communication is the bedrock of success” was the project team’s moto for the public outreach campaign. Internal and external communication was a tireless constant and a great pleasure for the UNDP team members, as well as for the beneficiaries. 21 public outreach events were organized on raising awareness and knowledge on the topic of Just Green Transition and Energy Poverty, and were promoted by local, regional and national media, sending a message about the goals and results of the joint effort Government of Japan and Serbia, together with UNDP and beneficiaries on Just Green Transition and Energy Poverty issues. The promotional campaign led with the idea to show the human side of the projects, the individuals which directly benefitted from implementation. This was a strategy which gave great results with a wide dissemination audience.

Series of articles in national, local and social media, released by UNDP and the beneficiaries, successfully presented [12 co-financed projects](#). Beneficiaries held 21 public events and 23 workshops, aiming mainly local communities as well as targeted economic sector, encouraged for replication of innovative business solutions, and all covered by local media. The feedback received was exceptional. [Local](#), [regional](#) and [national](#) TV stations broadcasted project aims and results, interviews with participants and passed on the message of Just Green Transition. Companies used their [own web sites](#) and [social media](#) to promote their [project results](#), partnership with UNDP and gratitude to the Government of Japan.

The project was presented at 2 high level national public events, to specific target groups, to engage all relevant actors in society in activities that will reduce the economy's dependence on fossil fuels and help Serbia to timely increase its resilience to changed climate conditions:

1. The Ministry of Environmental Protection organized a ["Dialogue on Climate Change"](#) in partnership with the United Nations (UN) team in Serbia and the United Nations Development Programme (UNDP), ahead of this year's UN global conference on climate change - COP28, in the United Arab Emirates – to showcase how adaptation and "green" innovations increase Serbia's resilience to climate change. Representatives of relevant ministries in the Government of the Republic of Serbia, experts in the field of climate change, representatives of the European Union (EU), international financial institutions, business, civil society, as well as UN agencies in Serbia participated in the dialogue. On this occasion, the photo exhibition and descriptions of the JSB project co-funded solutions were presented. The event was covered with 14 media articles.
2. Regional development agencies from the territory of AP Vojvodina (RDA Banat, Bačka, Srem, South Banat, and Panonreg) organized the ["Forum on the regional development of the Autonomous province of Vojvodina"](#), with the support of the Provincial Government of AP Vojvodina gathered. This forum gathered regional development stakeholders from all parts of Serbia, to present and discuss best practices in environment and economic development as a cross sectoral approach in sustainability. The Project Manager presented the project and project results through a panel dedicated to entrepreneurship- "Yesterday, today and tomorrow, challenges and opportunities of SME sector". Also, 2 companies, Join Ltd and 'PUC City Sanitation' Novi Pazar, got the opportunity to present their projects, vision and mission of the companies sustainability for the future, as well as their role in reducing energy poverty in their community, as best practices implemented from the public and private sector.

Project team also organized three stakeholder dialogues on Just Green transition and energy poverty, two on the local level and one on the national level, taking the opportunity to present project results especially the 12 innovative pilot projects.

Output 2: Improvements of legal and policy system on just green transition identified

Activity 2.1: Legal gap assessments to identify all necessary changes and amendments in the legislation relevant for the just green transition issues developed

The project finalized recommendations for strengthening national capacities for improvements of legal and policy system on just green transition, which will serve to set the framework for sustainable development initiatives, delineating rights, responsibilities, and procedures for stakeholders across various sectors. Legal gap assessments report is based on performed analysis on the existing policies and services at national level relevant for just transition issue, through identified laws and other relevant documents and all necessary changes and amendments in the legislation relevant for the just transition issues. Overall, it is concluded that Republic of Serbia must undertake numerous tasks to complete the green transition and achieve sustainable development goals effectively. The primary aim is to foster coordination across various sectors and align priorities by reconciling the requirements and interests of diverse stakeholders, recognizing that achieving these goals relies on actions and decisions across multiple sectors. Achieving the green transition and sustainable development goals can significantly contribute to environmental preservation, human health, economic prosperity, and societal well-being, while also advancing industry, and the transformation of the energy sector in Serbia. It is imperative that future

actions in the field of green transition and sustainable development be well-planned and effectively implemented.

Activity 2.2: Recommendations for establishing system of monitoring, reporting and updating the relevant documents (Action plan etc.) on just green transition, with gender disaggregated data, prepared

Based on the needs of the Ministry of Mining and Energy, the Project supported preparation of a framework for strengthening national capacities for monitoring, reporting and updating the relevant documents on just green transition and energy poverty. Consultants provided analysis of the policies and systems for development and strengthening green skills at the national and local level, analysed case studies from the developed countries, including Japan, and provided several policy recommendations. The recommendation is to establish a monitoring system based on national and local development priorities and ex-ante assessment of the green transition effects on the sectors and population that will be the most affected by the envisaged reforms. Pioneer steps should be performed by more developed urban centers (e.g. Belgrade, Novi Sad, Nis or Kragujevac) and the areas that are considered to be the most affected by the green transition and decarbonization processes (e.g. Kolubara, Kostolac, etc.).

Under this same activity 2.2., three stakeholder dialogues on Just Green Transition and Energy poverty were held, two on local level, Obrenovac and [Boljevac](#), and one [National dialogue](#), as the final event of the project in Belgrade on 26th of March, 2024. Total number of participants in dialogues was 170. Participants of the local dialogues were more than 60 representatives of stakeholders relevant to the process bringing together all state stakeholders from relevant ministries, as well as experts in various fields. Conclusions of the dialogues will serve as inputs for recommendations for the preparation of the legislative framework for the just green transition process in Serbia, with a focus on the social dimension.

In addition, project experts in architecture, mechanical and electrical engineering supported the Ministry of Mining and Energy in developing a public call for local self-governments (LSGO) to improve energy efficiency in public and residential buildings, through awarding subsidies to citizens for implementation of EE measures. The [Public Call](#) was developed and published. Project also provided technical support in implementation of energy efficiency and clean energy investment programmes of Energy Efficiency Administration (EEA) in 2023, in the field of architecture.

Output 3: Strengthened national capacities for monitoring and reducing the energy poverty and vulnerable consumers

3.1. Activity - Research of energy poverty and vulnerable consumers conducted, and Report prepared

Contracted company CeSid conducted a survey aimed at identifying the energy consumption habits of Serbians and their energy needs and priorities in choosing energy sources, as well as seeking to determine the reasons behind energy poverty in Serbia. A total of 1,000 adult citizens of Serbia took part in the Survey, of which 347 users of services of social work centers. The total sample of 1,000 citizens consisted of two separate parts: 1) a general, nationally representative sample of 800 citizens of Serbia and 2) a quota sample of 200 users of services of social work centers in Serbia. The report identified that energy poverty is a multidimensional problem and households that have the status of energy vulnerable customer, most often face many other forms of material and social deprivation, which is a reason for the necessity of improving national or local measures for increasing the coverage of subsidies for those groups of the population. Continuous monitoring and evaluation of the effects of implemented measures

are of great importance for an adequate understanding of their effectiveness, as well as for the future modification of policies in accordance with the dynamic needs of the population.

