## Just Transition attitudes and perceptions in the coal-impacted Community of Lazarevac, Serbia



# A WAKE-UP CALL FOR US ALL

**June 2021** 

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#### Abstract:

This study constitutes a comprehensive qualitative and quantitative report on the coal-impacted community of Lazarevac, Serbia, that aims to capture a bottom-up perspective, or "a view from below", of the problems, needs and desires of Lazarevac's residents regarding key issues of energy and just transition. The study investigates the residents' awareness and attitudes towards the just transition issue and offers recommendations on how to improve the communication and information flow amongst various stakeholders at the local, national and international level, based on the data collected. The study aspires to become an essential source of information, providing guidelines for the design of a balanced and effective communication and advocacy strategy, to support the vital process of mitigating the risks of energy and just transition.

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## **EXECUTIVE SUMMARY**



#### 1.EXECUTIVE SUMMARY

This study constitutes a comprehensive qualitative and quantitative report on the coalimpacted community of Lazarevac, Serbia, that aims to capture a bottom-up perspective of the concerns, needs and desires of Lazarevac's residents regarding key issues of energy and just transition.

Bearing in mind that a successfully substantiated communications campaign relies on an accurate understanding of the target groups it is attempting to reach, this study investigates residents' awareness and attitudes towards the issue of just transition. It also offers recommendations, based on the data collected, on how to improve communication and information flow amongst various stakeholders at the local, national and international level in order to enable an informed grassroots debate on long-term just transition, between the members of the affected community itself.

The study posed the following research questions:

- How informed are the residents of Lazarevac about energy transition, and just transition in particular?
- To what extent are they included in decisionmaking processes?
- Who do they recognise as the leading stakeholders in planning the local development?
- Who are the current and potential agents of change in this particular coal-impacted community?
- How does the community of Lazarevac see its future without coal?

Focusing on its primary goal to listen closely to what the residents of Lazarevac have to say, the research was conducted using qualitative research methods, such as in-depth interviews (23 interviews, 27 interviewees), semi-structured and structured interviews and informal conversations, and participant and non-participant observation, during the period from August 2020 to February 2021. These are supported by the quantitative data obtained

through an online survey completed by 21 civil society organisations (CSOs) in Serbia, and a standardised questionnaire filled in by 118 residents of Lazarevac.

The study aspires to become an essential source of information, providing guidelines for the design of a balanced and effective communication and advocacy strategy, to support the vital process of mitigating the risks of energy and just transition, and promote a societal transformation towards sustainability.

#### Why study Lazarevac?

Lazarevac is home to Serbia's largest coal mining complex, RB Kolubara (*Rudarski Basen Kolubara*), the largest division of the stateowned power utility company, Electric Power Industry of Serbia (*Elektroprivreda Srbije* - EPS). RB Kolubara produces approximately 30 million tons of lignite annually. Most of the lignite is transported from the mines, via a 30 km long railroad, to the TE Nikola Tesla plant in Obrenovac (TENT). Combined, power plants within the Kolubara and Obrenovac thermal and mining complexes produce more than 50% of Serbia's electricity.

The Kolubara Mining Basin (RB Kolubara) provides around 75% of the lignite used for EPS' thermal generation. The headquarters of RB Kolubara is located in Lazarevac. According to EPS' official data, as of May 2019, RB Kolubara had 11,880 employees. Coal-lignite is, from an economic standpoint, the most important natural resource of the Lazarevac municipality. There are about 150 companies and about 400 sole proprietorships operating in the mining industry and related activities. The mining and quarrying industry dominates the labour market in Lazarevac - almost 40% of the workforce is employed in these industries, significantly higher than in the rest of Serbia and the Belgrade region. Lazarevac is among the most economically developed municipalities in Serbia, primarily due to its mining industry.

Lignite mining in the RB Kolubara has caused significant air, soil, and water pollution in the region, severely affecting human health. The coal power plants Nikola Tesla A and Nikola Tesla B in Obrenovac are recognised as the third

and the sixth-largest SO2 pollutants in Europe, with 109,000 and 57,100 emitted tonnes, respectively. Nikola Tesla A is also the fourth pollutant in Europe by particulate matter (PM10) emissions, whereas TE Kolubara in Veliki Crljeni, Lazarevac, occupies the third place with 3,255 emitted tonnes.

#### **Environment: Dust and Rust**

When it comes to how informed the residents are about environmental issues, some residents of Lazarevac are aware of the various impacts of environmental pollution on their local community. However, they complain about the lack of hard, statistical data concerning environmental pollution and protection, which would help raise public awareness. They have also not noticed any increase in residents' awareness about environmental problems in recent years. The majority of the responders believes that this important data is "covered in dust", as the state and the local authorities and institutions have not done enough to raise public awareness about their municipality's environmental problems.

Regarding how engaged they feel in the local community's life and decision-making processes, many believe that people's involvement has become "rusty", i.e. people feel demotivated, discouraged, or simply disinterested in getting involved more actively in the affairs of the local community. Activists and members of civil society organisations feel excluded (even purposely) from the local decision-making process, which frustrates the remaining dedicated residents and forces them to consider abandoning the effort.

#### **Just Transition: Fear and Anger**

When it comes to Lazarevac residents' awareness of energy and just transition, the majority of respondents does know what energy transition is, whereas, in their opinion, the level of their fellow residents' knowledge is low. Those who know what energy and just transition are, belong to a demographic of more urban, more educated, young and middle-aged people that have a good understanding of this topic and can be reached

through modern channels of communication, such as Internet portals and social media.

Another subset of Lazarevac's residents, involved in some of the local environmental movements and organisations, appears to be more informed about energy transition and less about just transition. None of them seem to be actively and continuously engaged in raising awareness about these issues. The majority of respondents from Lazarevac do understand the energy and just transition concepts, after they are explained to them. They mostly have a negative perception and choose to not respond when asked about their attitudes, perceptions and hopes for the future. Their reticence is caused by their concern about the reactions of their local self-government, employers, and State institutions.

Considering the question of who are the current and potential agents of change in this coal-impacted community and who could plan the local development, the research respondents express a high level of distrust towards all stakeholders involved in the energy transition process: their local self-government, trade unions, employers, and the State. Even though the State and the local government are recognised as the main actors responsible for the provision of information and the implementation of the energy and just transition, they are also perceived as being corrupt and unwilling to address these issues. Furthermore, many active members of the Lazarevac society also distrust their fellow residents, being convinced that they are not willing to get actively involved in the local community affairs, either because they are not informed in a timely and adequate manner, or because they have become indifferent and submissive because they feel left behind during the past decades. This is what makes Lazarevac angry.

#### Lazarevac Tomorrow: What home? Whose home?

In general, questions on energy transition seem to be a "taboo" topic in the local community of Lazarevac. Residents either think that they are powerless to raise collective awareness and to promptly initiate coal phase-out planning, or believe that closing down the Kolubara power

plant is out of the question and should not happen under any circumstances.

Lack of motivation and interest pervades all generations of respondents from Lazarevac. Older generations, which have been working in the mining industry, have provided for their families, secured jobs for their children, and are not motivated to participate in the process that could endanger their future (financial) prospects. Middle-aged generations have secure jobs, can provide basic necessities and secure a decent livelihood for their families, and often show loyalty towards their employers or the local government officials. Younger generations are satisfied with what constitutes a decent average salary for Serbia and allows for a worry-free lifestyle. Younger people, that are aware of the necessity of energy transition and see its benefits, feel misunderstood and undervalued by their local community, which has pushed many to emigrate to Belgrade or abroad.

Most research respondents have expressed scepticism when asked about potential alternatives for Lazarevac after the closure of the power plant. They predominantly believe that Lazarevac will become a "ghost town" if the mine closes, and many of them have already bought or are planning to buy apartments in Belgrade and continue their lives there.

These findings represent a wake-up call for all the stakeholders involved in the energy and just transition processes.

#### What needs be done?

Ensuring that the transition towards sustainability and a cleaner future is just, requires a multi-layered solution. Informed and participatory decision making requires a wide reaching communication strategy that should involve various stakeholders at the local, regional, national and EU level.

The residents of the municipality of Lazarevac should be the first to be involved in the

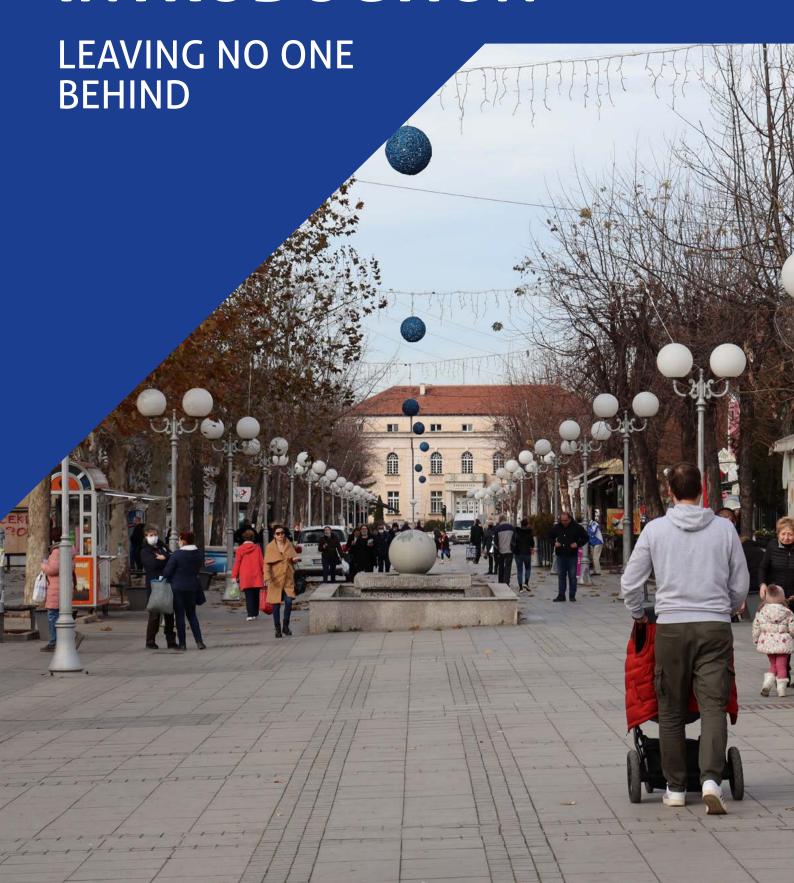
process. The goal of citizen-focused activities should be to raise awareness about energy and just transition and offer information on the processes, their benefits, and what residents can expect. In view of the high level of distrust towards all stakeholders at different levels, these activities should be performed by trustworthy agents of change. Ideally, taking into consideration the findings obtained in the field, the agents of change would be local or national-level independent experts or CSOs specializing in energy and just transition.

The young activist groups in Lazarevac could also be considered as potential local agents of change. However, they require improved capabilities in order to be able to provide accurate and timely information and organize awareness-raising activities in support of the local community at the local level.

The State-level institutions should provide to the general public more comprehensive information about energy and just transition, whereas the national-level CSOs and other stakeholders should increase the pressure on local and national authorities to assume a more active role in the energy and just transition processes. If the authorities were involved in the process and openly spoke about just transition in Lazarevac, the fear felt by some locals would be reduced, encouraging a more proactive approach.

The national (and, through them, the local) authorities need to feel actual pressure from international and EU institutions in order to commit to the issue in a substantial and strategic manner. EU and international institutions need to implement stricter control over the funding they provide to Serbia's energy sector and impose more severe sanctions in case of failure to utilize the funds for the intended purposes. On the other hand, they must encourage public institutions and bodies to assume a more active role in the processes, including them in international networks, programmes, projects and activities, making the funds for energy and just transition issues more readily available.

## INTRODUCTION



#### 2.INTRODUCTION

#### 2.1. Leaving no one behind in the Western Balkans



We must show solidarity with the most affected regions in Europe, such as coal mining regions and others, to make sure the Green Deal gets everyone's full support and has a chance to become a reality. (Frans Timmermans, Executive Vice-President of the European Commission)

"Solidarity", "support", "opportunity" – this is what coal mining regions all over Europe need in order to begin seeing clearer skies and start breathing cleaner air in the not-too-distant future. The Just Transition Mechanism (JTM) is a key tool intended to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind. Fairness and leaving no one left behind are some other established values waiting to reach their full potential in the coal-impacted communities. By establishing social fairness as an essential guiding principle of energy transition, the justifiably fearful coal-impacted communities will not only be taken into account, but they will also be inspired to assume the role of the main drivers of change.

The aim of the European Green Deal (EGD) put forth by the European Commission, is to overcome severe climate change challenges and environmental degradation by transitioning to a clean, circular economy, restoring biodiversity, and cutting pollution. By 2050, Europe will become the first climate-neutral continent, serving as a role model for the rest of the world. However, this goal can only be achieved by expanding this ambitious vision beyond the borders of EU member states. Considering that the 16 existing coal power plants in the Western Balkans, with a combined capacity of 8.7 GW, emit more sulphur dioxide than all 250 coal power plants in the EU, with a total capacity of 156 GW², it is essential that this region receives guidance and various tools to address the issues of energy and just transition.

In December 2020, the World Bank Group, the College of Europe (Natolin campus), the Energy Community Secretariat, the European Bank for Reconstruction and Development, the European Commission and the Government of Poland officially launched the **Platform Initiative for the Western Balkans and Ukraine** (hereinafter the "Platform"). As a sister initiative of the Platform for Coal Regions in Transition established for the European Union countries in 2017, the Platform aims to support the EU's neighbouring states and aspiring members in their efforts to move away from coal. In order to accomplish this goal, the Platform provides invaluable assistance to coal-impacted regions and communities for the formulation and implementation of comprehensive policies, through knowledge exchange, peer-to-peer learning visits, technical assistance, access to a global learning academy for coal regions, and –last but not least-financial assistance for transition projects. The Platform was established following the Western Balkan countries' commitment to clean energy transition, as announced in the Podgorica Joint Statement of 21 February 2019. Moreover, the initiative is further reinforced and guided by the Sofia Declaration on the Green Growth Agenda for the Western Balkans of November 2020.