3.2. Activity - Legal gap assessments and cost analyses to identify all necessary changes and amendments in the legislation relevant for the energy poverty issues developed

The project developed the report 'Legal gap assessments and cost analyses to identify all necessary changes and amendments in the legislation relevant for the energy poverty issues' and it is focusing on the identification of laws and other legislation relevant for the energy poverty issues that needs to be improved, which will serve to set the framework for sustainable development initiatives, with the following key findings: Serbia has taken an important initial step towards safeguarding vulnerable energy consumers by defining them and establishing legislation. The Serbian Energy Act outlines the definition of energy vulnerable consumers and aligns with the requirements of the [3rd EU energy package](#). However, there is still room for improvement in terms of long-term measures to alleviate energy poverty and enhance protection and support. The recently enacted Energy Efficiency and Rational Use of Energy Act introduces a definition of energy poverty and establishes a new Administration within the Ministry responsible for energy matters. This Administration is tasked with developing specific programs to implement energy efficiency measures for energy vulnerable customers, aiming to reduce energy poverty. Given the current focus on short-term measures for socially vulnerable consumers and the significant energy inefficiency of many households, particularly during cold weather periods, there is a clear need for long-term strategies to improve energy efficiency and decrease household energy needs. Measures should prioritize enhancing the energy efficiency of dwellings to address the root causes of energy poverty.

3.3. Activity Result - Report with recommendations for implementation of measures (gender sensitive), with examples of good practice relevant for reducing energy poverty, and for establishing system of monitoring and reporting on energy poverty developed

Energy poverty was addressed directly with our project partners on implementation of 12 project, supporting the vulnerable categories of citizens and households with donations through energy efficiency measures, heating sources and green jobs. The National dialogue was held with a panel "How to Respond to Energy Poverty?" where examples of good practice were presented.

Ministry of Mining and Energy [developed the public call](#) for local self-governments (LSGO) to improve energy efficiency in public and residential buildings, through awarding subsidies to citizens for implementation of EE measures, with the support of engaged experts from the project. 30 applications were submitted by the local self governments for this public call. In 2024, Serbia allocated significantly more funds for socially vulnerable citizens for the energy renovation of housing, improvement of the heating and cooling system, and the production of electricity using solar panels. According to the new public call, local self-government units and city municipalities can allocate funds for citizens from socially vulnerable categories, in which case co-financing is according to the financial model: 45% each for the Ministry and local self-government units or city municipalities and 10% for socially vulnerable citizens.

This project responded to additional Government's request and provided technical support for the implementation of energy efficiency and clean energy investment programmes of EEA in 2023. Besides, project developed analyses of legislative framework by developing necessary analysis, plans, and systems for setting the appropriate basis for scaling up solar PV systems and a basis for development of standardized models for further replicability.

The project prepared the report 'Recommendations for implementation of measures (gender sensitive), with examples of good practice relevant for reducing energy poverty, and for establishing system of monitoring and reporting on energy' and it collected examples of good practice from developed countries, including Japan, in addressing the effects of climate change and greening their economy in a variety of ways from different stakeholders. It is putting special focus on Japan's good practice examples, their approach in supporting the carbon neutrality for small and medium-sized businesses, benefits for small and medium-sized businesses working towards carbon neutrality, economic and social context of green transition etc. Set of different metrics is proposed in the Report to monitor and address energy poverty effectively, and it should support the Government of Serbia in defining the necessary comprehensive public policy documents on energy poverty.

Contribution to NDC targets: The project contributed in several ways to the achievement of Serbia's NDC target. The economy-wide and conditional NDC of Serbia indicates 33.3% of GHG emission reduction by 2030 compared to 1990 levels. The project supported decarbonization related investments in the total amount of 313,125 t/CO₂e within the lifetime of supported investments. On the yearly basis it equals 15,656 t/CO₂e emission reduction. Although the level of country's ambition is higher than the above mentioned reductions in GHG emissions, the project set a good model for the contribution of private sector and industries to the achievement of Country's climate ambition. Also, the project brought additional elements to the achievement of Serbia's climate targets related to just transition and energy poverty as important elements of decarbonization efforts.

Partnerships: partnerships with Japanese counterparts (private sector, JICA, NGO, academia, etc.)

Continuous support of the Embassy of Japan to Climate Promise projects assisted the acceleration of Serbia's green transition, decarbonization and formed a base for addressing energy poverty. The Japanese Business Alliance (JBAS) in Serbia was a very important project partner in strengthening cooperation between companies from Japan and from Serbia. Additionally, introducing Serbian businesses to Japanese examples of best practices and KAIZEN management, brought valuable motivation to Serbian companies to invest in new, cleaner technologies and green business models, as well as to adopt KAIZEN as an excellent methodology for efficiency in processing industry. Two companies in Serbia, founded by Japanese corporations, directly contributed to the goals of the project through sharing its knowledge, promotion of good practice, and reduction of GHG emissions Beo cista Energija Ltd and Toyo Tires Serbia.

Human Security (HS) approach: The project incorporated the human security approach by ensuring energy security at the community level and by support Government's efforts against the energy poverty from the current energy crisis which is threatening the human security of the most vulnerable. In doing so, the project supported investments of the corporate sector in improved energy performance of vulnerable households, invested in green energy solutions for companies that resulted in less indoor air pollution and better working conditions for the concerned employees, organized dialogues on just green transition and local economy diversification to improve knowledge and understanding of the decision makers, businesses and employees on measures to prevent job losses and options for creation of green job markets. In parallel, the project supported concrete investments that contribute to local economy diversification (e.g. transformation of former mines into visitor center to boost local tourism).

South-south cooperation: As a follow up of the South-South Exchange Event organized by Climate Promise Team, bilateral meeting with UNDP CO Kyrgyzstan has been organized in November 2023 on sharing experiences on private sector engagement and contracting modalities (especially in using Performance Based Payments (PBPs)). Serbian representatives (Ms. Sandra Dokić, State Secretary in the Ministry of Environmental Protection and Ms. Smiljka Živanović as UNDP CO Serbia representative)

participated in the Global Exchange Workshop that took place in Colombo, Sri Lanka, on 4-7 March 2024, organized for sharing project successes and challenges, draw connections and lessons learned, understand NDCs and how activities implemented under the JSB2 project contribute to its country's climate pledges now and into the future.

Environment protection: the project supported green investments also resulted in the improved quality of the environment, in particular by reducing municipal air pollution through the replacement of fossil fuel with alternative energy sources, waste reuse and recycling (e.g. construction and textile waste), water savings in the industrial processes. Also, the project reduced risks of energy poverty for individual households and for the SMEs, ensured jobs and green job transformation in supported companies and communities, increased the awareness of decision makers, businesses and citizens about the benefits of just green transition and on measures to prevent energy poverty. Also, the project contributed to the establishment of permanent dialogue on the need for local economy diversification in the context of just transition. By improving the quality of local environment, the project supported investments also contributed to the overall health and wellbeing of the concerned citizens.

Innovative solutions: some representative innovative private sector pilot projects are:

- Project Toyo Tire Serbia showcases a commitment to innovation and sustainability, encouraging innovative solutions for waste reduction and nature conservation, by using of epoxy resins derived from raw materials sourced from renewable sources, in prototype production. This shift towards epoxy resins from renewable sources is not only innovative but also sets a progressive example in the Serbian context, demonstrating a pioneering approach to environmental sustainability and resource utilization.
- Kayak House project innovation combines renewable energy, specialized solar panels for roofs of such water vehicles, with transportation and tourist services to create a unique and environmentally responsible touristic experience.

Support by the Global Climate Promise team

The “Innovative and Just Green Transition as Tool for Securing Systemic Energy Security and Reducing Energy Poverty” project team in CO Serbia received valuable and continuous support from the Global Climate Promise team, sharing knowledge about energy poverty, best practices on the global level, as well for reporting and promotion of project results. The Global Climate Promise team provided regular monitoring of the progress of the project implementation, immediate technical support and advise whenever needed, especially when discussing bottlenecks and issues during implementation of the just transition in energy sector projects. Provision of clear guidance and instructions for reporting on project results to the donor through quarterly reports helped the UNDP Serbia team to present the results and deliver the project activities on time. Additionally, the Global team facilitated collaboration among project teams organizing South-South Online Exchange workshop in October and webinar on visibility in November. Besides, the Global team strengthened the efforts of the UNDP Serbia team through the opportunity to present our Government's continuous and ambitious efforts to reduce greenhouse gas emissions as per NDC's targets with emphasis on decarbonization of the energy production and consumption sector, including not only the public and residential sector, but also industries and businesses at the Climate promise 2024 Global Exchange Workshop in Sri Lanka.

Outputs	Activities	Indicators	Baseline	Target	Achievement	Remark Please use this space to explain why the project under/over achieved the set target
Output 1 Innovative business models that reduce import dependency, diversify electricity generation mix, reduce energy intensity of the economy or enable access to clean and affordable energy for vulnerable population, intended for individual households (prosumers), public and private business sector, identified and deployed	1.1. Activity Result: Innovation Challenge Call to support investments and innovative business models that reduce import dependency, diversify electricity generation mix, reduce energy intensity of the economy or enable access to clean and affordable energy for vulnerable population, intended for individual households (prosumers), public and private business sector conducted	Number of applications to the Challenge Call received	NA	20	29	Due to the large interest of the Serbian public and private companies to implement green transition investments through UNDP Challenge Call mechanism, project provided financial support to 12 innovative business models instead of 5, initially planned.
		Number of information sharing sessions organized	NA	At least 2	7	
		Number of workshops organized	NA	At least 5	5	
	1.2. Financial agreements for the implementation of the projects innovative business models that reduce import dependency, diversify electricity generation mix, reduce energy intensity of the economy or enable access to clean and affordable energy for vulnerable population, completed	Number of most innovative decarbonization/green transformation solutions deployed	NA	At least 5	12	
	1.3. Activity Result: Public outreach events to disseminate results and encourage replication of innovative solutions conducted	Number of public outreach events organized	NA	At least 2	23	
Output 2 Improvements of legal and policy system on just green transition identified	2.1. Activity Result: Legal gap assessments to identify all necessary changes and amendments in the legislation relevant for the just green transition issues developed	Legal gap assessments report developed	No	Yes	Yes	As a part of of the consultative process with relevant stakeholders in
		Number of people (representatives of relevant	NA	Females: 50	Females:79	

	2.2. Activity Result: Recommendations for establishing system of monitoring, reporting and updating the relevant documents (Action plan etc...) on just green transition, with gender disaggregated data, prepared	stakeholders) engaged in dialogue on green transition Number of dialogues Number of developed public call for LGSO Report with recommendations prepared	NA 0 No	Males: 50 3 1 Yes	Males: 91 3 1 Yes	Serbia, commenced last year, UNDP gathered more than 60 representatives on the local dialogues, and 110 on the national dialogue, which confirmed that these topics require continuous attention.
Output 3 Strengthened national capacities for monitoring and reducing the energy poverty and vulnerable consumers	3.1 Research of energy poverty and vulnerable consumers conducted, and Report prepared 3.2. Activity - Legal gap assessments and cost analyses to identify all necessary changes and amendments in the legislation relevant for the energy poverty issues developed 3.3. Activity Result - Report with recommendations for implementation of measures (gender sensitive), with examples of good practice relevant for reducing energy poverty, and for establishing system of monitoring and reporting on energy poverty developed	Number of people interviewed Legal gap assessments report developed Number of people engaged in dialogue on energy poverty Number of LSGO applications for improvement energy efficiency in public and residential buildings, evaluated Report with recommendations prepared	NA No NA NA No	Females: 100 Males: 100 Yes Females: 50 Males: 50 At least 30 Yes	Females: 531 Males: 469 Yes Females: 91 Males: 79 30 Yes	Seeking to determine the reasons behind energy poverty in Serbia, UNDP Serbia conducted a survey aimed at identifying the energy consumption habits of Serbians and their energy needs and priorities in choosing energy sources. Therefore, a total of 1,000 adult citizens of Serbia took part in the Survey, of which 347 users of services of social work centers.

IV. Lessons Learned and way forward

The successfully implemented pilot investments confirm the strong interest of both public and corporate sector in investing in low-carbon and green solutions. A particularly huge gap is revealed between green and standard commercial bank financing packages for the industry sector. Therefore, it is necessary to unlock access to finance for green investments and explore possibilities for blending donor's funds and private capital with the IFIs, commercial banks, other donor funding, budgetary resources etc.

The Project implemented UNDP's Challenge Call mechanism for capacity building and guided mentorship, with the technical support for project development and co-financing of pilot project investments through Performance-based Payment Agreements. Both, public and private companies emphasized the most valuable part of the acceleration process was the completely new approach, guiding them from project ideas to mature bankable innovative projects.

Thus, the project encouraged the companies to apply innovative approaches, such as:

- Implementing new technologies that reduce import dependency, reduce energy intensity of the economy and enhance market sustainability and competitiveness. This new model encourages Corporate Social Responsibility measures for addressing energy poverty through support to vulnerable and socially endangered population.
- Applying the concept of diversification on electricity generation mix and implementing different renewable energy production through combining photovoltaic powerplant with thermosolar panels and water heat pumps.
- Using solar power to promote healthy and sustainable agriculture and for various transportation modes.
- Reskilling, retraining, creating new business and job opportunities in coal mining regions, especially women's entrepreneurship
- Implementing circular economy through reusing construction waste and utilizing biomass for heating.
- Capacity building activities within the innovative projects, which brought a great number of participants, showing interest for new business models which bring sustainability and efficiency with a contribution to green transition

The Project faced its biggest challenge due to the short implementation period, considering the number of projects received through the Challenge call and the comprehensive UNDP procedures for deploying Low-value Performance Based Payment Agreements for co-financing the selected projects. The innovative new business model projects highlight the importance of private sector engagement in just transition/climate change, by creating new jobs and initiating citizens participation. Additionally, the Project successfully established a model for addressing energy poverty by local business sector initiatives. The project identified the need for improvements of regulatory framework in order to allow the green transformation of economy in general, thereby enhancing the creation of green job markets. To prevent negative consequences, it is extremely important to support the government in integrating Just Transition as one of the mandatory elements of future NDC planning and implementation, and also to adopt national Just Transition planning documents, in particular for vulnerable regions/communities and economy sectors (e.g. mining, Thermo Power Plants, carbon intensive industries such as cement, steel, paper, fertilizers production, construction industry, chemical industry etc.).

The JSB funded project contributed to the EU/Sweden/Switzerland funded “Green Agenda in Serbia” portfolio of projects by introducing the just transition principles into green transformation related investments and projects of the public and corporate sector.

V. Financial Status¹

Output	Budget	Expenditure	Delivery Rate (%)	Remark
Output 1	614,000.00	612,263.53	99.72%	
Output 2	100,000.00	99,919.43	99.92%	
Output 3	159,103.00	150,888.89	94.84%	
DPC	43,655.00	42,588.60	97.56%	
GMS (8%)	73,341.00	72,448.43	98.78%	
UN Levy	9,901	9,901	100%	
Total	1,000,000.00	988,009.88	98.80%	

VI. Visibility Achievements

The project team, together with the companies which received support from the project developed a strong campaign to promote the concept of Just Green Transition and raise awareness on energy poverty.