Official website of the European Union, available at: <a href="https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/just-transition-mechanism\_en">https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/just-transition-mechanism\_en</a>

Chronic coal pollution - EU action on the Western Balkans will improve health and economies across Europe. HEAL, CAN Europe, Sandbag, CEE Bankwatch Network and Europe Beyond Coal. 2019 <a href="https://www.env-health.org/wp-content/uploads/2019/02/Chronic-Coal-Pollution-report.pdf">https://www.env-health.org/wp-content/uploads/2019/02/Chronic-Coal-Pollution-report.pdf</a>

#### 2.2. Leaving no one behind in Lazarevac, Serbia

#### 2.2.1. Aim of the study and research questions

While an understanding of these issues and a commitment to address them exists at the top political level, the question as to how aware coal-impacted communities in the Western Balkans are of the energy and just transition and the inevitability of undergoing these processes in the decades ahead, remains. How do the residents that are directly dependent on the coal mining industry perceive these processes, and what do they consider as the main problems of the implementation of just transition at the local level? To what extent are the voices of the coal-impacted communities heard, acknowledged and encouraged in this region?

This study aims to listen to and consider these local voices, being convinced that energy transition in the Western Balkans can be successful if there is a well-defined, medium-to-long-term communication plan, which will inevitably require the involvement of the coal-impacted communities. Starting a dialogue on just energy transition in the Western Balkans, requires the collection of relevant data, in order to get to know our audience, taking into consideration their rational and emotional perceptions and aspirations.

Therefore, when examining the coal-impacted community of Lazarevac, Serbia in particular, **this study posed the following research questions:** 

- How informed are the residents of Lazarevac about energy transition, and just transition in particular?
- To what extent are they **involved** in decision-making processes?
- · Whom do they recognise as the leading stakeholders in planning the local development?
- · Who are the current and potential agents of change in this particular coal-impacted community?
- How does the community of Lazarevac see its future without coal?

By exploring these questions, the study aspires to become an essential source of information, providing guidelines for the design of a balanced and effective communication and advocacy strategy. It aims to equip key policy frameworks with informed, real value propositions to communicate to the coalimpacted community of Lazarevac, in support of the vital process of mitigating the risks of energy and just transition.

#### 2.2.2. Methodology

Focusing on its primary goal to listen to what the residents of Lazarevac have to say instead of telling them what to do, this study approaches the aforementioned research questions by adopting a "view from below". This means that the research has been conducted using qualitative research methods that attempt to capture a bottom-up perspective of the concerns, needs, and desires of the coal-impacted community of Lazarevac regarding just transition. Qualitative research methods (e.g. in-depth interviews, semi-structured and structured interviews and informal conversations, participant and non-participant observation) are further supported by the quantitative data obtained through an online survey and a standardised questionnaire distributed among and completed by Serbian civil society organisations (CSOs) and the residents of Lazarevac.

Image 1: Lazarevac, pedestrian area in the city centre, a view towards the city library



Image 2: Lazarevac, a view from the city library towards the main pedestrian area in the city centre



An online survey was conducted among Serbian environmental civil society groups and organisations in order to discover how and to what extent the civil society sector conveys messages between policymakers and coal-impacted communities, as well as to understand what, in their opinion, are the main obstacles to the just transition process in Lazarevac and other coal-impacted regions in Serbia (Annex 2).

Furthermore, the research included **participant observation** in Lazarevac, e.g. familiarization with the municipality's layout, infrastructure, population, historical and religious heritage; observation of everyday social, economic, cultural and other activities of its residents; direct observation of the activities of the surface coal fields in the Kolubara mining basin (hereinafter "RB Kolubara") and other facilities of the Kolubara A coal power station (hereinafter "TE Kolubara" or "TEK"); visits to the communities of the municipality of Lazarevac that are most affected by air, soil and water pollution, and those that are expected to be the most affected by energy transition; participation in local civil society organisations' activities, etc.

In addition to various informal conversations and discussions with the residents of Lazarevac, seven in-depth individual and group interviews were conducted with 11 representatives of civil society organisations (youth, women, political and ecological organisations), and, using snowball sampling, 16 in-depth interviews with other Lazarevac residents. All the interviews were recorded and had an average duration of two and a half hours. The in-depth interviews provided detailed information and direct quotations from people about their experiences, opinions, feelings and knowledge on specific subjects of interest for this study. They played a vital role in understanding how much the residents of Lazarevac know about just transition, their direct experience of living and working in the coalimpacted community, the forces that motivate them, and the fears that make them feel discouraged. The interviewees' names have been changed in order to respect their wish to remain anonymous.

Lastly, we conducted a quantitative research using a standardised questionnaire, capturing a bottom-up perspective of the concerns, needs and desires of the coal-impacted community of Lazarevac regarding just-transition. Due to the constraints imposed by the COVID-19 pandemic (e.g. limited access to households, peoples' reluctance to conduct face-to-face interviews, safety issues) a non-probability, voluntary response sampling was used, in order to obtain a sufficiently large sample that would enable us to reach valid conclusions. Two surveying techniques with the same version of the questionnaire (Annex 1) have been used – an online and an offline self-filling questionnaire. The questionnaire consisted of 43 questions, with subsections, divided into four thematic areas (see 2.2.3 below). The online questionnaire was distributed through social media groups and pages used by Lazarevac residents, whereas the offline questionnaire was distributed at key gathering areas (points of interest) of the communities.

In total, **118 people answered the survey.** Compared to the available official data of the Statistical Office of the Republic of Serbia, the sample is representative by gender<sup>3</sup>, age<sup>4</sup>, and income<sup>5</sup>, but has a limited representativeness by level of education<sup>6</sup> and urban-rural residence (population of area of residence)<sup>7</sup>. Although the questionnaire dedicated a significant part to quantitative questions, emphasis was also given to the respondents' qualitative responses. Qualitative responses were coded, analysed and compared to data collected through interviews with local stakeholders, with which they share a high level of similarity and consistency.

<sup>3 52.5%</sup> male and 47.5% female in the sample, compared to 49.03% male and 50.97% female in the population

<sup>4 41.3</sup> average age in the sample, compared to 40.7 in the population

<sup>5 69,489</sup> RSD in the population, compared to 69,393 RSD pondered mean value in the sample

<sup>6</sup> Secondary education levels are similar, 56.8% in the sample compared to 55.9% in the population, but higher level education was more present in the sample than in the population, 41.5% compared to 10.9%

<sup>7 71.2%</sup> urban and 28.81% rural in the sample, compared to 44.3% urban and 55.7% rural in the population

#### 2.2.3. Structure of the study

With the exception of the first chapter, which is based on secondary research data, all the chapters of the study combine questionnaire results (quantifiable and non-quantifiable findings), quotes from the interviews conducted, analysis and assessment of said data, and, where applicable, other sources, e.g. existing policy, news reports, etc.

The chapters of the study are structured thematically:

- 1. Lazarevac Today (background information on the community of Lazarevac);
- 2. Environmental Protection (answering the research questions on how informed the residents are about environmental issues, and to what extent/in what ways are they involved in the local community's life and decision-making processes);
- **3. Just Transition** (answering the research questions regarding the extent to which the residents are informed about the energy and just transition, who are the agents of change in this particular local community, and who is involved in planning local development);
- **4. Lazarevac Tomorrow** (answering the research question on how do the residents of Lazarevac see their future without coal).

#### Let me introduce you to Lazarevac

The online survey results obtained from Serbian environmental protection organizations paint a bleak picture.

If our **field observation** were a painting, it would be *Nighthawks* by Edward Hopper, a portrayal of concurrent closeness and remoteness, giving the illusion of interpersonal normality in what is essentially a desolate and lonely space.

If the sentiments expressed during the **in-depth interviews** could be distilled in a single image, the image would portray people lost in a dark alley in broad daylight, where the sun is struggling to illuminate their path, but dust and soot are prevailing.

If all the **118 questionnaire respondents** could have a single voice, that voice would be a cry for help, help to get noticed, included, valued, and respected.

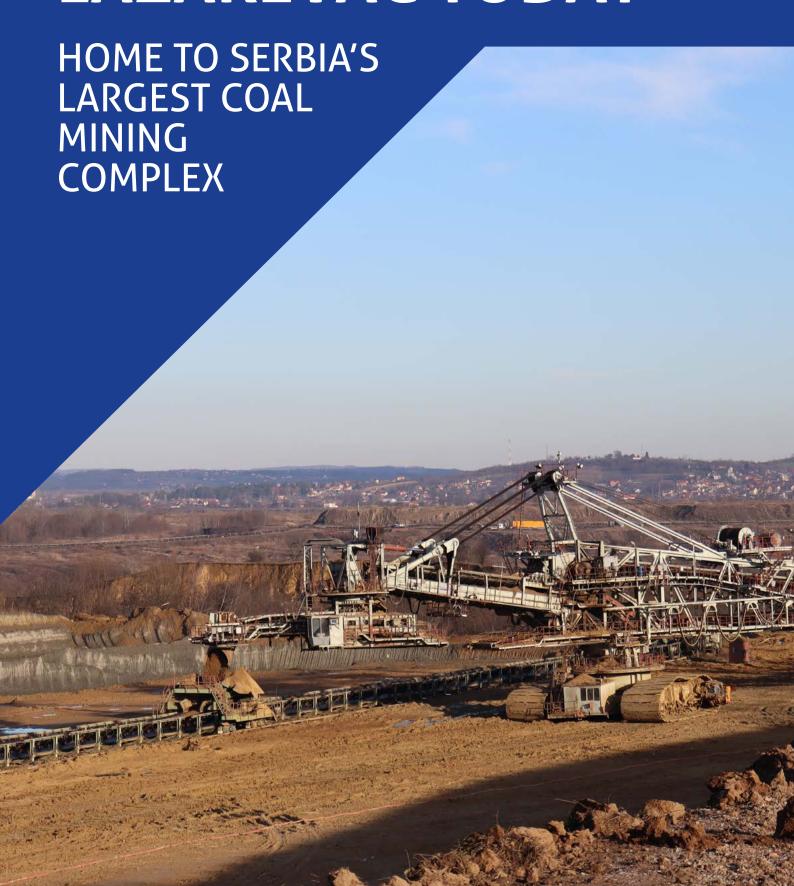
If the similarity and consistency of all these findings, observations and feelings could be reduced to a single message, the residents of Lazarevac would scream:

#### "Wake up!"



Photo: Nighthawks by Edward Hopper (1942)

### LAZAREVAC TODAY



#### **3.LAZAREVAC TODAY**

#### 3.1. Home to Serbia's largest coal mining complex



In our local community it does matter who is the mayor of the municipality, but it has always been more important who is in charge of the Kolubara thermal plant. That is how things work here. (Mladen, 47)

The municipality of Lazarevac is located on the banks of river Kolubara, that lends its name to Serbia's largest coal mining complex, opened in 1952. A famous local First World War battle, that still inspires Serbian national pride, took place along the banks of this river and is known as the Battle of Kolubara. Many educational and cultural institutions, sports clubs, businesses, and residents' groups and associations in Lazarevac, use the word "Kolubara" in their official names.

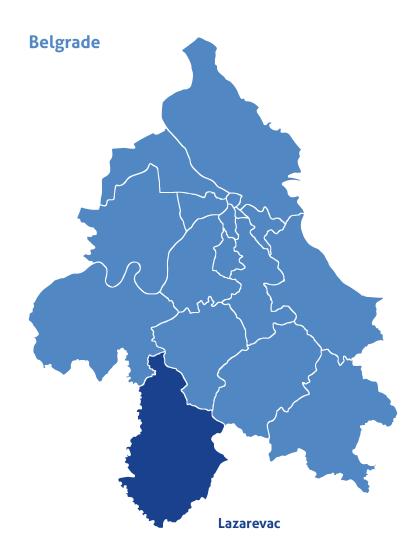
However, to a visitor who tries to familiarize with this municipality, these eye-catching and ubiquitous "Kolubara" signs remind them more of the mining basin rather than the river itself. Not only because numerous administrative and other buildings of RB Kolubara and its operating units, are located in the municipality, but also because the entire community seems to be "breathing" to the rhythm of the roaring machines used for coal extraction nearby. No matter the topic a Lazarevac visitor wishes to explore, RB Kolubara always comes to the forefront. When asked why this is the case, the residents of Lazarevac usually offer a quick and straightforward response:

There is no RB Kolubara without Lazarevac's coal, and there is no Lazarevac without RB Kolubara.

#### 3.2. Geographical position

Lazarevac constitutes one of 17 Belgrade municipalities and extends over 389 km². It has 34 communities with an average area of 11.3 km². City Municipality of Lazarevac is a part of Belgrade Region (Figure 1). Lazarevac is located 55 kilometres from Belgrade, the capital of Serbia. The Ibar Highway and the Belgrade-Bar railway cross the territory of the municipality, and the road network includes the main road to Aranđelovac, Valjevo and Obrenovac, as well as several regional roads. These provide Lazarevac with good connectivity to Belgrade and central Serbia. The vast quantities of coal are transported to the Nikola Tesla thermal power plant in Obrenovac (hereinafter the "TE Nikola Tesla" or "TENT") by the industrial railway connecting the Kolubara mining basin's plants.

Figure 1: The geographical position of Lazarevac within Belgrade



#### 3.3. Demographics

According to the 2011 Population Census, the most recent conducted in Serbia, the municipality of Lazarevac has a population of 58,622 inhabitants (29,880 or 50.97% women, and 28,742 or 49.03% men) living in 18,862 households. The average number of household members is 3.1, which is slightly higher than the national averages. Although population density (153 inhabitants per km²) is over three times higher than the national average, it is ranked 15th among Belgrade's city municipalities, with only Barajevo (126) and Sopot (73) being less densely populated. The 2019 estimates indicate that the population of Lazarevac declined slightly since the last Population Census in 2011. Today, Lazarevac has a population of 56,595 people (decreased by 2,207 residents since 2011).

The average age of the population is 40.7 years, making Lazarevac municipality slightly younger than the national and regional average. There are 24,410 economically active inhabitants in the municipality (aged 15-64). Out of 58,622 inhabitants of Lazarevac and its surrounding communities, 11,844 (20.20%) belong to the category of young people (aged from 15 to 29 years). In Lazarevac's urban area, there are 26,006 inhabitants (44.36%), while 32,616 (55.64%) of them live in rural areas. The municipality of Lazarevac is not a multi-ethnic community – Serbs constitute 95.51% of the total population.