3 published short reels showing the new business models:

<https://www.instagram.com/reel/C3sXyX8va6z/?igsh=N3k5bjNIM241cnN0>

https://www.instagram.com/reel/C3VBIPo_NJzI/?igsh=aWc4NDBhaWU0M2sy

<https://www.instagram.com/reel/C4XpOHutJVr/?igsh=ZHdiOW95c2piYngw>

promoting energy generation mix and raising awareness of energy poverty and social responsibility of companies, had over 373,100 views on UNDP Serbia Instagram page and over 73,000 views on UNDP Serbia Facebook page. Significant number of views also have published reels and news on social media of the companies, promoting project results. The Kick off of the Acceleration process was an event followed with 22 published news article by national, regional and local medias. Local dialogues were covered by local media, while the national dialogue was covered by national, regional and local medias with 15 news article were published about it.

¹ Disclaimer: Data contained in this financial report section is an extract of UNDP financial records. All financial provided above is provisional.



Visibility report for the project activities and co-financed project attached as Annex.



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Annex 1
Main results of the 12 co-financed decarbonization projects
from the Accelerator of Project "Innovative and Just Green Transition as Tool for Securing
Systemic Energy Security and reducing Energy Poverty",
financed by the Government of Japan
UNDP Serbia

1. [Innovative production of denim](#) – Join Ltd. Installed thermo-solar panels for sanitary hot water for 3000 l/day, capacity of up to 50 kW and an annual production of 73,000 kWh, and 100 kW photovoltaic panel system with an annual production of 132,000 kWh and a purification filter. Projected annual reduction of emissions 193.304 t CO₂ with 20-year period cumulative reduction 3,866.08 t CO₂. As an EE measure, 143.5 m² of window frames were replaced at the production facility of 660 m² and façade insulation was applied for a vulnerable category household of 130m², to address energy poverty. 1 training for employees about safety and health at work and 1 public event was organized.
2. [From biomass to clean energy for clean air](#) - PUC "City Sanitation" purchased a multi-functional 4 seasons utility machine with an attachment for crushing wood (collected with bulky waste from households or bio-waste from farms) into chips, an access platform - for pruning trees up to 5m high, discs for cutting branches and weeds and timber gripper – for trees that are sick and prone to falling or have been felled due to bad weather. 2 employees were trained for green jobs from marginalized population groups to operate the machine. Projected annual reduction of emissions in Novi Pazar will be 384.395 t CO₂ with 20-year period cumulative reduction 7,687.90 t CO₂. 7 capacity building [Workshops](#) with 49 participating farmers and 2 public events were organized.
3. [Solar Harvest](#) - Energy cooperative Elektropionir and organic farm Organela from Valjevska Kamenica installed Agro-PV powerplant, capacity of 21.84 KWe, with output power of 17.5 KWh. The estimated reduction of emissions in the first year of operation is 556.83 t CO₂ and 11,136.6 t CO₂ for the next 20 years. 1 green job was created, 2 capacity building workshops with 16 participants were held and 1 public event was organized. The project raised general awareness about cross sector cooperation between sustainable food production and renewable energy in particular for vulnerable categories – in collaboration with NURDOR association of parents with children affected by cancer.
4. [Vinča Recourse Recovery Centre project](#) -Beo Čista Energija Ltd. is a Belgrade Waste Management PPP (Serbian – Japanese - French cooperation) enabling City of Belgrade to close and rehabilitate the Vinča landfill with estimate of 210,000 t CO₂ reduction per year. Flue Gas Treatment equipment was purchased and installed and a Visitor Center was furnished and branded for 50 visitors – with purpose of increasing the awareness on EfW facility in waste management system.



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5 public events organized with 56 participants, from elementary school students to University students and public and private companies.

5. [Photovoltaic power plant on the roof](#) - Mizan Line Ltd. By combination of renewable energy from solar power plant and utilizing efficient heat pumps, the company will reach carbon neutrality and contribute to air pollution reduction in the Sjenica region for 167.86 t CO₂ per year, with cumulative reduction estimated to 3,357.2 t CO₂ years. The innovative new business model created the opportunity for the unemployment of women and other vulnerable population, hence 20 green jobs, 1 public event and 1 workshop organized in Sjenica municipality, one of the least developed municipalities in the Republic of Serbia. Corporate Social Responsibility (CSR) actions to fight energy poverty were implemented by replacing individual furnaces with environmentally friendly fuel and retrofitting of households to improve the energy efficiency.
6. [Parterre arrangement of Coal mining museum Senjski Rudnik](#) - Public enterprise for underground coal mining RESAVICA, Despotovac deals with the exploitation of coal in 9 mines on the territory of the Republic of Serbia. Senjski Rudnik (Mine) is turning into an Eco Museum, following the plan to close the mine. This mining place, a mining colony, is turned into an eco-museum community presenting the way of life and work in a mining settlement, representing true just green transition 3 new green jobs (tourism) were created, 3 workshops for local economy diversification and reskilling and 1 public event was organized.
7. [Solar power plant](#) - GRP Centar Ltd in Sombor installed a power plant: 69.92 kWp for total annual production of 79,099 kWh with 88.88 t CO₂ emission reduction/ year and cumulative in 20 years, 1,777.63 t CO₂. Energy transformation of the company, shifting to alternative energy resources, cleaner production, increasing energy efficiency and the reduction of higher energy costs that are impacting businesses' profitability, hence creating 2 new green jobs. Addressing green transition and energy poverty, company organized 1 workshop, 1 public event and established a good practice of 5 t/year briquettes donations to socially vulnerable categories.
8. [Improving the sustainability of the construction industry by recycling construction waste-](#) DS ISKOP GRADNJA Ltd. from Novi Pazar obtained a multifunctional crushing machine concrete. Reuse of concrete enhanced sustainability of the construction industry in Serbia, through the efficient recycling of construction waste, creating 2 new green jobs. 1 workshop and 1 public were organized to raise awareness about the significance of recycling of the construction waste. As CSR façade insulation for a vulnerable category household and heating source was provided to address energy poverty.
9. [Solar catamaran E-Cat X](#) - Kayak House Ltd. from Novi Sad, built a catamaran and installed specialized flexible solar panels on its roof RES capacity 4,6 kW with 2 electric engines designed for sailing where sailing with boats with internal combustion engines is prohibited. This



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sustainable transport environmentally responsible project contributed to 1.008 t CO₂ emission reduction/ year and cumulative in 20 yers 20.17 t CO₂. 3 educational workshops for children with special needs and without parental care and [2 public events](#) were organized and 2 agreements with child care public institutions were signed.

10. [Use of hazelnuts in the production and processing of AY-YA products, closure of the production process, and promotion of women's entrepreneurship in the Municipality of Šid](#)- AY-YA obtained and installed a Cold press oil machine and a Nut butter machine enabling an innovative production process utilizing more than 80% of the hazelnuts. With piloting new products and widening the company's portfolio, creating 1 new green job, AY YA is a pioneer in Serbia, regarding the production of cold-pressed hazelnut oil. [3 workshops](#), with 95 participants, were organized for woman run agricultural households introducing diversification of production, cold-pressed oil, natural cosmetics and gluten-free food raising capacity for womens' entrepreneurship. [1 public event was organized with 72 participants.](#)
11. [Patent/prototype development: Innovative use of recycled tire pellets to create non-toxic, circular, and modular street furniture that puts used tires back on city streets](#)- Toyo Tire Serbia ltd. Prototype developed the technology to transform vulcanized tires into urban furniture contributing to the concept of a circular economy and sustainable resource management, reducing the waste stream which significantly impacts the environment. [1 developmental and educational playground](#) using vulcanized rubber tires was constructed, as interactive, hands-on learning environment which promotes physical activity, sensory exploration, and cognitive development among youth. 2 public events were organized.
12. [Electrical Energy Production by Human Powered Exercise Machines](#)- Beoatling ltd. Belgrade obtained and installed a microgenerator for electrical energy generation through the utilization of the human power energy engaged during the work-out sessions, with RES 10 kW, 264 t CO₂ emission reduction/ year and cumulative in 20 years 5,280.00 t CO₂. Conversion of voluntarily small body movements (kinetic energy) into continuous electrical energy is an innovative approach to the green energy production. 1 workshop and 1 public event was organized in a local work out gym to show the possibilities and to raise awareness of the importance of microgenerators.



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Annex 2 Visibility Report

of project activities and projects supported under
the Accelerator of Project "Innovative and Just Green Transition as Tool for Securing Systemic Energy
Security and reducing Energy Poverty",
financed by the Government of Japan
UNDP Serbia

Project activities:

The Project Team prepared and launched the **"Challenge Call for Innovative business models that diversify electricity generation mix, reduce energy intensity of the economy or enables clean energy, especially for the vulnerable consumers"** on May 25, 2023. On this date, the first Info day was organized in cooperation with JBAS and participation of Japanese companies, their assembly members.

Seven info days were held for promotion of the Challenge Call and discussion with potential project promoters. First Info Day was organized in Belgrade in cooperation with JBAS, with presence of more than 30 Japanese companies that operate in Serbia. Other Info days were held in different parts of Serbia, Zlatibor, [Zajecar](#), [Pancevo](#), [Valjevo](#), Novi Sad and [Novi Pazar](#), in order to regionally cover all potential applicants.

<https://www.undp.org/serbia/news/call-innovative-solutions-production-electrical-energy-renewable-sources-and-reduction-energy-consumption>

<https://zajecar.pks.rs/vesti/u-rpk-zajecar-predstavljen-program-ujedinjenih-nacija-za-razvoj-undp-za-inovativne-poslovne-modele-u-cilju-poboljsanja-energetske-efikasnosti-8571>

<https://pancevo.pks.rs/vesti/odrzan-info-dan-u-okviru-javnog-poziva-koji-sprovodi-program-ujedinjenih-nacija-za-razvoj-undp-8590>

<https://valjevo.pks.rs/vesti/info-dan-u-okviru-javnog-poziva-za-inovativne-poslovne-modele-8593>

<https://www.b92.net/lokal/novi-pazar/drustvo-zelena-tranzicija-u-fokusu-javnog-poziva-u-novom-pazaru-video-2362129>

<https://rtvnp.rs/2023/07/05/odrzan-info-dan-o-projektima-smanjenja-energetskog-siromastva/152972>

<https://sandzakh Haber.net/u-novom-pazaru-odrzan-info-dan-o-projektima-smanjenja-energetskog-siromastva/>

<https://naslovi.net/2023-07-05/indeksonline/u-novom-pazaru-odrzan-info-dan-o-projektima-smanjenja-energetskog-siromastva/33882417>

<https://youtu.be/JqKY-M90Un0?si=YkySIQVL8ApngqPw>

The kick-off meeting of the project Accelerator, was organized in September, as a high level event, with participation of Japanese Ambassador to Serbia, His Excellency Akira Imamura, Yakup Beris, UNDP Resident Representative and State Secretary in the Ministry of Environmental Protection, Sandra Dokić, who had the opportunity to hear the company presentation of each 28 project proposals, entering acceleration phase.

<https://www.undp.org/serbia/news/28-innovations-decarbonize-economy-and-alleviate-energy-poverty>

<https://www.ekoforum.rs/predstavljeno-28-inovacija-za-dekarbonizaciju-privrede-i-smanjenje>

<https://www.radiostoplus.com/novopazarski-join-se-pridružuje-zelenoj-tranziciji/>

<https://www.e2.rs/kompanije-iz-srbije-predstavile-inovativna-resenja-za-dekarbonizaciju/>

<https://biznis.rs/vesti/srbija/kompanije-predstavile-inovacije-za-dekarbonizaciju-smanjenje>

<https://www.vesti.rs/Vesti/Beris-Neophodno-pruziti-podrsku-najugrozenijim-pojedincima-i>



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Dialogues on just green transition:

Three stakeholder dialogues on Just Green Transition and Energy poverty were held, two on the local level, Obrenovac and Boljevac, and one National dialogue, as the final event of the project in Belgrade on 26th of March, 2024. Total number of participants in dialogues was 170. Participants of the local dialogues were more than 60 representatives of stakeholders relevant to the process: the Ministry of Mining and Energy, the Ministry of Environmental Protection, local governments, PC Elektroprivreda Srbije, TPP Nikola Tesla, Kostolac and Kolubara, mine Bogovina, PC Resavica, private companies from Obrenovac and Boljevac, the Chamber of Commerce of Serbia, the Secretariat for Energy of the City of Belgrade, the National Employment Service, the Center for Social Work, as well as local experts dealing with environmental and social protection.

1. Local Dialogue Obrenovac

<https://www.facebook.com/share/p/gPKaLKfAdTfVEvYs/?mibextid=oFDknk>

https://www.linkedin.com/posts/undp-serbia_climatepromiseproject-justtransition-decarbonization-activity-7161018831983853569-Pmsb?utm_source=share&utm_medium=member_android
<https://energetskiportal.rs/odrzani-dijalozi-o-pravednoj-zelenoj-tranziciji-u-obrenovcu-i-boljevcu/>

2. Local Dialogue Boljevac

<https://rtvbor.rs/u-boljevcu-predstavljen-projekat-zelene-tranzicije-programa-za-razvoj-un/>

<https://youtu.be/onfEamUYoFI>

<https://www.facebook.com/share/p/gPKaLKfAdTfVEvYs/?mibextid=oFDknk>

https://www.linkedin.com/posts/undp-serbia_climatepromiseproject-justtransition-decarbonization-activity-7161018831983853569-Pmsb?utm_source=share&utm_medium=member_android
<https://energetskiportal.rs/odrzani-dijalozi-o-pravednoj-zelenoj-tranziciji-u-obrenovcu-i-boljevcu/>

3. National dialogue:

https://www.facebook.com/story.php?story_fbid=716744747274094&id=100068157242218&mibextid=oFDknk&rdid=KA5oPwvNBNJYyWcA

https://www.linkedin.com/posts/undp-serbia_uz-podr%C5%A1ku-vlade-japana-i-u-partnerstvu-sa-activity-7178437136172335107-l21Y?utm_source=share&utm_medium=member_android

tanjug.rs

insajder.net

tvmost.info

tanjug.rs

Beta

forbes.n1info.rs

Radio Beograd 1

beta.rs

Fonet

ekoforum.rs

vojvodinauzivo.rs

Radio Beograd 1

novosti.rs

energetskiportal.rs

eupravozato.mondo.rs



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Projects supported under the Project Accelerator

[Twelve \(12\) decarbonization projects were successfully finalized](#), increasing the national Renewable Energy Source installed capacities for additional 324 KW of solar power, and contributing to decreasing CO₂ emissions for 15,656 t/CO₂ in the first year of implementation. Promotion of Just Green Transition projects and raising awareness on energy poverty and social responsibility of companies was a unique mission of the beneficiaries and the project team. Two reels, brought UNDP Serbia, greatest attention ever, from the wide audience, with over 476,100 views on UNDP Serbia Instagram page.