**Table 1:** Statistical overview of Lazarevac municipality, compared to the Belgrade region and the Republic of Serbia, Population Census 2011

|             |                                     | Serbia    |         | Belgrade Region |         | Lazarevac |         |
|-------------|-------------------------------------|-----------|---------|-----------------|---------|-----------|---------|
|             | Size                                | 88,499    |         | 3,234           |         | 383       |         |
| 7           | Population (2011 census)            | 7,186,862 |         | 1,659,440       |         | 58,622    |         |
| GENERAL     | Population density                  |           | 81      |                 | 513     | 153       |         |
| N N         | Natural increase rate               |           | -5.3    |                 | -2.1    | -2.5      |         |
| G           | Average age                         |           | 42.2    | 41.8            |         | 40.7      |         |
|             | Average number of household members | 2.9       |         | 2.7             |         | 3.1       |         |
|             | Age 0-14                            | 1,025,278 | 14.27%  | 232,730         | 14.02%  | 8,810     | 15.03%  |
|             | Age 15-29                           | 1,322,021 | 18.39%  | 307,698         | 18.54%  | 11,844    | 20.20%  |
| AGE         | Age 30-44                           | 1,460,224 | 20.32%  | 367,531         | 22.15%  | 11,723    | 20.00%  |
|             | Age 45-59                           | 1,600,609 | 22.27%  | 479,719         | 28.91%  | 13,911    | 23.73%  |
|             | Age 60+                             | 1,778,730 | 24.75%  | 271,762         | 16.38%  | 12,334    | 21.04%  |
| GENDER      | Male                                | 3,499,176 | 48.69%  | 785,826         | 47.35%  | 28,742    | 49.03%  |
| - GE        | Female                              | 3,687,686 | 51.31%  | 873,614         | 52.65%  | 29,880    | 50.97%  |
| NATIONALITY | Serbs                               | 5,988,150 | 83.32%  | 1,505,448       | 90.72%  | 55,987    | 95.51%  |
| NATION      | Rest                                | 1,198,712 | 16.68%  | 153,992         | 9.28%   | 2,635     | 4.49%   |
|             | 15+ education                       | 6,161,584 | 100.00% | 1,426,710       | 100.00% | 49,812    | 100.00% |
|             | No school / education               | 164,884   | 2.68%   | 16,751          | 1.17%   | 1,102     | 2.21%   |
| EDUCATION   | Incomplete primary education        | 677,499   | 11.00%  | 58,259          | 4.08%   | 5,044     | 10.13%  |
| 3           | Primary education                   | 1,279,116 | 20.76%  | 198,842         | 13.94%  | 10,237    | 20.55%  |
| <u>S</u>    | Secondary education                 | 3,015,092 | 48.93%  | 749,079         | 52.50%  | 27,845    | 55.90%  |
|             | Higher and university education     | 1,000,569 | 16.24%  | 396,779         | 27.81%  | 5,412     | 10.86%  |
|             | Unknown                             | 24,424    | 0.40%   | 7,000           | 0.49%   | 172       | 0.35%   |
| ACTIVITY    | Active population (aged 15-65)      | 2,971,220 | 100.00% | 722,108         | 100.00% | 24,410    | 100.00% |
|             | Employed                            | 2,304,628 | 77.57%  | 593,021         | 82.12%  | 20,847    | 85.40%  |
| AC          | Unemployed                          | 666,592   | 22.43%  | 129,087         | 17.88%  | 3,563     | 14.60%  |

Source: Statistical Office of the Republic of Serbia

The percentage of the economically active population in Lazarevac, Belgrade region and Serbia is similar. However, the percentage of employed population is higher in Lazarevac (85.40%) than in the Belgrade region (82.12%) or at the national level (77.57%), even though the average educational profile of the population of Lazarevac is less favourable than the national and regional averages. **RB Kolubara has been the driving force of employment opportunities within the municipality.** The demand for a skilled workforce caused the establishment of a large number of vocational high schools (secondary education).

This is the main reason why Lazarevac has a higher percentage of the population with secondary education (55.90%) than the Belgrade region (52.50%) or the Republic of Serbia (48.93%). However, Lazarevac lags behind the national and regional percentage of the population with higher or university education, with only 10.86% of the population receiving higher education or a university degree. In the Belgrade region, the percentage of this population group is almost three times higher (27.81%), while in Serbia as a whole, the percentage is 16.24%.

Image 3: Technical school "Kolubara", Lazarevac; a vocational high school offering specialized curricula in: 1) geology, mining and metallurgy, 2) mechanical engineering and metal processing, 3) electrical engineering, and 4) economics, law and administration



Unlike most cities and municipalities in Serbia, the population has not declined during the two decades between the previous two censuses (1991-2011) (Table 2). In Lazarevac, the total number of inhabitants has been essentially stable. If we observe the number of inhabitants since 1948, we can notice a decline in the number of inhabitants in rural communities, and an increase of the number of inhabitants in urban areas. This decline of rural population is common in Serbia and attributed to industrialisation and urbanisation processes. In Lazarevac, one of the key factors influencing urbanisation was coal mining (1952) and the opening of TE Kolubara (1958). Even though there are several possible reasons that could explain the decline of the total number of inhabitants (e.g. negative natural increase rate, flight of the younger population to larger cities for education, or abroad in search of employment), the constant demand for workforce in-and-around RB Kolubara has had a big impact on the influx of new people in the Lazarevac municipality.

Table 2: Population of Lazarevac, 1948-2011

|           | 1948   | 1953   | 1961   | 1971   | 1981   | 1991   | 2002   | 2011   |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lazarevac | 36,377 | 38,794 | 43,906 | 45,675 | 51,068 | 58,882 | 58,511 | 58,622 |
| Urban     | 3,614  | 3,970  | 5,905  | 7,994  | 13,184 | 21,978 | 22,732 | 26,006 |
| Rural     | 32,763 | 34,824 | 38,001 | 37,681 | 37,884 | 36,904 | 35,779 | 32,616 |

Source: Statistical Office of the Republic of Serbia

#### 3.4. Economy

Coal-lignite is, from an economic standpoint, the most important natural resource within the municipality. According to estimates, made available by the Statistical Office of the Republic of Serbia, lignite reserves amount to approximately 2.5 billion tons. There are about 150 companies and about 400 sole proprietorships operating in the mining industry and related activities. Larger companies include Thermal Power Plant "Kolubara" in Veliki Crljeni, Kolubara Metal, Kolubara Universal, Xella - Vreoci, Kolubara Usluge and others, all connected to the coal mining industry.

Since 2017, the percentage of employed population has been stable, whereas the number of the unemployed has steadily declined. It's worth noting that an increase of the total number of sole proprietorships has been observed in Lazarevac, which could be an indicator of an increased entrepreneurial mindset among its population.

**Table 3:** Number of employed, unemployed and active companies/sole proprietorships in Lazarevac municipality, 2017-2020

|                             | 2017   | 2018   | 2019   | 2020  |
|-----------------------------|--------|--------|--------|-------|
| Employed                    | 22,718 | 21,843 | 22,146 | -     |
| Unemployed                  | 3,229  | 2,759  | 2,440  | 2,576 |
| Active companies            | 558    | 563    | 486    | 483   |
| Active sole proprietorships | 1,618  | 1,728  | 1,792  | 1,830 |

Source: Statistical Office of the Republic of Serbia; Serbian Business Registers Agency

The mining and quarrying industry dominate the labour market in Lazarevac – almost 40% of employees work in this industry, significantly higher than in the rest of Serbia and the Belgrade region. This affects the proportion of workers employed in other industries, resulting in lower percentages than the national or regional average (Table 4). Mining and quarrying are followed by manufacturing (12.87%), wholesale and retail trade (missing 8.50%); repair of motor vehicles and motorcycles (8.50%), and administrative and support service activities (8.47%).

Table 4: Number of employed in Lazarevac municipality, per industry, 2019, annual average

|   | Republic<br>of Serbia | %       | Belgrade<br>Region | %       | Lazarevac | %       |
|---|-----------------------|---------|--------------------|---------|-----------|---------|
| Agriculture, forestry and fishing                                     | 30,875                | 1.47%   | 3,555              | 0.48%   | 7         | 0.03%   |
| Mining and quarrying  | 25,989                | 1.24%   | 9,727              | 1.32%   | 8,753     | 38.97%  |
| Manufacturing   | 459,647               | 21.87%  | 67,350             | 9.11%   | 2,891     | 12.87%  |
| Electricity, gas, steam and air conditioning supply                   | 26,015                | 1.24%   | 8,375              | 1.13%   | 699       | 3.11%   |
| Water supply; sewerage, waste management and remediation activities   | 35,602                | 1.69%   | 8,773              | 1.19%   | 757       | 3.37%   |
| Construction  | 105,671               | 5.03%   | 41,419             | 5.60%   | 762       | 3.39%   |
| Wholesale and retail trade; repair of motor vehicles and motor cycles | 342,569               | 16.30%  | 125,174            | 16.92%  | 1,909     | 8.50%   |
| Transport and storage   | 119,006               | 5.66%   | 43,943             | 5.94%   | 606       | 2.70%   |
| Accommodation and food service activities                             | 82,459                | 3.92%   | 28,942             | 3.91%   | 841       | 3.74%   |
| Information and communication   | 67,481                | 3.21%   | 40,714             | 5.50%   | 122       | 0.54%   |
| Financial and insurance activities                                    | 43,849                | 2.09%   | 23,843             | 3.22%   | 225       | 1.00%   |
| Real estate activities  | 6,747                 | 0.32%   | 3,660              | 0.49%   | 7         | 0.03%   |
| Professional, scientific and technical activities                     | 108,935               | 5.18%   | 59,765             | 8.08%   | 331       | 1.47%   |
| Administrative and support service activities                         | 106,631               | 5.07%   | 72,183             | 9.76%   | 1,902     | 8.47%   |
| Public administration and defence; compulsory social security         | 157,403               | 7.49%   | 78,921             | 10.67%  | 454       | 2.02%   |
| Education   | 146,247               | 6.96%   | 44,071             | 5.96%   | 1,197     | 5.33%   |
| Human health and social work activities                               | 156,920               | 7.47%   | 48,065             | 6.50%   | 604       | 2.69%   |
| Arts, entertainment and recreation                                    | 36,595                | 1.74%   | 15,149             | 2.05%   | 195       | 0.87%   |
| Other service activities  | 42,626                | 2.03%   | 16,006             | 2.16%   | 200       | 0.89%   |
| TOTAL   | 2,101,267             | 100.00% | 739,635            | 100.00% | 22,462    | 100.00% |

Source: Statistical Office of the Republic of Serbia

Lazarevac is among the most economically developed municipalities in Serbia. Even though Lazarevac has been performing above the national and regional average in terms of average net salary, the gap has been decreasing every year. In 2015, the average net salary in Lazarevac (64,468 RSD/ cc 550 EUR) was 45% higher than the national average (44,432 RSD/ cc 380 EUR) and 16% higher than the average in the Belgrade region (55,551 RSD/ cc 470 EUR). In 2019, this gap decreased - average net salary in Lazarevac (69,489 RSD/ cc 590 EUR) was 26% higher than the national average (54,919 RSD/ cc 460 EUR), and just 2% higher than the average in the Belgrade region (68,140 RSD/ cc 580 EUR) (Table 5). This could indicate that the economy of Lazarevac, heavily influenced by the performance of TE Kolubara, has not been keeping up with the growth trends of other industries in Serbia (see Table 4). However, more thorough research is required to fully evaluate the (possibly declining) competitiveness of the mining and quarrying industry in Serbia and its influence on the people living and working in the Lazarevac municipality.

Table 5: Average net salary (RSD), 2017-2020, Republic of Serbia, Belgrade region, and Lazarevac

|                    | 2015   | 2016   | 2017   | 2018   | 2019   |
|--------------------|--------|--------|--------|--------|--------|
| Republic of Serbia | 44,432 | 46,097 | 47,893 | 49,650 | 54,919 |
| Belgrade region    | 55,551 | 57,717 | 60,142 | 60,689 | 68,140 |
| Lazarevac          | 64,468 | 65,390 | 65,953 | 64,243 | 69,489 |

Source: Statistical Office of the Republic of Serbia

#### 3.5. Culture

Cultural activities and programmes in Lazarevac take place at the Centre for Culture, the Modern Gallery, the "Dimitrije Tucovic" Library, and the First Suburban Theatre – Pulse Theatre Lazarevac and elsewhere. The most significant events, traditionally held in the municipality, are the Festival of Humour for Children, the Athletic Street Race and the Cycling Race. According to the Statistical Office of the Republic of Serbia, Lazarevac has a single cinema that is not frequently visited, recording the third-lowest number of visitors per 100 inhabitants among the 17 Belgrade municipalities.

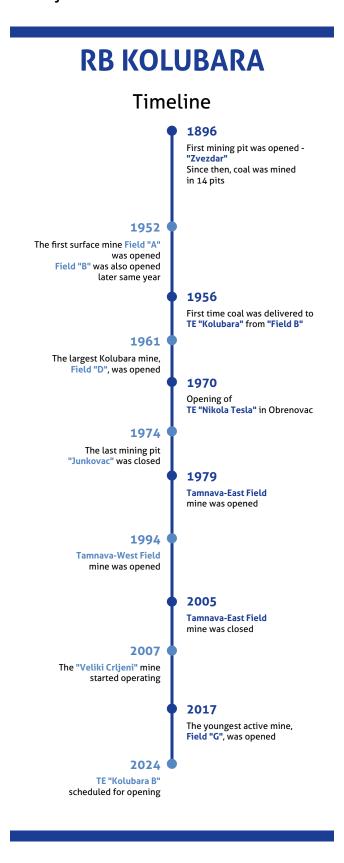
Image 4: Cultural Centre building (up, left), a monument to the Serbian peasant (up, right), a detail of the Kamengrad (Stoneville) park complex (down, left) and the Church of St. Demetrius (down, right)



One of Lazarevac's most noteworthy landmarks, the church of St. Demetrius which dominates the city centre, contains a memorial ossuary with the remains of around 20,000 Serbian and 30,000 Austro-Hungarian soldiers that died in battle. This memorial ossuary is a source of pride for many residents of Lazarevac, as it represents a rare example of burying enemy soldiers together with your own, with equal honours and respect. Vrače Hill is another important historical site in the municipality of Lazarevac associated with the Battle of Kolubara. The place where the Social Democratic Party leader, Dimitrije Tucović, was killed in battle and where a stone obelisk in his honour stands today, Vrače Hill is a favourite picnic spot for the residents of Lazarevac with a beautiful view of the Kolubara valley.