UNDP Visibility links:

Facebook:

https://www.facebook.com/story.php?story_fbid=708885118060057&id=100068157242218&mibextid=oFDknk&rdid=9kezhsDVpoaqw5bt

https://www.facebook.com/story.php?story_fbid=694773269471242&id=100068157242218&mibextid=oFDknk&rdid=BRCK1hDmFMyWoRVP

https://www.facebook.com/story.php?story_fbid=697397069208862&id=100068157242218&mibextid=oFDknk&rdid=cLRWxlXg5Vjylwja

https://www.facebook.com/story.php?story_fbid=699539935661242&id=100068157242218&mibextid=oFDknk&rdid=oPoOfT6kf1uAC9Kb

https://www.facebook.com/story.php?story_fbid=700993882182514&id=100068157242218&mibextid=oFDknk&rdid=jRrZjW2sysrCT2ce

https://www.facebook.com/story.php?story_fbid=708295788118990&id=100068157242218&mibextid=oFDknk&rdid=LbDzsRUW5OI9LUD8

https://www.facebook.com/story.php?story_fbid=708885118060057&id=100068157242218&mibextid=oFDknk&rdid=ZMZADUstqH1OGtOj

Instagram:

<https://www.instagram.com/reel/C3sXyX8va6z/?igsh=N3k5bjNIM241cnNO>

<https://www.instagram.com/reel/C3VBIPoNjzl/?igsh=aWc4NDBhaWU0M2sy>

<https://www.instagram.com/p/C4ao29dtavH/?igsh=MTA0dmtrZm1lM3lxeQ==>

<https://www.instagram.com/reel/C4XpOHutJVr/?igsh=ZHdiOW95c2piYngw>

<https://www.instagram.com/p/C3zpBCiNTR1/?igsh=NGZreXl2NThyYnhi>

<https://www.instagram.com/p/C3hhBoRtlht/?igsh=MXU4amE2Y3Vodzlhdw==>

LinkedIn:

https://www.linkedin.com/posts/undp-serbia_climatepromiseproject-justtransition-decarbonization-activity-7165282007118290946-jFRS?utm_source=share&utm_medium=member_android

https://www.linkedin.com/posts/undp-serbia_climatepromiseproject-justtransition-decarbonization-activity-7167834836689141762-wHdM?utm_source=share&utm_medium=member_android

https://www.linkedin.com/posts/undp-serbia_climatepromiseproject-climatepromiseproject-activity-7172900752548478976-lwaD?utm_source=share&utm_medium=member_android

Site visit to Novi Pazar:

<https://bilden.rs/cetiri-firme-iz-novog-pazara-i-sjenice-pocela-da-koriste-obnovljive-izvore-energije/>

<https://www.tanjug.rs/ekonomija/srbija/77065/cetiri-firme-iz-novog-pazara-i-sjenice-pocela-da-koriste-obnovljive-izvore-energije/vest>

<https://srda.rs/energetska-tranzicija-za-zdraviju-zivotnu-sredinu-i-vecu-konkurentnost-novopazarskih-privrednika/>



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<https://www.ekoforum.rs/energetska-tranzicija-za-zdraviju-zivotnu-sredinu-i-vecu-konkurentnost-novopazarskih-privrednika/>
<https://rtvnp.rs/2024/02/28/jos-jedna-znacajna-donacija-za-gradsku-cistocu/164642>
<https://www.radiostoplus.com/kompanije-iz-novog-pazara-i-sjenice-pocela-da-koriste-obnovljive-izvore-energije/>
<https://odrzime.rs/javno-privatna-partnerstva-jpp/novi-pazar-prednjaci-u-resenjima-za-pravednu-zelenu-transformaciju-privrede/>
<https://streaming.ninamedia.rs/uploads/2024/03/04/28377224-0536-4BCF-9A6B-D4DBB51665EB.mp4>
<https://rtvnp.rs/2024/03/04/u-novom-pazaru-i-sjenici-preduzeca-pocela-da-koriste-obnovljive-izvore-energije/164840>

1. Project title: Innovative production of denim.

Project Number: 01000350/01/2023

Lead partner: Join ltd Novi Pazar

Project value: US\$ 98,000.00

Co-financing from UNDP: US\$ 49,000.00

Project description

This project replaces use of solid fuels in production with renewable energy, installing thermos solar panels for sanitary hot water for 3000 l/day, capacity of up to 50 kW and an annual production of 73,000 kWh and a 100 kW photovoltaic panel system with an annual production of 132,000 kWh. Projected annual reduction of emissions 193.304 t CO₂ with 20-year period cumulative reduction 3,866.08 t CO₂. As an EE measure, 143.5 m² of window frames were replaced at the production facility of 660 m² and façade insulation was applied for a vulnerable category household of 130m², to address energy poverty. Additionally, by placing air purification filters, the company is working towards environmental protection and reducing air pollution. They operate in the textile industry and employ over 50 workers, which they trained within the project about safety and health at work. The project raised awareness of the community on benefits of green transition and set up an example model of socially responsible businesses that contribute to the reduction of energy poverty.

Visibility links:

<https://www.facebook.com/share/p/2ZSBTyPVvz7CZgbG/?mibextid=qi2Omg>
<https://www.facebook.com/share/p/r4ptdK3Gz2YqZGqX/?mibextid=oFDknk>
<https://www.facebook.com/share/p/nWCYfnXiF2kcdaZr/?mibextid=oFDknk>
<https://www.instagram.com/p/Czv9-lZvp6n/?igsh=MXd2N3MwajlwbWQwdQ==>
<https://www.instagram.com/p/C09eehxsEHX/?igsh=MWVlCfHRhaDBubDQxNw==>
https://www.instagram.com/p/C1E_aLesCM8/?igsh=dGJoYnlvYTJodnhq
<https://youtu.be/1f8SMZOFHwQ?si=TVKcPX9SIN48HYjp>
<https://www.facebook.com/share/p/v5anmR1fbrRozdVB/?mibextid=oFDknk>
<https://www.instagram.com/p/C372Oe3sYzc/?igsh=cGc2dzByb2NiYXdn>

2. Project title: From biomass to clean energy for clean air

Project Number: 01000350/02/2023

Lead partner: PUC "City Sanitation" Novi Pazar

Project value: US\$ 201,163.98

Co-financing from UNDP: US\$ 49,500.00

Project Description

This project contributed to the reduction of emissions in Novi Pazar 384.395 t CO₂/year with 20-year period cumulative reduction 7,687.90 t CO₂. PUC purchased a multi-functional 4 seasons utility machine with an attachment for crushing wood (collected with bulky waste from households or bio-waste from farms) into



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chips, an access platform - for pruning trees up to 5m high, discs for cutting branches and weeds and timber gripper – for trees that are sick and prone to falling or have been felled due to bad weather. The equipment is for maintenance of public green areas, for collection of wood waste, biomass from agricultural farms, that are processed into chips for the newly built city heating plant that has one biomass boiler with an installed capacity of 8 MW. Two employees were trained for the green jobs from marginalized population groups to operate the machine and Seven capacity building Workshops with participants participating farmers and 2 public events were organized. The reskilling of vulnerable and marginalized groups (Roma population) secured decent livelihood, workshops for farmers resulted in several contracts for provision of biomass and cooperation between two public companies secured sustainability of green heating.

Visibility Inks:

<https://www.facebook.com/share/v/5d2mV7rGYNQ1GJrA/?mibextid=oFDknk>
<https://www.facebook.com/share/p/wMPYpAKVW3QZMTgM/?mibextid=oFDknk>
https://www.facebook.com/story.php?story_fbid=3851678315114393&id=100008167879251&mibextid=oFDknk&rdid=Awusqa9RfuzMlwrH
<https://www.facebook.com/reel/282477074873007>
<https://fb.watch/rBU52YT38Y/>
https://m.youtube.com/watch?v=lvXqclevMDM&fbclid=IwZXh0bgNhZW0CMTEAAR0dkmqFPUEiN0XJbKt9D3IWML9iBTI5UzMvXSahuoOpZFdEWdMTP-lIcWM_aem_ATq4r8iYBvMqTQiYq-PpbcoOKj1Bi-qFytzkN17V-4B_xfIR_c7muRIqmatPerE8Nr1V37Rv75X8y2kZScRLUgLM

3. Project title: Solar Harvest

Project Number: 01000350/03/2023

Lead partner: Energy cooperative Elektropionir

Project value: US\$ 53,200.00

Co-financing from UNDP: US\$ 26,600.00

Project description

This project together with organic farm Organela from Valjevska Kamenica installed a Agro-PV powerplant, capacity of 21.84 KWe, with output power of 17.5 KWh. The estimated reduction of emissions in the first year of operation is 556.83 t CO₂ and 11,136.6 t CO₂ for the next 20 years. One green job was created and two capacity building workshops with sixteen participants were held and one public event was organized. The project raised general awareness about cross sector cooperation between sustainable food production and renewable energy in particular for vulnerable categories – in collaboration with NURDOR association of parents with children affected by cancer.

Visibility links

<https://balkangreenenergynews.com/rs/solarna-berba-prva-agrosolarna-elektrana-u-srbiji/?fbclid=IwAR22OrsviHc1JyEDrT7SLYJv2PGnbtQ4jHY6RINJFcah7ILLi8K94Ahr9ZE>
<https://www.danas.rs/vesti/klimatske-promene/bobicasto-voce-ispod-solarnih-panela-u-valjevskoj-kamenici-postavljena-prva-agrosolarna-elektrana-u-srbiji-foto/>
<https://forbes.n1info.rs/vesti/postavljena-prva-agrosolarna-elektrana-u-srbiji/?fbclid=IwAR07kXlbpqrhxVT7ZH9DYtB4bJFrWf3te1ERxD-kSUyrbHy5HkCleBugc4>
<https://beta.rs/content/200315-postavljena-prva-agrosolarna-elektrana-u-srbiji?fbclid=IwAR3BjkSH50osg71OGLkdUAVPI3hxxawRPtax0NxmzPVnZt3B4k0ZKhZBF8>
https://www.agrofin.rs/vesti/valjevska-kamenica-uskoro-prva-agrosolarna-elektrana-u-srbiji/?fbclid=IwAR21L5efJtSNuoCwNhNPEAb6p3PuicegxIDF_68UddLbVxN9ldm9VRRXD8



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<https://greennews.rs/agrosolarna-elektrana-spajanje-poljoprivrede-i-zelene-energije-u-valjevskej-kamenici/?fbclid=IwAR0mvHviCnNPIKdmckKKJwqglmfF8M9Y2fNDLkZAa2Gk1UutJucXTCYQz6ao>

4. Project title: Vinca Recourse Recovery Centre Project
Project Number: 01000350/04/2023
Lead partner: Beo Čista Energija Ltd. Belgrade
Project value: US\$ 299,103.54
Co-financing from UNDP: US\$ 45,906.60

Project description

Belgrade Waste Management PPP Project enabled the City of Belgrade to close and rehabilitate the Vinča I per year. This project included two main components, Launching the Visitor Center (Furnishing and Branding) for approximately 50 visitors – with purpose of increasing the awareness on EfW facility in waste management system and installation of Flue Gas Treatment equipment that contributes to environmental protection. PPP Vinča Project is recognized as a Serbian – Japanese - French cooperation project, which had a role of transferring Japanese methodology in waste management to companies in Serbia through different public outreach events during the project.

<https://www.bcenergy.rs/visits-by-partners-and-waste-management-experts/>

[The youngest visitors at the Vinča Resource Recovery Center – Beo Čista Energija \(bcenergy.rs\)](#)

[Students of the Faculty of Mechanical Engineering visited the Vinča Resource Recovery Center – Beo Čista Energija \(bcenergy.rs\)](#)

<https://www.bcenergy.rs/representatives-of-the-ministry-of-environmental-protection-visited-vinca-resource-recovery-center/>

5. Project title: Photovoltaic power plant on the roof
Project Number: 01000350/05/2023
Lead partner: Mizan Line doo
Project value: US\$ 99,000.00
Co-financing from UNDP: US\$ 49,000.00

Project description

This project generated a energy mix from combining renewable energy from solar power plant and utilizing efficient heat pumps, setting the company on a carbon neutrality path and contributing to air pollution reduction in the Sjenica region for 167.86 t CO₂ per year, with cumulative reduction estimated to 3,357.2 t CO₂ in twenty years. The innovative new business model created the opportunity for the unemployed women and other vulnerable population, hence 20 green jobs, with a public event and a workshop organized in Sjenica municipality, one of the leased developed municipalities in the Republic of Serbia. CSR actions to fight energy poverty were implemented by replacing individual furnaces with environmentally friendly fuel and retrofitting of households to improve the energy efficiency.

Visibility links:

<https://www.facebook.com/share/p/okp9qeJbHjz8UGBP/?mibextid=oFDknk>

<https://www.facebook.com/share/p/S5hRGU4fa18nq8qh/?mibextid=oFDknk>

https://www.facebook.com/story.php?story_fbid=917164353743565&id=100063500263041&mibextid=oFDknk&rdid=XldCuozkWFb3cwFS

https://www.facebook.com/story.php?story_fbid=917164133743587&id=100063500263041&mibextid=oFDknk&rdid=FbXZn2wMDv7YOHfw



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<https://www.facebook.com/watch/?mibextid=oFDknk&v=1027346388347044&rdid=eFgv9yvVeaiNhNB>
https://www.facebook.com/story.php?story_fbid=885926316867369&id=100063500263041&mibextid=oFDknk&rdid=FEyX0yfplvKewLuR

6. Project title: Parterre arrangement of Coal mining museum Senjski Rudnik

Project Number: 01000350/06/2023

Lead partner: Public company for underground coal mining RESAVICA

Project value: US\$ 84,105.45

Co-financing from UNDP: US\$ 40,570.70

Project description

Public enterprise for underground coal mining RESAVICA, Despotovac deals with the exploitation of coal in 9 mines on the territory of the Republic of Serbia. This project supporting part of construction, Senjski Rudnik (Mine) Eco Museum, following the plan to close the mine. The mining place, a mining colony, is turned into an eco-museum community presenting the way of life and work in a mining settlement, representing true just green transition three new green jobs (tourism) were created, three workshops for local economy diversification and reskilling and one public event was organized.