#### 3.6. Coal mining

The history of mining in the Kolubara basin dates back to 1896 when the first "Zvizdar" pit was opened. Coal was mined from 14 pits, and the last pit "Junkovac" was closed in 1974. The turning point in coal production was 1952 when the first open pit mine, Field "A", was opened. Ever since, the electricity supply in Serbia has relied heavily on coal from the Kolubara basin.



Serbia meets large part of its electricity demand with domestic production. Around 70% of electricity generation in Serbia is based on coal (68.30% in 2019), while hydropower plants produce around 30% (27.14% in 2019). As of 2019, renewable sources such as biomass, solar and wind had a cumulative share of 3.14% in Serbia's electricity mix. Serbia's electricity market is dominated by the national public power utility company, Electric Power Industry of Serbia (*Elektroprivreda Srbije - EPS*). **EPS has a monopoly in lignite mining, electricity generation and distribution throughout the country.** 

Serbia has significant coal reserves, with 4.5 billion tons of lignite deposits. The reserves are found in two major coal basins - Kolubara (partially in the Lazarevac municipality) and Kostolac. The coal mines in Serbia are owned and operated by EPS subsidiaries.

Image 5: Mining basin "Polje D" in Vreoci (up, left), TE Kolubara, Veliki Crljeni (up, right), "Kolubara Processes" building in Vreoci (down, left), and mining basin "Tamnava-Zapadno Polje" near Radljevo, Municipality of Ub (down, right)









<sup>8</sup> Electric Network of Serbia (*Elektromreža Srbije* (EMS)), Annual Report on the National Residual Mix for Serbia for 2019, June 2020

The Kolubara Mining Basin (RB Kolubara) covers almost 600 km² and provides around 75% of the lignite used for EPS' thermal generation. The headquarters of RB Kolubara are located in Lazarevac. It is the largest division of EPS and is the leading coal producer in Serbia and the Balkans. According to official EPS data, as of May 2019, RB Kolubara had 11,880 employees, 6,625 of which worked in the open-pit mines. RB Kolubara has five operating units: "Surface mines", "Processing", "Metal", "Project" and Administration.

RB Kolubara produces approximately 30 million tons of lignite annually. Most of the lignite is transported from the mines to the TE Nikola Tesla in Obrenovac, via a 30 km long railroad, while a smaller portion is delivered to power plants Morava (in Svilajnac) and Kolubara (in Lazarevac, Veliki Crljeni). Combined, the power plants of the Kolubara/Obrenovac thermal and mining complex produce more than 50% of Serbia's electricity.

Coal is mined at four surface mines: Field "B", Field "D", Field "Tamnava-West Field" and Field "G". These four mines cover an area of about 80 km<sup>2</sup> in the territory of the municipalities of Lazarevac, Lajkovac and Ub.

EPS, partnering with the Chinese company Power Construction Corp.of China Ltd., has launched a project to build the **Kolubara B thermal power plant** with a capacity of 350MW, expected to become operational in 2024. For this purpose, a new surface mine "Radljevo" will be opened by 2023. On the other hand, TE Kolubara (Kolubara A) is scheduled for closing by 2023.

#### 3.7. Air pollution and health

Lignite mining in the RB Kolubara has been the cause of significant air, soil, and water pollution in the region, severely affecting human health. The pollution originates from mining activities and emissions of particulate matters (PM) and sulphur and nitrogen oxides, generated by the lignite burned in the power plants' boilers. Vulnerable groups such as children and the elderly are the most at risk, other than those employed or living in close vicinity to the mining and power generation operations.

A 2020 report<sup>9</sup> prepared by the Europe Beyond Coal campaign indicated that the Nikola Tesla A and Nikola Tesla B coal power plants in Obrenovac were the third and sixth-largest SO2 polluters in Europe with 109,000 and 57,100 emitted tonnes, respectively. Nikola Tesla A is also the fourth largest polluter in Europe by particulate matter (PM10) emissions, whereas **TE Kolubara in Veliki Crljeni, Lazarevac, is ranked third with 3,255 emitted tonnes of PM10.** 

The Kostolac thermal plant and the TE Nikola Tesla in Serbia are responsible for 1,940 premature deaths in the EU, the Western Balkans and beyond, 4,000 cases of bronchitis in children and 1,000 in adults, 1,500 hospitalizations of patients due to respiratory or cardiovascular symptoms, as well as for annual healthcare costs of up to 4.4 billion EUR.<sup>10</sup> In Lazarevac, due to the pollution of the water supply, in addition to a primary healthcare centre, there is also a Special Hospital for Endemic Nephropathy which in 2019 treated 460 patients over 17,620 hospital days and registered 29 deaths.<sup>11</sup>

With regard to professional diseases, they are mostly detected among the lignite mining and power generation workers. 2018 data shows that workers mining lignite in the RB Kolubara are widely exposed to certain professional diseases: 41.46% of workers were found to have limited capability for work, while 1.74% were found unable to work.<sup>12</sup>

<sup>9</sup> Chronic coal pollution - EU action on the Western Balkans will improve health and economies across Europe. HEAL, CAN Europe, Sandbag, CEE Bankwatch Network and Europe Beyond Coal. 2019

<sup>10</sup> Chronic Coal Pollution Serbia: Making the case for health promoting investments for zero pollution in Serbia, a report by the Health and Environment Alliance (HEAL), researched and written by Vlatka Matkovic and Srdjan Kukolj. 2020

Institute of Public Health of Serbia "Dr Milan Jovanovic Batut", Health Statistical Yearbook of Republic of Serbia 2019

Smart strategies for the transition in coal intensive regions, a report on social challenges and re-skilling needs of the workforce solutions in the TRACER target regions, July 2020

Image 6: The chimneys of TE Kolubara as seen from the Ibar Highway



#### Welcome to Lazarevac

There are several ways to describe Lazarevac. It can be an economically developed municipality, a place where the dominant industry employs almost 40% of its active population or a city where people have a steady income, but, sometimes quite literally, they lose the ground under their feet when the mine basins expand, undermining their homes. There are also many ways in which we could define the residents of Lazarevac. They can be unemployed or employed, uneducated or educated, poor or wealthy, beekeepers and teachers, engineers and miners. The common element that melds all these diverse categories and identities into a unique social community, is the coal from the basin mine Kolubara.

In the city's main pedestrian area, a visitor to Lazarevac can observe the shop window of the local Tourism Agency, filled with paintings, postcards and other souvenirs dedicated to the local historical, cultural and religious heritage and prominent historical figures of the region. Despite the region's rich historical legacy, mostly related to the famous Battle of Kolubara, a miner named *Uglješa* (from the Serbian word *ugalj*, meaning coal) has been chosen as Lazarevac's mascot. Entirely covered in coal dust and with a pickaxe in his hand, he is seemingly cheerfully going about his everyday work.



*Uglješa* is the unofficial mascot of Lazarevac, but, as employees of the Tourism Agency have explained, he has grown very close to the hearts of the majority of this municipality's inhabitants. Dressed in Serbian national costume, this happy miner greets us with the message:

"Welcome to Lazarevac!"

## ENVIRONMENTAL PROTECTION

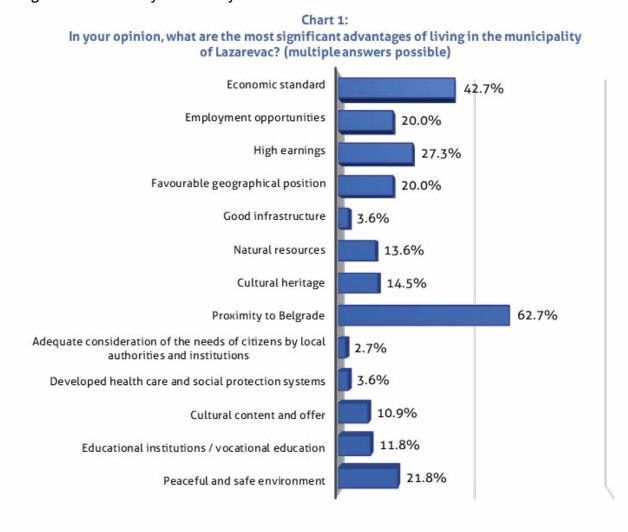


#### 4.ENVIRONMENTAL PROTECTION

#### 4.1. Dust in the air

Lazarevac looks like an oasis in a desert, surrounded by coal mine basins. It looks green and pretty, but this image is fake. The basins are getting closer to the city, bringing even more pollution, noise and dust. (Mladen, 47)

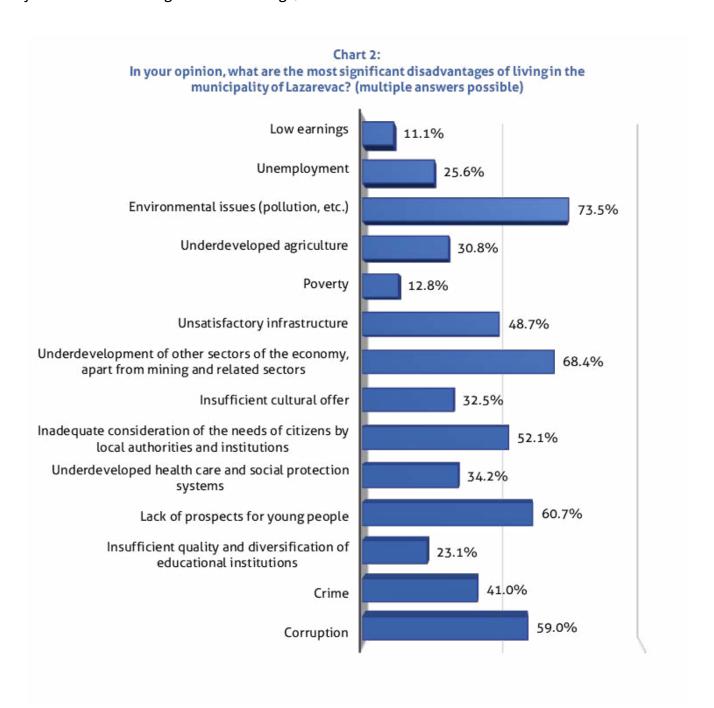
When the exploitation of coal started in RB Kolubara, there were not enough miners and engineers in the region for the work required in the mine basins and TE Kolubara. For that reason, Lazarevac has been attracting qualified professionals not only from Serbia and the wider Kolubara region, but from all the countries of former Yugoslavia. In Veliki Crljeni, where the TE Kolubara has been operating, a distinctive neighbourhood, called *Rudarsko naselje* ("miners' colony"), is still standing. It is the neighbourhood where the families of the first skilled workers required for RB Kolubara settled down. Following the breakup of Yugoslavia, Lazarevac has also received Serbian populations from Croatia and Bosnia and Herzegovina, and subsequently from Kosovo and Metohija. Some of them arrived out of cruel necessity (e.g. forced displacement due to war), but some, especially in the previous two decades, have chosen Lazarevac because of the employment opportunities which could potentially provide a higher standard of living and a more worry-free lifestyle for themselves and their families.



Today's population is well-aware of these advantages of living in Lazarevac. When asked to choose what

are, in their opinion, the most significant advantages of living in the Lazarevac municipality (Chart 1), three out of five top answers involved economic prosperity. Namely, 62.7% of respondents indicated the proximity to the Serbian capital of Belgrade, followed by the municipality's **economic standard** (42.7%), **high earnings** (27.3%), **peaceful and safe environment** (21.8%), and **employment opportunities** (20%). Men were more prone than women to indicate high earnings (27.42% compared to 8.93%) and employment opportunities (32.26% compared to 17.86%) as the most significant advantages of living in Lazarevac. This can be explained by the male dominated mining industry – the largest economic sector in Lazarevac, but it also raises the question **about how available are well-paid and secure jobs for the female population in this municipality.** 

Worryingly, good infrastructure (3.6%), developed healthcare and social protection systems (3.6%), and adequate consideration of the needs of residents by local authorities and institutions (2.7%), recorded the lowest scores. Only 4 respondents indicated developed healthcare and social protection systems as the most significant advantage, and none of them were women.

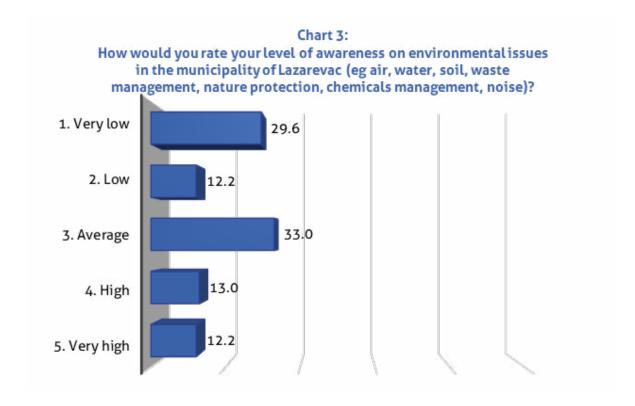


As indicated by the number of responses of Chart 2 (671 compared to 281 in Chart 1), the residents of Lazarevac have been more willing to address the disadvantages of living in this municipality. According to Chart 1, the respondents were least concerned about the economic issues: 12.8% complained about poverty and 11.1% about low earnings. Certain serious issues, some of which could be directly attributable to the region's coal mining industry, recorded very high scores, including the **underdevelopment of other sectors of the economy**, other than the mining and mining related sectors (68.4%), **lack of prospects for young people** (60.7%), **corruption** (59%), and **inadequate infrastructure** (48.7%).

The largest number of respondents – 73.5%, recognised environmental issues, such as air, soil and water pollution, as the most significant disadvantage of living in Lazarevac.