Visibility links:

<https://youtu.be/eX3Ybl3aF1Y?si=rgXM3s9B5Gkg49Se>

<https://jppeu.rs/vesti/>

<https://www.instagram.com/p/CzqDsAslj2o/?igsh=MXNyYjgxbHh3azd5cw==>

7. Project title: Solar power plant for own use with sale of the surplus to the electricity grid

Project Number: 01000350/07/2023

Lead partner: GRP Centar Ltd Sombor

Project value: US\$ 51,572.73

Co-financing from UNDP: US\$ 25,786.36

Project description

This project follows strategic commitments of GRP Centar energy transformation of the company, shifting to alternative energy resources, cleaner production, increasing energy efficiency and sustainability of the company. Installing a power plant: 69.92 kWp for total annual production of 79,099 kWh with 88.88 t CO₂ emission reduction/ year and cumulative in 20 years 1,777.63 t CO₂, this company created two new green jobs. Addressing green transition and energy poverty, company organized one workshop and public event and established a good practice of 5 t/year briquettes donations to socially vulnerable categories.

Visibility links:

https://www.linkedin.com/posts/grp-center_grp-centar-doo-je-postavio-solarne-panele-activity-7163443629481521153-9fi7?utm_source=share&utm_medium=member_desktop

https://www.linkedin.com/posts/grp-center_u-okviru-projekta-inovativna-i-pravedna-activity-7163442449191833602-dsm0?utm_source=share&utm_medium=member_desktop

https://www.linkedin.com/posts/citywall-climbingwalls_sustainability-sustainable-solar-activity-7141437583133257728-MJYj?utm_source=share&utm_medium=member_desktop

8. Project title: Improving the sustainability of the construction industry by recycling construction waste

Project Number: 01000350/08/2023



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Lead partner: DS ISKOP GRADNJA Ltd.
Project value: US\$ 100,000.00
Co-financing from UNDP: US\$ 49,500.00

Project description

This project obtained a multifunctional crushing machine for concrete. Reuse of concrete enhanced sustainability of the construction industry in Serbia, through the efficient recycling of construction waste. This new machine and tasks within the company created two new green jobs. One workshop for construction companies and their cooperators with a public event were organized to raise awareness about the significance of recycling of the construction waste. As CSR activity, façade insulation for a vulnerable category household and a heating source was provided to address energy poverty.

Visibility links:

<https://www.facebook.com/reel/262633606931283>

https://www.instagram.com/reel/C4az_D3iXld/?utm_source=ig_web_copy_link&igsh=MzRIODBiNWFIZA==

9. Project title: Solar catamaran E-Cat X
Project Number: 01000350/09/2023
Lead partner: KAYAK HOUSE Ltd
Project value: US\$ 98,340.00
Co-financing from UNDP: US\$ 46,000.00

Project description

This project built catamaran and installed specialized flexible solar panels on its roof RES capacity 4,6 kW with two electric engines designed for sailing where sailing with boats with internal combustion engines are prohibited. This sustainable transport, environmentally responsible project, contributed to 1.008 t CO2 emission reduction/ year and cumulative in 20 years 20.17 t CO2. The project represents an exemplary model of eco-tourism, promoting sustainable and environmentally responsible transportation in Serbia.

Three educational workshops were held and two agreements were signed for several promotional tours for children with special needs and without parental care. This will give the opportunity to take a ride on a catamaran, learn about catamaran production, electric propulsion, and its environmental impact. Two public events were also held for raising awareness about importance of sustainable and environmentally friendly transport.

Visibility links:

https://rtv.rs/sr_lat/vojvodina/novi-sad/voznja-katamaranom-za-decu-iz-soso-milan-petrovic-audio/1515679.html

https://www.facebook.com/story.php?story_fbid=942871971174184&id=100063541692173&mibextid=oFDknk&rdid=0mtJ1ZTLueC34tgy

https://www.facebook.com/story.php?story_fbid=931893095605405&id=100063541692173&mibextid=oFDknk&rdid=QrbMmGDbhF6UjhxY

<https://www.instagram.com/p/C3DgNk4M9dy/?igsh=MWtrZXY4aWduazBpdw%3D%3D>

10. Project title: Use of hazelnuts in the production and processing of AY-YA products, closure of the production process, and promotion of women's entrepreneurship in the Municipality of Sid
Project Number: 01000350/10/2023
Lead partner: AY-YA Products Sid
Project value: US\$ 34,480.35
Co-financing from UNDP: US\$ 17,136.34



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Project description

AY-YA obtained and installed a Cold press oil machine and a Nut butter machine enabling an innovative production process utilizing more than 80% of the hazelnuts with piloting new products and widening the company's portfolio, creating 1 new green job AY YA is a pioneer in Serbia, regarding the production of cold-pressed hazelnut oil. Three workshops, with 95 participants, were organized for woman run agricultural households introducing diversification of production, cold-pressed oil, natural cosmetics and gluten-free food raising capacity for womens' entrepreneurship. 1 public event was organized with 72 participants.

Visibility links:

<https://sid.rs/2024/01/30/>

<https://sremskevesti.rs/podrska-zenskom-preduzetnistvu-u-sidu/>

<https://www.sremskenovine.co.rs/2024/01/podrska-zenskom-zelenom-preduzetnistvu/>

<https://www.facebook.com/share/p/mWQ6dmhLws19SmH2/?mibextid=oFDknk>

<https://www.facebook.com/share/p/d18CmESD5UvbKtG4/?mibextid=oFDknk>

<https://www.instagram.com/p/C2xy2AANYhu/?igsh=MWgwdGd0NHFrNDF1cw==>

<https://youtu.be/RuPIII-klGY?si=AOOnKj18JWNlyWpiq>

11. Project title: Patent/prototype development: Innovative use of recycled tire pellets to create non-toxic, circular, and modular street furniture that puts used tires back on city streets

Project Number: 01000350/11/2023

Lead partner: Toyo Tire Serbia Ltd

Project value: US\$ 100,000.00

Co-financing from UNDP: US\$ 46,000.00

Project description

This project developed the Prototype to transform vulcanized tires into urban furniture contributing to the concept of a circular economy and sustainable resource management, reducing the waste stream which significantly impacts the environment. A developmental and educational playground using vulcanized rubber tires was constructed, as interactive, hands-on learning environment which promotes physical activity, sensory exploration, and cognitive development among youth and two public events were organized.

Visibility links:

https://www.linkedin.com/posts/toyo-tire-serbia-d-o-o_odrahsivabuduafdnost-recikliranje-guma-inovacije-activity-7170802367280484352-yej?utm_source=share&utm_medium=member_desktop

https://www.linkedin.com/posts/toyo-tire-serbia-d-o-o_globalrecyclingday-recyclingheroes-odrahsivabuduafdnost-activity-7175450404665630720-dtfK?utm_source=share&utm_medium=member_desktop

<https://www.facebook.com/share/p/KiQQ1HJwsZ8bWMZ5/?mibextid=oFDknk>

<https://www.instagram.com/p/C4KiDiruCfR/?igsh=NGdhbmtseXlzc3Nq>

12. Project title: Electrical Energy Production by Human Powered Exercise Machines

Project Number: 01000350/12/2023

Lead partner: Beoatling Ltd.

Project value: US\$ 10,000.00

Co-financing from UNDP: US\$ 5,000.00

Project description



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This project obtained and installed a microgenerator for electrical energy through the utilization of the human power energy engaged during the work-out sessions, with RES 10 kW, 264 t CO₂ emission reduction/ year and cumulative in 20 years 5,280.00 t CO₂. Conversion of voluntarily small body movements (kinetic energy) into continuous electrical energy is a innovative approach to the green energy production. 1 workshop and 1 public event was organized in a local work out gym to show the possibilities and to raise awareness of the importance of microgenerators.

Visibility links:

https://www.linkedin.com/posts/activity-7175939698312265729-SuNw?utm_source=share&utm_medium=member_android