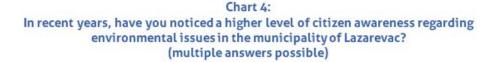
#### 4.1.1. Environmental issues: Not informed, not involved

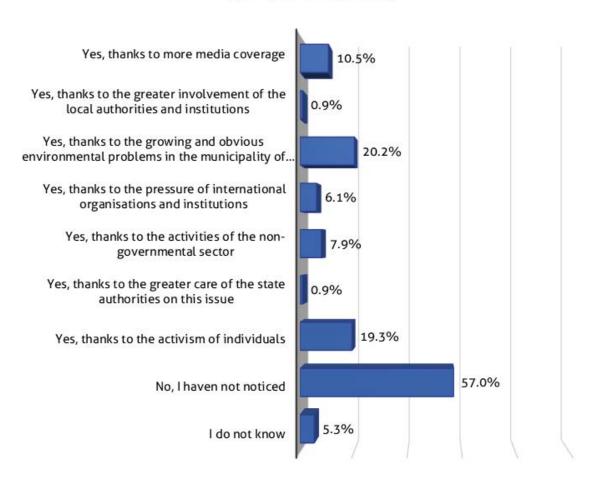
Even though the respondents recognised environmental pollution as being the main disadvantage of living in Lazarevac, when asked how would they rate their level of awareness regarding environmental issues in the municipality of Lazarevac (e.g. air, water, soil pollution, waste management, environmental protection, chemicals management, noise), they predominantly rated it as average (33%) and very low (29.6%). Only 12.2% think they are very well-informed about the above mentioned issues (Chart 3). Among age groups, the respondents above 60 years of age are the least informed (42.86% of them opted for the answer "very low"), whereas the youngest age group, from 18 to 30, registered the lowest percentage among those who opted for the "very high" option (only 5.56%). If we were to search for potential partners in the municipality of Lazarevac, we should look at the 46 to 60 years of age demographic, that appears to be the most informed about issues such as air, water and soil pollution (25% opted for "high" and 18.7% for "very high").



I have never really thought about air pollution in the city. I guess, by living here, I've got used to it. Probably if somebody came and told me how polluted it is, I would have believed them. But, at least in my social circle, nobody talks about that, it has never been a part of our everyday conversations. (Mihajlo, 33)

Furthermore, the majority of respondents (57%) replied that they have not noticed a higher level of citizen awareness about the environmental issues in the municipality of Lazarevac in recent years. Among those who said they have, 20.2% believe that this is the case because the environmental problems are becoming more apparent and more severe, while 19.3% believe that this is attributable mostly to individual activism. Greater media coverage (10.5%) and the non-governmental sector's activities (7.9%) also play a modest role. The answers to this question have revealed important information about Lazarevac residents' perception that State and local authorities and institutions played a negligible role in raising citizen awareness about the environmental problems in their municipality, both scoring only 0.9% (Chart 4).





The same point about the insufficient role played by the State and local authorities and institutions in raising citizen awareness about the environmental problems was raised in the interviews conducted with Lazarevac residents. The interviewees believe that they have not been informed in a timely and adequate manner, but also that they have been excluded from the discussion and prevented from obtaining relevant data on the environmental problems in their local community:

Is there anyone to inform these people? If somebody tried and actually managed to accomplish that in Lazarevac, they would immediately become scapegoats, because you can complain about any issue in Lazarevac, as long as you stay clear of anything related to Kolubara! (Sara, 39)

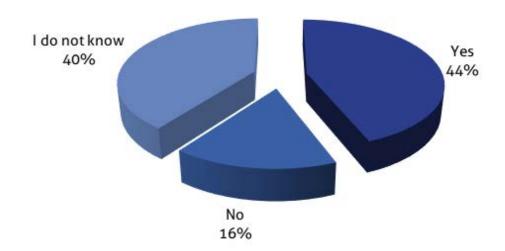
Ten years ago, they did some analysis of air pollution here. Experts from Belgrade came and installed an air quality monitoring station in Veliki Crljeni to measure air pollution levels. The information was passed on to the people in the municipality responsible for this issue. When they realised what the results looked like, they immediately made them unavailable to the public. It's information of public interest, but try and get it if you can! I am telling you – there's no chance! You can write letters, e-mails or officially request data, but they would rather pay the statutory fine than give you the data. (Milan, 63)

#### 4.1.2. Pollution and its consequences: Here, or just hearsay?

44% of respondents are aware, while 16% declared that they are unaware, of the various impacts of environmental pollution on their local community, other than the impact on human health. A troubling percentage of the respondents – 40%, stated that they do not know anything about this issue (Chart 5). Once again, the Lazarevic's residents seem to send a message that **they lack relevant and timely information on the issues directly affecting their everyday lives.** 

Chart 5:

Are you aware of any other impacts/effects of environmental pollution (air, land, water) on your local community, apart from the impact on human health?



Those who answered affirmatively to this question were also asked to write down their observations and perceptions of what RB Kolubara's mining activities affect the most, other than human health (Figure 2). The most relevant and most commonly mentioned answers, which will be analysed further in the upcoming pages, concerned the effects of coal exploitation on:

- severe air, water, soil and consequent food pollution;
- destruction of agricultural land;
- · animal illnesses and extinction of plant and animal species;
- presence of wild landfill sites;
- lack of sewage and water supply systems;
- the social impact of environmental pollution, e.g. population emigration from the region, abandonment of villages and elimination of the rural lifestyle.

Figure 2: Selected answers from the questionnaire on the impacts of environmental pollution



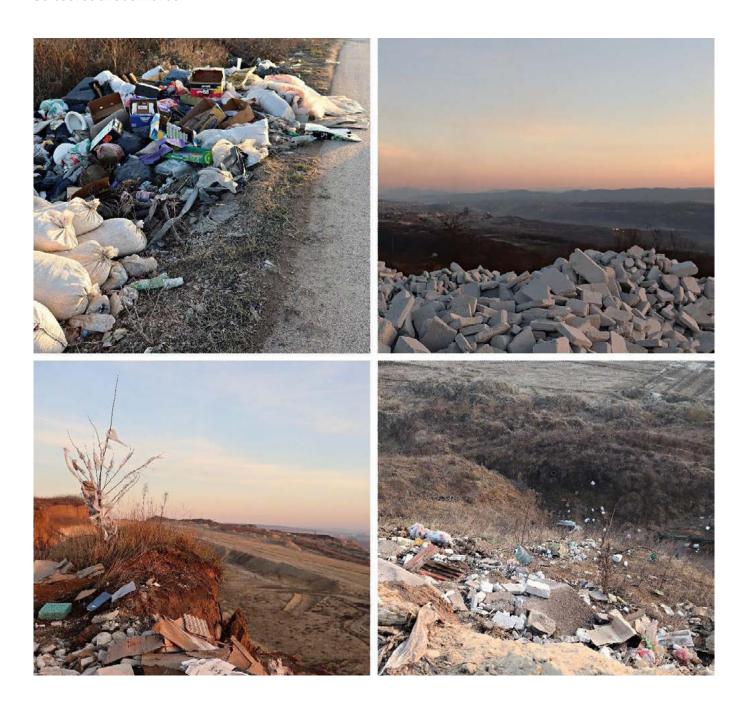
### **Drowning in garbage**

In informal conversations and formal interviews, the residents of Lazarevac often pointed out the problem of waste dumps and wild landfills in their local community. The areas bordering the mining basins of RB Kolubara are littered with a variety of waste (Image 8). RB Kolubara's management, local political authorities, and local firms and businesses are usually blamed for this situation, however my interlocutors also acknowledged that residents take advantage of this negligence to conceal their own. In other words, Lazarevac is polluted from all sides – not only by the stakeholders involved in coalmining activities but also by the residents of Lazarevac themselves.

"

The mining basins are in such a condition that anyone can throw their trash there. Even when they dump it in waste containers, the authorities burn the trash on site, because we don't have a proper landfill. (Slobodan, 54)

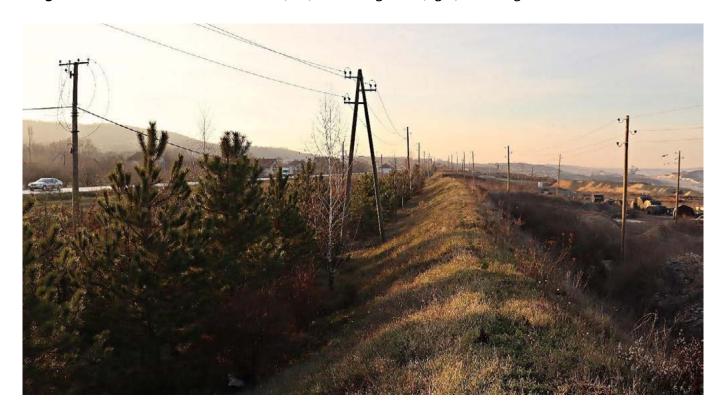
**Image 7**: Garbage dumps at the edges of the Kolubara mining basin, as spotted from viewpoints in the villages of Baroševac and Junkovac



## Where is the greenbelt?

The residents of Lazarevac are particularly distraught about RB Kolubara's management's supposed **neglect of the greenbelt** that surrounds the existing mining sites. In their opinion, not enough efforts have been expended to recultivate and afforest this terrain that plays an important role in protecting the nearby communities and their inhabitants from the pollution caused by the mining activities.

Image 8: Greenbelt between the local road (left) and mining basin (right), the village of Baroševac



**Image 9:** Garbage in the greenbelt, village of Baroševac



Some new basins are not being appropriately expanded, even from a legal standpoint! For example, in mining site D, they have cut the land vertically, without creating a pit slope angle that should be, let's say, less than 45 degrees. This is very important for the geomechanical stability of the soil. And then what happens? We have landslides. (Slobodan, 54)

The most essential thing you have to know about Lazarevac, is the extreme pollution. Last night I couldn't sleep, I was waking up with that nasty smell in my nose, even though the windows were closed. Can you imagine if they were open? Not that anyone cares about it. They don't care about the greenbelt either. It has not occurred to them that the land should be recultivated, although these are really basic things that need to be done. People's houses are hanging on the edges, while the so-called greenbelt is filled with garbage. We are talking about large wild landfills. The basins look like an endless expanse of debris and dust. There is no greenery anywhere to be found, just dumps and craters. They haven't solved the problem of land recultivation; they haven't put any new trees in the ground; they haven't built the greenbelt to protect the rest of the city – so what are we talking about here? It is not a question of goodwill; it is their legal obligation to make all these things happen! (Ana, 43)

## **Social impacts**

The ongoing **resettlement of the village of Vreoci** represents the most recent example of adverse **social effects** caused by the mining activities in the RB Kolubara to the municipality of Lazarevac. In its efforts to expand mining site D, EPS has initiated a process of land expropriation and collective relocation of 1,180 households and approximately 3,000 people from the village of Vreoci. Apart from the numerous irregularities and the serious controversy that followed the expropriation and relocation processes<sup>13</sup>, this has also greatly affected the lives of thousands of people, that, in most cases, were forced to abandon their familiar rural lifestyle for an unfamiliar life in the city.

For years the inhabitants of Vreoci have been exposed to severe air, water and soil pollution, while their houses kept cracking due to landslides caused by the nearby mining activities. For all these years, they have been aware of the fact that relocation was inevitable. They have also received financial compensation for their resettlement, that enabled them to make a fresh start in practically any way they wish. Some have chosen to continue their lives in another rural area of Lazarevac, some have resettled in the *Rasadnik* neighbourhood that was purpose-built for their relocation, while some others invested considerable resources building impressive new houses in the city, causing the envy or derision of Lazarevac's urban community.

However, as some former inhabitants of Vreoci explained, for many individuals and families this process has not only meant losing their households, land and animals, but also **losing the existing social networks and rural identity and values**, such as neighbourly and family solidarity and unity. Countless families were torn apart when shared households had to also share the financial indemnity, some were torn apart due to the generational gap when choosing the best future living arrangement, while some others lost family members who could not, in their age, handle leaving something they had been building for their entire lives.

<sup>13</sup> CEE Bankwatch Network, "EBRD policy breaches at Serbia coal mine confirmed by bank's own complaint mechanism", 29 October 2015, available at: <a href="https://bit.ly/3p9loBd">https://bit.ly/3p9loBd</a>

Those who suffered the most were the elderly; they couldn't stand the fact that they had to leave their homes. They were too attached to that land. Then, you had the younger generations that, needless to say, wanted to resettle in urban areas because of school or work, while the elderly wanted to move to another rural area, a new village, because they were not used to live in the city, without their yards and animals. Middle-aged people on the other hand, were caught in the middle of their parents' and children's wishes, which in some instances even led to divorces. These are social consequences that all the money in the world could not prevent or reverse. (Slobodan, 54)

Image 10: Vreoci today



You cannot even imagine how much [belongings] I used to have there in Vreoci! In my new city life, I will never be able to replace what I used to have there! Can you imagine having sheep, pigs, chicken, hectares of orchards and farm land – we had it all! We used to live a typical village life – we had enough to eat and drink, we haven't even felt the economic sanctions [of the 1990s]! It is good that we knew a couple of years in advance that we would be resettled. We were prepared a bit. Still, I was almost the last one to leave my village, and my neighbours waved me goodbye in tears. (Dejan, 46)

I consider myself lucky because I was still young when the resettlement was taking place. When I think of it now, I am one hundred per cent sure that I wouldn't be able of going through that process again. I wouldn't go through that experience even if they offered me a million euros! I know I wouldn't be able to handle it in any way – physically, mentally and emotionally. (Mladen, 47)

Image 11: Vreoci's "oasis in the desert."



What remains of Vreoci today are a few households that have not yet found a resettlement solution, homeless families that have occupied abandoned but still standing houses in the village, and a piece of green land, "an oasis in the desert", which has been exempted from expropriation. This is the land where the village's most precious religious and cultural heritage continues to resist the expansion of the coal mine, thanks to the activism of former inhabitants of Vreoci (Image 12). These include the church dating to 1872, the wooden church dating to 1815, the oldest in the Kolubara region, and the remains of the old school in Vreoci, one of the oldest in the Šumadija region (1843). But not for long, according to local authorities. These landmarks will be soon relocated or demolished.



An entire society has died. The only thing that remains is those churches. It is where we occasionally meet and recall our shared memories. It is what keeps us together. (Slobodan, 54)

### **Health impacts**

More than half of the respondents affirmed that their municipality's environmental pollution has directly affected their **health** (55%). A higher percentage of respondents – 64%, stated that they are aware of their relatives' and friends' health problems caused by air, land or water pollution (Charts 6 and 7).

When asked to name these diseases, the residents of Lazarevac most frequently mentioned the following:

- cancer (primarily lung cancer);
- · asthma, bronchitis and other respiratory diseases;
- kidney disease;
- cardiovascular disease;
- allergies;
- hypertension.

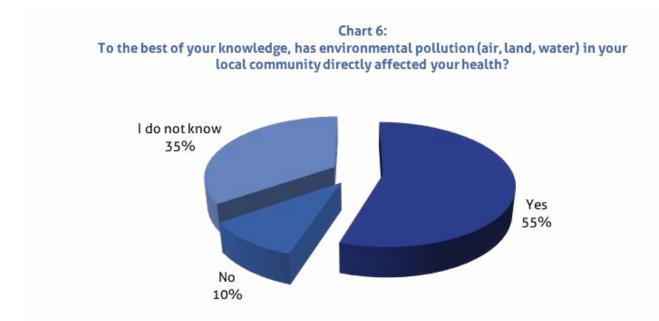
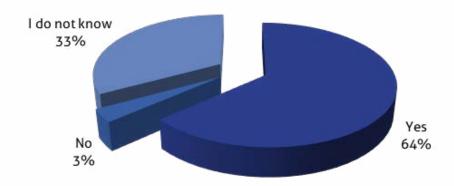


Chart 7:

To the best of your knowledge, has environmental pollution (air, land, water) in your local community directly affected the health of your family member or friend?



While the majority of the respondents affirmed that environmental pollution had a significant impact on human health in Lazarevac, it should be noted that many of them did not have enough information to answer this question. 35% of the respondents said that they did not know if their health issues were attributable to air, water, or land pollution, while 33% did not know whether the same cause had put their relatives' and friends' health at risk. In the formal and informal interviews and conversations, the residents of Lazarevac frequently raised the concern of not being informed enough about issues of paramount importance for their lives and their families' welfare. Regarding this question in particular, some residents of Lazarevac believed that if an issue has not been publicly and emphatically acknowledged and explained, there is no issue.

It is not something to which the people of Lazarevac pay much attention. There are no official statistics stating that this-many people in Lazarevac died of cancer due to air pollution. There is no statistical data confirming that people die of cancer in Lazarevac more than they die someplace else. If somebody were willing to give me the exact numbers, the exact percentage – then I would be convinced. (Dragana, 28)

On the other hand, most interviewees believed it was in the State's and local authorities' interest to keep this data secret, which only foments speculation on just how disheartening this data must be.

The problem is that there are no statistics, no data, and they will never exist. It is not in their [the authorities'] interest. For example, if you come tomorrow with research and hard data on this issue, they will simply reject it! And as long as they question the data, and they will most certainly see to that, no one will be interested in conducting this research. EPS is of critical importance for Serbia; there is no way they would allow such statistics to become public! I know two women who used to work in "Kolubara Processing" and both got cancer. I also know one woman who had a miscarriage because of the working conditions. Is it related to their exposure to all the poison there? Probably yes. Can they prove it? Probably not. (Sara, 39)

Lazarevac is too small a community to have a dedicated hospital for kidney diseases, but these illnesses are simply too common here. That's directly connected to Kolubara. I am sure we are not all genetically predisposed to have this same disease; it is because of the pollution! Everybody sees it, and they still do nothing. (Ana, 43)

## 4.2. Rust in the air

People here just do not understand how polluted our environment is. I cannot explain why this is the case. Probably because they have good salaries and luxurious lives and simply don't care, or maybe they don't know any better. I think our society is simply apathetic. We have become too rusty. (Milan, 63)

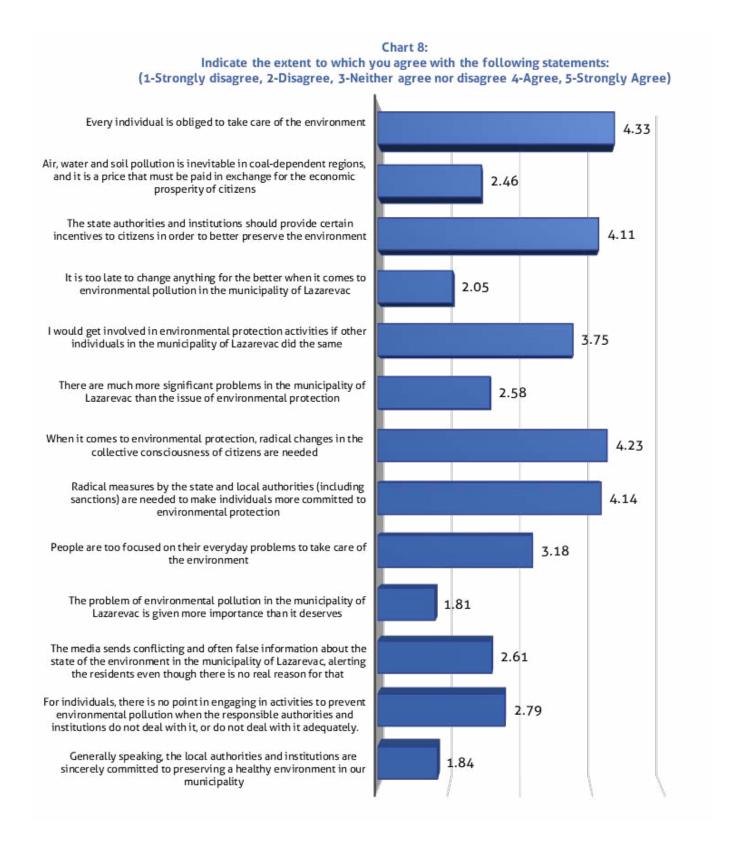
According to their assessment presented above, the residents of Lazarevac are somewhat or very uninformed about environmental problems in their municipality, and their awareness about these issues has not increased in recent years. However, when asked to express their level of agreement (from 1-strongly disagree to 5-strongly agree), with specific statements concerning environmental protection, they showed a high level of appreciation for the environment in which they live and work (Chart 8).

The respondents **agreed** that State and local authorities share responsibility with the residents when it comes to environmental protection. Taking into account the distribution of answers, these are the four statements that recorded the highest average scores:

- 1. Every individual is obliged to take care of the environment (4.33);
- 2. When it comes to environmental protection, radical changes in the collective consciousness of residents are needed (4.23);
- 3. The State authorities and institutions should provide certain incentives to residents in order to better preserve the environment (4.14); and
- 4. Radical measures by the State and local authorities (including sanctions) are needed to make individuals more committed to environmental protection (4.11).

A **disagreement** with specific statements from Chart 5 confirms the respondents' (purported) commitment to environmental protection. These are the three statements which recorded the lowest average scores:

- 1. The problem of environmental pollution in the municipality of Lazarevac is given more importance than it deserves (1.81);
- 2. Generally speaking, the local authorities and institutions are sincerely committed to preserving a healthy environment in our municipality (1.84); and
- 3. It is too late to change anything for the better when it comes to environmental pollution in the municipality of Lazarevac (2.05).



In other words, disagreements with the above statements indicate the **three crucial messages** the coalimpacted community of Lazarevac is trying to send:

- 1. we should pay more attention and give more importance to the environmental problems in our municipality;
- 2. currently the local authorities are not sincerely involved in solving our community's environmental problems and should show more commitment; and
- 3. it is still not too late for us.

On average, the respondents agreed that they would get involved in environmental protection activities if other individuals in the municipality of Lazarevac did the same (3.75), but that people are too focused on their everyday problems to take care of the environment (3.18). These statements could lead to several possible conclusions:

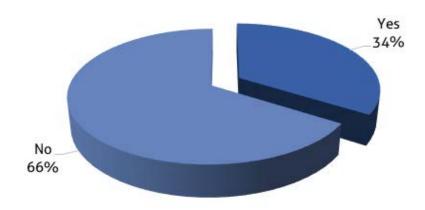
- 1. that the residents of Lazarevac might be consciously disengaged from the environmental pollution's severe consequences in their local community;
- 2. that the residents of Lazarevac might be disinterested in actively working on solving these problems despite being aware of them; or
- 3. that the residents of Lazarevac might not be adequately informed and equipped to address such a complex issue on their own.

## 4.2.1. (Not) too late for Lazarevac?

The aforementioned findings are in line with the responses to the question of whether the residents of Lazarevac have taken or actively participated in any action or initiative to solve a problem in their local community in the past year, where 66% of them answered negatively (Chart 9). Interestingly, the 46 to 60 years of age demographic, that affirmed to be the most informed about the environmental problems in their municipality (Chart 3), is the least actively involved in solving a problem in their local community (78.13% answered to this question with a "no", and only 21.88% answered "yes").

Furthermore, when compared to the responses in Chart 8, the questionnaire results indicate that those who are actively involved in solving a problem in their local community, are also the ones who disagree most strongly with the statement that "there are much more significant problems in the municipality of Lazarevac than the issue of environmental protection". They also disagree most strongly with the statement that "the local authorities and institutions are sincerely committed to preserving a healthy environment in their municipality". This could mean that the existing activists in the municipality of Lazarevac assess environmental problems correctly and are willing to take action to address them in their local community, but they think that they do not have the necessary support from Lazarevac's local authorities.

Chart 9:
Have you taken or actively participated in any action or initiative to solve a problem in your local community in the last year?



The youngest respondents (18-30 years of age), compared to other age groups, are those that most strongly agree with the statement that air, water and soil pollution is inevitable in coal-dependent regions, and it is the price that must be paid in exchange for the economic prosperity of residents. They also strongly agree that there are many more significant problems in the municipality of Lazarevac than the issue of environmental protection. This indicates that the young people of Lazarevac apparently do not care about the state of the natural environment or perceive these issues as secondary compared to the benefits of having a job at RB Kolubara.

The activities of those who responded to this question with "yes" (34%) included, inter alia:

- participation in various humanitarian initiatives for the medical treatment of their fellow citizens;
- providing financial assistance to socially vulnerable groups; or
- helping young people with disabilities in getting adequate employment.

Some responses demonstrate the residents' active involvement in solving some of the environmental issues in the Lazarevac municipality, from collecting waste and cleaning of wild landfills, planting trees and cleaning schoolyards, to educating fellow residents on the importance of environmental protection.

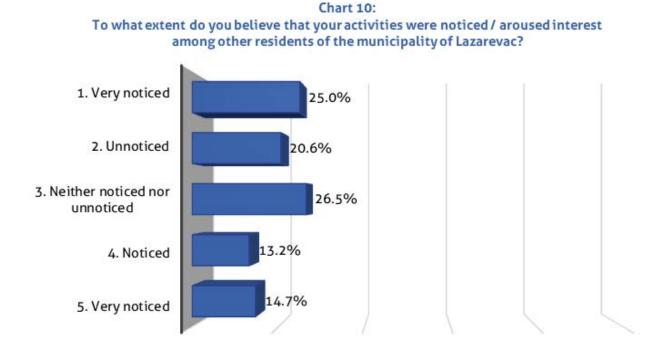
**Figure 3:** Selected answers from the questionnaire on the initiatives taken for solving a problem in the local community of Lazarevac



When asked to what extent they believe that their activities were noticed or raised interest among other residents of Lazarevac, 26.5% of the respondents said that their activities where neither noticed nor unnoticed, while 45.6% thought that their activities have not raised the interest of their fellow citizens ("unnoticed" (20.6%) and "very unnoticed" (25%). Only 14.7% of respondents believed that their active engagement in solving their community's problems was very noticed, and 13.2% that it was noticed (Chart 10).

When asked what is the reason behind their lack of participation in the local community's affairs is, the residents of Lazarevac predominantly answered that:

- they do not have enough time (40.8%);
- they do not believe that they can achieve anything with it (33.8%); and that
- they do not think that they would have enough support from their fellow citizens (23.9%).



It is worth mentioning that 16.9% of respondents explained that their lack of active and voluntary participation in solving their local community's problems was due to fear of the local authorities' (potential) reaction, while 11.3% did not know how to be actively involved (Chart 11).

Chart 11:
What is the main reason that you have not initiated or participated in any activity to solve a problem in your local community in the last year? (multiple answers possible)



In relation to the aforementioned findings, almost all interviewees raised the issue of lack **of public awareness** regarding environmental pollution and protection. Interviewees and other interlocutors, who are more active participants in their community's everyday life and the decision-making process, thought that people in Lazarevac lack this awareness for several reasons:

## "People are not informed about environmental questions"

During my years of working in Kolubara, I came to realise that people lack awareness even when it comes to the protection of their fundamental human rights, let alone the environment! We behave in a civilized and eco-friendly manner when we travel to some EU country. But when we need to take care of our own environment, we do exactly the opposite. I don't know; it might be due to our mentality. The black smoke is coming out from the thermal plant's chimneys, everything is polluted, and nobody cares! (Mila, 50)

People don't have the necessary awareness to protect our environment. When a couple of us organised in order to take environmental action and even made our plans into reality, our fellow citizens accused us of money laundering and posted it on Facebook! People are burning garbage and tires, they are poisoning our soil and our water. They see no problem with their own actions! (Zoran, 34)

## 'People are not informed about environmental questions, but it is not their fault"

- Our local civil society organisations are weak and lack know-how. It has happened before, the municipality had to return the funds it received for solving pollution problems because there were not enough local actors that proposed any projects and initiatives of appropriate quality. (Darko, 52)
  - I truly believe that if the local authorities or the utility company gave these people some garbage bins and containers, or if they built a proper landfill, people would follow the rules. Provide it to them, and let's see what happens! (Sonja, 32)
- Lazarevac used to be clean and green, the heart of this region, and look at it now! People are throwing garbage, tires, furniture, old and broken house appliances, and they even burn it there, on site! They take every piece of garbage from their home and dump it outdoors! What is worse, the authorities have allowed them to do that. Have you seen anywhere a warning sign that says it is forbidden to throw garbage wherever people want? No. They could install CCTVs and punish those who put our environment at risk! If you do not inform and educate people, what kind of behaviour can you expect from them? (Dejan, 46)
- Kolubara and the companies that depend directly on it, don't care about the environment. There are also some foreign firms that dump their trash and other waste in our environment. They probably wouldn't do that in their own countries. And when people see what they are doing, why wouldn't they also throw their own trash wherever they want? (Zoran, 34)



Image 12: A waste container, smoke and a stray dog in front of the Xella Srbija doo company building

## "People care about conformism and materialism, not about the protection of nature"

- In Lazarevac, you are perceived as a successful person if you manage to get a job in Kolubara. Here, when you tell people that you work in the private sector or some other place, they look at you with pity and then ask: Was there really no way for you to get into Kolubara? (Sonja, 32)
- What do we have in Lazarevac? We have a complacent and self-sufficient community where people are satisfied with their salaries that are, let's be honest, higher than the average salaries in Serbia. So they say: Let's stay silent, it is all good, as long as the money keeps coming in our pockets every first and fifteenth of the month. You do your eight hours of work and everything else after that is great, we have a nice life! We also drive expensive and fast cars, live in huge houses, we don't want for anything! So why should anyone care about pollution? (Slobodan, 54)
- Here, [RB] Kolubara is God. People think: Tomorrow I will go to work, the day after tomorrow maybe I will not be able to. I only care about the money anyway. If I get lung cancer come on, you know it cannot be due to pollution! That's just a thing that people say. People always find some justification because they lack formal and informal education. What environmental consciousness? We need to learn civic and democratic consciousness first. (Milan, 63)
- I can take a look at Kolubara "from the outside" because no one in my family is employed there. Some of those who try to make some noise and complain about the way things are, are probably those who steal tools from work, or do not go to work at all but are still getting, or use, public resources for private interests you know, those little benefits one can get from such a workplace. An individual will revolt only when their own interests are at risk. And still, they would not fight against the shortcomings of their employer, but to obtain the same benefits their colleagues have. Most people are fighting for small, personal interests. They fight from their small guardhouse, from an office without a toilet or heating in winter, that looks like a small hen house. But the ones above them [their superiors] know how to keep them quiet they give them a slightly larger hen house and a new coffee-maker, and they are suddenly all happy and satisfied! (Ana, 43)

Image 13: Smoke, dust and rust in the municipality of Lazarevac



## "People are indifferent and submissive"

I can feel that people in Lazarevac are apathetic. Many generations have been lost here, not just this one, or the future ones. When you try to educate them about climate change, they ask why are you worried about something that will happen in 50 or 100 years? I will be dead by then, why should I care? (Milan, 63)

There is no critical mass that could be convinced that the issue we raise today [about air pollution] is an issue we need to solve in order to improve our children's lives. Educating people

could maybe change this way of thinking, but how? This entire generation needs different priorities, needs to hear the truth, and maybe we can hope that in 40 years, someone will be able to change things for the better. (Ana, 43)

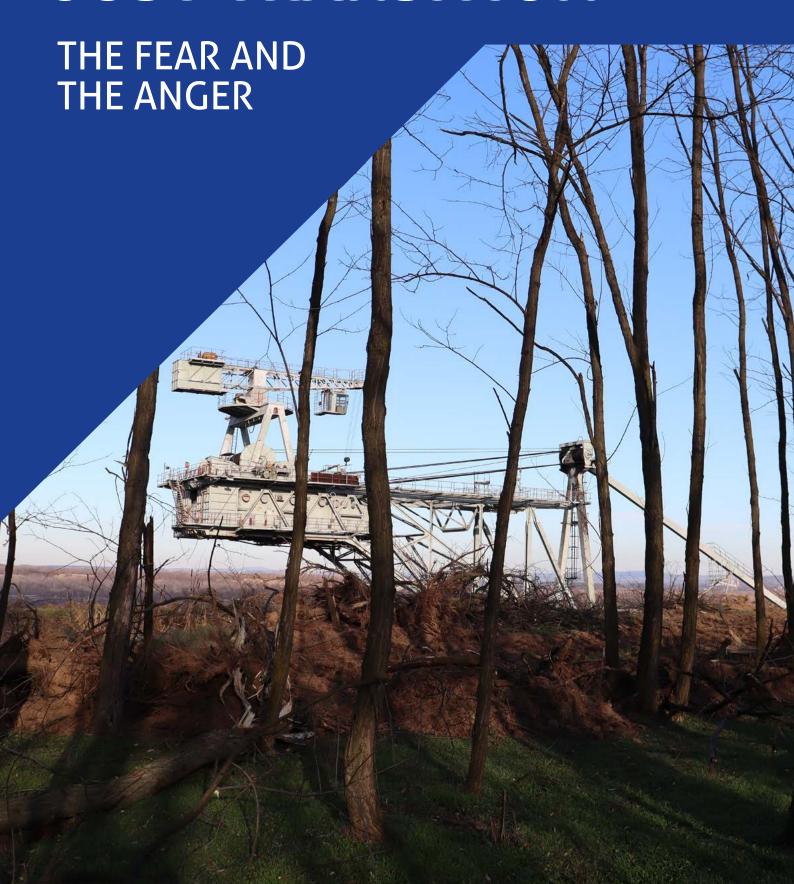
## Therefore,

- most respondents do not actively participate in solving their local community's problems (Chart 9);
- the reluctant respondents do not act because they think they do not have enough support from their fellow residents (Chart 11); while
- the active respondents conclude that even when they do act, their activism could go largely unnoticed by the wider local community (Chart 10).

These statements confirm the previous conclusion that residents of Lazarevac demonstrate a certain level of disengagement from and disinterest in the causes and issues of the severe environmental pollution in their municipality and an inability to gain an understanding of them and take action. The only added element is the respondents' belief that there is not enough collective consciousness for getting the residents' voice heard in the local community's affairs.

Is it "still not too late" for Lazarevac then?

# **JUST TRANSITION**



## **5.JUST TRANSITION**

## 5.1. The Fear



It is a particular situation here in Lazarevac. Many people work in Kolubara or wait for a job in Kolubara. When you try to tell them something about environmental issues, they all say: Keep quiet, do you want us to lose our jobs?! (Sandra, 33)

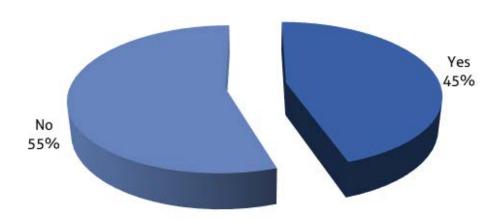
When a researcher tries to obtain information about the energy and just transition in Lazarevac, they might end up being accused of trying to open up Pandora's box. If the researcher insists on opening the box, they might end up being perceived as a someone who doesn't care if people lose their jobs, or serves the interests of known and unknown foreign and domestic stakeholders, or is a foreign mercenary at best, or a domestic traitor at worst.

When the box is finally open, the researcher ends up seeing a lot of fear and much anger within the coalimpacted community of Lazarevac.

### 5.1.1. How much does Lazarevac know?

In order to ensure the largest sample possible, the questions on the population's awareness of energy and just transition have been made mandatory. The results show that 45% of Lazarevac's residents know what **energy transition** is, whereas 55% answered negatively to the question (Chart 12).

Chart 12: Do you know what "Energy Transition" is?



35.9% of this awareness comes from respondents younger than 45, whereas 62.5% comes from respondents older than 46. Men were slightly more aware of energy transition than women (54.84% of the male population, compared to 33.93% of the female population). 66.67% of the respondents that actively participated in solving some issues in their local community in the past year, stated that they knew what energy transition is.

The respondents were also asked to define energy transition to the best of their knowledge, whereby an overwhelming majority of them demonstrated considerable knowledge on this issue (Figure 4).

Figure 4: Selected answers to the question of what is the energy transition



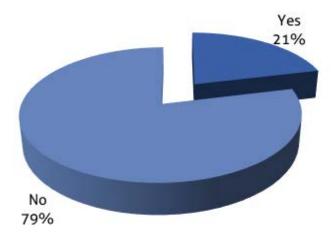
Some of the answers were particularly thorough, reflecting on broader matters associated with energy transition, like getting closer to EU membership or prioritizing people's health:

- In my opinion, these should be the steps taken by individuals and the State in order to protect the economy and the environment at the same time, and find transitional solutions until obtaining energy from environmentally friendly sources becomes feasible.
- I understand it as a process of switching from traditional energy sources that actually pollute the most oil, fossil fuels, especially coal in our country, to "greener" and renewable sources: wind, water, sun, biomass, etc.

- Switching from fossil fuels to renewable energy sources, and reducing consumption with the help of more efficient materials and innovations.
- Better management of energy facilities in the interest of all Serbia residents and for the purpose of joining the EU.
- **J** To work gradually to prioritize health, rather than the economy.

When it comes to their knowledge about **just transition**, a large percentage of respondents – 79%, did not know what just transition means (Chart 13). Thus, despite energy transition being a concept that almost half of the respondents were familiar with, just transition remains an obscure subject for the population of this coal-impacted community. These results are equally distributed among all generations, and both gender groups encompassed by the questionnaire.

Chart 13: Do you know what "Just Transition" is?



Similarly to the previous question, respondents who said they knew what just transition is, were also asked to define the concept, whereby many of them showed an overall decent understanding of this issue (Figure 5).

Figure 5: Selected answers to the question of what is just transition



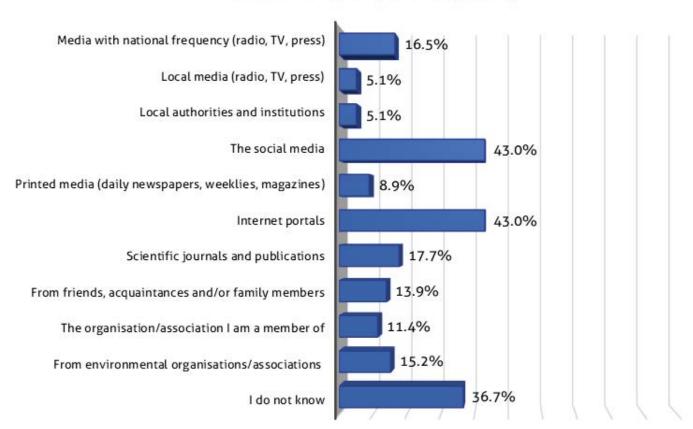
Listed below are some selected answers to the question of what is just transition, showing that 21% of the residents of Lazarevac know that it should be painless and acceptable by all, taking into consideration the interests of the workers as well as those of the State and other interested stakeholders:

- It is a transition from non-renewable to renewable sources, which takes into account workers and creates the conditions for decent and good-quality work, according to nationally defined development priorities.
- It means that both the State and the people can switch to clean energy, with a solution as painless and mutually acceptable as possible.
- I probably didn't get enough information about this, but it seems to me that it should mean that for those areas where there is long-term exploitation of coal, minerals, fossil fuels, etc. it is crucial to provide the necessary planning and funding and probably reskilling of the population to some extent, in order to switch to clean energy sources.

The respondents were predominantly informed about the energy and just transition via Internet portals and social media (both 43%), followed by scientific journals and publications (17.7%), media with national coverage (radio, TV, press) (16.5%) and environmental organisations and associations (15.2%). The residents of Lazarevac who were aware of energy and just transition were the least informed by local authorities and institutions and local media (both 5.1%) (Chart 14).

Chart 14:

If you are familiar with Energy and Just Transition concepts, how did you get informed about them? (multiple answers possible)



Considering that the questionnaire sample consists of a more educated and urban population than the official average of Lazarevac, this could affect the percentage of people who know what energy and just transition are. In other words, it can be assumed that the percentage of people in Lazarevac who are not aware of these concepts is higher than the one presented in this study.

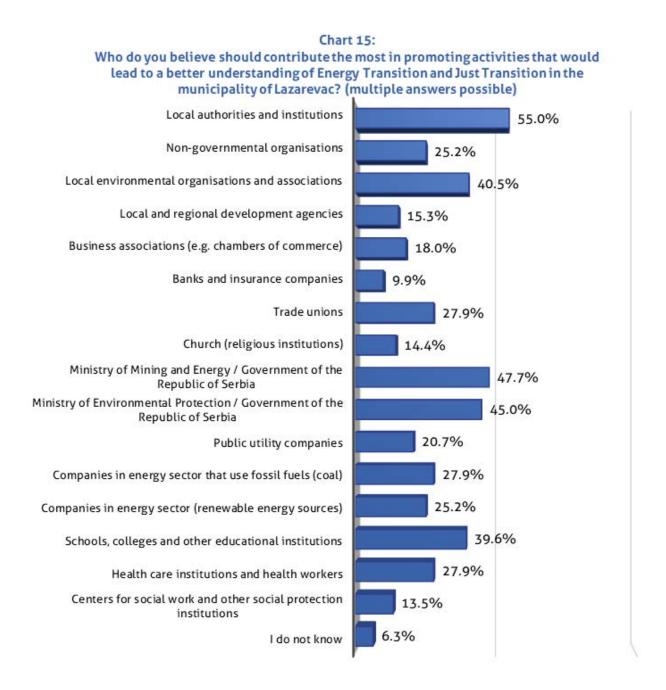
On the brighter side, taking into consideration the results of the questionnaire, we can also assume that the minority of Lazarevac residents who know what energy and just transition are, are well informed about the topic, and can be reached through modern channels of communication, such as Internet portals and social media.

## 5.1.2. What does Lazarevac expect?

After being given the definition of just transition, Lazarevac's residents were asked who, in the best of their knowledge, should be the biggest contributor in promoting activities that facilitate a better understanding of energy and just transition, as well as who should be the main agent of just transition planning and implementation in their municipality. In other words, they were asked who should be responsible for providing information about energy and just transition, and who should assume the

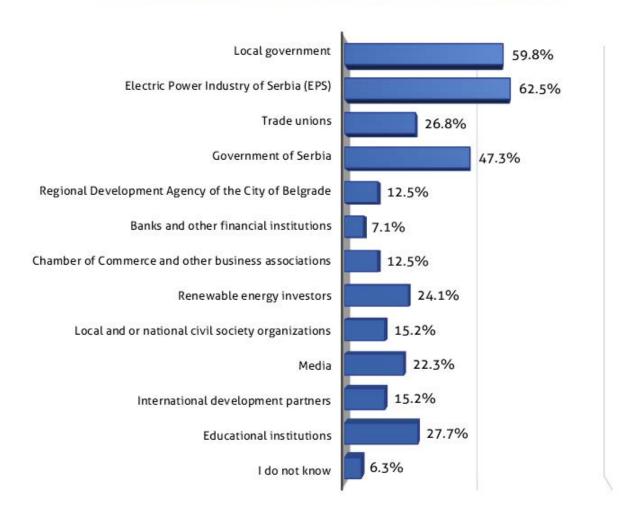
#### leading role in implementing these policies and mechanisms.

In both instances, the respondents recognised the Government of Serbia, and Lazarevac's local authorities and institutions as the main stakeholders in raising awareness about just transition and the planning and implementation thereof (Charts 15 and 16).



Regarding the provision of information, the majority of respondents (55%) stated that they expect support from local authorities and institutions, whereas a considerable percentage assigned this role to the Government of Serbia – 47.7%, to the Ministry of Mining and Energy, and 45% to the Ministry of Environmental Protection. A notable percentage of respondents expects to be informed by activities of local environmental organisations and associations (40.5%) and educational institutions (39.6%), as well as healthcare institutions, companies in the energy sector that use fossil fuels, and trade unions (the latter three recording 27.9% each).

Chart 16:
Who do you believe should be the main agent of the planning and implementation of Just Transition in the municipality of Lazarevac? (multiple answers possible)



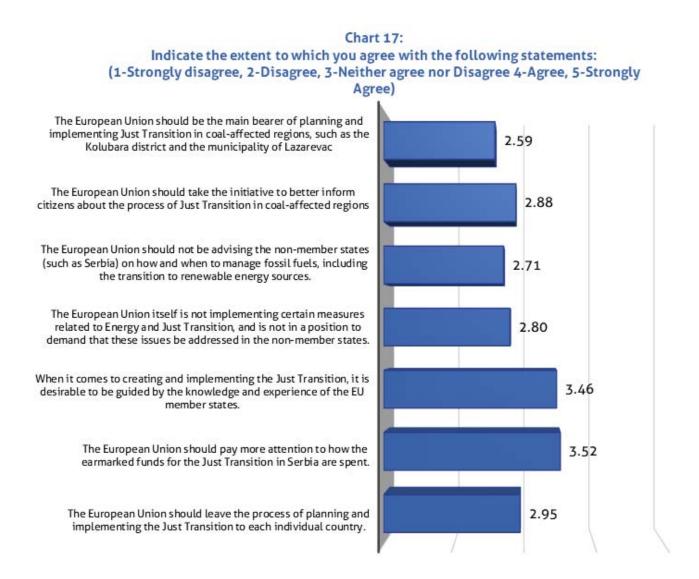
Regarding the question of who should be the main agent of just transition in their local community, the majority of respondents – 62.5%, cited the state-owned **Electric Power Industry (EPS)**, followed by **the local government of Lazarevac** (59.8%), and **the Government of Serbia** (47.3%). In addition to being recognised as responsible for informing the population, **educational institutions** (27.7%) and **trade unions** (26.8%) are also recognised as potential agents of just transition in Lazarevac. To a lesser extent, **renewable energy investors** (24.1%) and the **media** (22.3%) are also expected to fulfil this role.

Regarding the **role of the European Union** in the just transition process (Chart 17), taking into consideration the average score and the distribution of answers, the respondents **disagreed** with the following statements:

- The EU should be the main agent for the planning and implementation of just transition in coalimpacted regions, such as the region of Kolubara and the Lazarevac municipality;
- The European Union should not be advising non-member states (like Serbia) on how and when to manage fossil fuels, including the transition to renewable energy sources;
- The EU itself is not implementing the energy and just transition measures and is not in a position to demand from non-member states to address these issues.

On the other hand, the respondents **agreed** with the following statements:

- When it comes to designing and implementing just transition, it is desirable to be guided by the knowledge and experience of EU member states'.
- The European Union should pay more attention to how the funds earmarked for Serbia's just transition are being spent.



In other words, the coal-impacted community of Lazarevac is trying to send these **three crucial messages**:

- 1. We want the European Union to be more involved in the just transition process in our country;
- 2. The European Union is a legitimate partner whose guidance and know-how we are ready to accept;
- 3. European Union should not be the main stakeholder in the just transition implementation in our local community but should remain present to advise and control the process.

## 5.1.3. What is Lazarevac afraid of?

As demonstrated by the results of the questionnaire presented above, the local community of Lazarevac is not well-informed about energy transition, and is even less informed about just transition. Regarding the latter, only 21% of the respondents stated that they know what this concept means. The respondents consist mostly of young to middle-aged individual with higher education than Lazarevac's average, that mostly come from the urban areas of the Lazarevac municipality. Therefore, it can be assumed that the percentage of those who are familiar with this concept is even lower and more discouraging.

When the variables are crossed, the questionnaire results show that 79% of respondents do not know what just transition is, regardless of age, gender and profession. Moreover, the majority of those who know what just transition is, is also aware of the ongoing socio-economic and environmental problems in their local community and is actively working on solutions. However, these activists remain an almost negligible minority within Lazarevac's local community.

What does the majority think, then? The five-month research that included in-depth interviews with activists and other residents of Lazarevac, as well as participant and non-participant observation, could offer possible answers to this question. Spoiler alert: it all has to do with fear.

## "We are afraid of losing our jobs"

When the researcher tried to raise the question of just transition, many residents of Lazarevac responded by raising their eyebrows. Some questions were received with a sneer. For some other questions, the researcher is warned to keep her voice down. For most questions, it is the coal-impacted community of Lazarevac that either keeps its voice down or remains completely silent. When shutting their house doors or refusing to talk on the first mention of energy transition, many residents of Lazarevac defended their stance by saying that they or their children work in RB Kolubara, and therefore they cannot speak of this topic.

People are so afraid to speak up. If you ask me to grade that fear on a scale from one to ten, I would say that number is 9.8! Older people and pensioners are afraid for their children, so they stay silent to don't get their children fired. The miners are not what they used to be, either. They have been, let's say, very passive during the past ten years. The dignity and pride of the miner in Kolubara are no more! That miner is also "retired". (Dejan, 46)

There is no one to raise their voice; everybody is protecting their 80 to 100 thousand dinars! I know it is reasonable to be afraid, but what is the breaking point, after which there is no more fear? Where and when does this fear go away? Does it go away when we see ourselves and our colleagues working without masks, without sterilisers, without protection? [Does it go away] When you are sick, when you are bullied by your boss? Is it when you cannot advance your career? Where does it end, I wonder? (Zoran, 34)

Image 14: Graffiti in Kamengrad, Lazarevac's main park, reading: "Here on business"



## "We are afraid of the political authorities' reactions"

The questionnaire results presented above show that a large number of respondents identified State and local authorities as the main stakeholders in the just transition awareness, planning, and implementation processes. However, the coal-impacted community of Lazarevac does not believe that either the State or the local government are equipped with sufficient knowledge, skills and political will to address this issue. Importantly, they believe it is in the Government of Serbia's interest to keep coal power plants operational, so they do not feel safe to discuss issues that go directly against the Government's agenda.

You have to be brave to speak out loud about environmental issues in our National assembly. If you say something about air pollution, they immediately label you as a tycoon or something like that. Not to mention that in the local government, here in Lazarevac, every assembly member is bought, one way or another! (Ivan, 44)

People in power are very vain. I am talking about both State and local government. They don't allow you to do anything, and they don't want to talk to their constituents. We are sending them official requests for information of public interest, and we are sending them proposals for projects we would love to do. But what they think is that if you make suggestions, what you actually want is to steal their publicity or even their positions! Nobody is allowed to be better and more successful than them – that is their way of thinking. (Dejan, 46)

The main problem of our community is that Serbian citizens do not trust politicians. Governments have changed in the past decades, voters have been even punishing those who didn't do their work well, trying to change things, but people haven't got anything in return. We are tired of not moving forward. (Nemanja, 47)

#### "We are afraid of the employer's actions"

The residents of Lazarevac are well-aware of RB Kolubara's crucial role in providing secure jobs and salaries in their municipality. They are also well-aware of the power wielded by the largest state-owned company in Serbia, *Elektropriveda Srbije* (EPS), within Lazarevac's social community. However, what they are actually afraid of is the strong connection between the ruling political party and the management of EPS, which in reality means that every job in RB Kolubara has to be earned or kept by expressing party loyalty. For this reason, many interviewees from Lazarevac believe that outsiders to the system are prevented or discouraged from pointing out the problems in their workplace and broader social community:

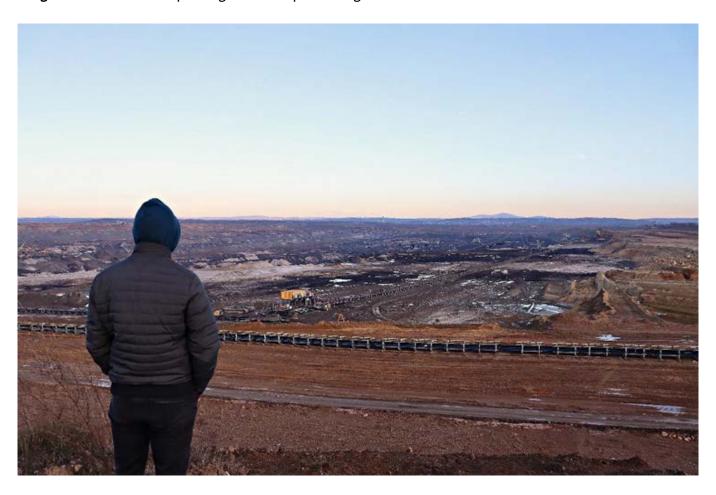
- Nowadays you can get a job in Kolubara only through a [political] party. You need to have really good political connections to get a job. It wasn't like this before. You got the job through the party, but you needed to be an expert in your field as well. Now, anybody can have any job they want, even if they are not qualified. (Ana, 43)
  - There are so many vain people in power that make you afraid to say what you think. If they are directors or managers, no rules apply to them! Instead, it would be best if you behaved as they tell you. (Jasna, 50)
- The most important thing here in Lazarevac is to be loyal to your political party. It wasn't always this way. Back in the day, an ordinary worker, a miner, was respected like God! My mom used to work in the administration, and she told me how directors and managers used to stand up when a miner entered the room and offered him their chairs to sit and rest. This is how much they respected the worker back then! Now, the workers are blackmailed and intimidated. There aren't even so many workers anymore! When I started in my job, there were 23 of us. Today, we are a group of only eight people. And why aren't there so many workers [in the field]? Because the offices are full! (Dejan, 46)

## "We are afraid of being left behind"

The questionnaire results indicate that the respondents from Lazarevac want the European Union to be more involved in the just transition process, and that they see the EU as a legitimate partner whose guidance and knowledge they are ready to accept. In the interviews and informal conversations, the coal-impacted community of Lazarevac seemed to be more sceptical about the EU's role in the just transition process. With their trust in the EU's overall good intentions diminishing, for reasons cited in the interview excerpts below, they fear that their interests will be betrayed and their voices left unheard:

- The energy transition question is not a question for us from Lazarevac, but for the State of Serbia. We can be involved in the dialogue, we can agree on anything, but when you take something from us, you also have to give us something in return, no matter who you are the State or the EU. Fine, we need to shut the thermal plant down, but what compensation do you offer to us? And who will be the one to say that it has to be shut down? We don't need someone from the World Bank and the such, we need to find someone from Serbia to lead. He must be someone this community trusts. (Lazar, 58)
  - We get nothing but expressions of concern and worry by EU representatives. There should be criminal punishment for violations of laws, rules and regulations! Of course, for that to happen, we would need to become a well-organised and well-functioning country! (Sonja, 32)
- When I was younger, I was a "Eurofanatic". Now I am "this close" to becoming "Eurosceptic". I am old enough, I've been through a lot. I waited for something good to happen since the 90s, some change for the better, with Serbia in or outside the EU. Today I find it hard to look at this government that destroys our society in every sense and the EU turning a blind eye or even supporting it! (Nemanja, 47)

Image 15: A view of the expanding Tamnava open mining basin



## 5.2. The anger

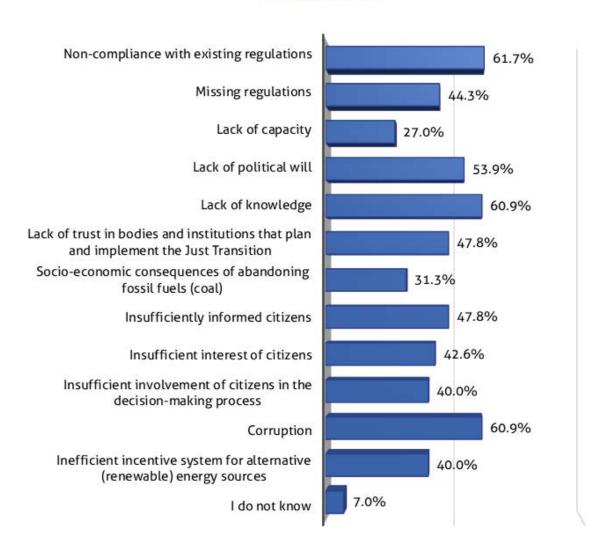
## "

Ordinary people and ordinary workers cannot trust anyone – not the State, not the union, not the local government, not the employer! Simply no one! (Dejan, 46)

When asked to name what they consider to be the most significant challenges or problems for the implementation of just transition in Lazarevac, more than half of the respondents chose non-compliance with existing regulation (61.7%), corruption (60.9%), lack of knowledge (60.9%) and lack of political will (53.9%), as the most salient. These issues are followed by insufficiently informed residents (47.8%), lack of regulations (44.3%), and insufficient interest of residents (42.6%). Insufficient involvement of residents in the decision-making process and inefficient incentive system for alternative (renewable) energy sources have both been recognised as challenges by 40% of the respondents.

Chart 18:

What do you consider to be the most significant challenges/problems for implementing the Just Transition in the municipality of Lazarevac? (multiple answers possible)



Compared to other age groups, the respondents older than 46 were more inclined to opt for corruption, lack of political will, and lack of knowledge. The younger population group (18-30 years of age) was the least inclined to opt for lack of trust in the bodies and institutions that plan and implement just transition, insufficiently involved and informed residents, and residents' low interest. The age group between 46 and 60 years was the most concerned about the socio-economic consequences of abandoning fossil fuels.

## 5.2.1 What is holding Lazarevac back?

Non-compliance with existing regulation, corruption, lack of knowledge, and lack of political will are recognised as the primary issues which hold Lazarevac back regarding the just transition implementation process.

In 2011, RB Kolubara was in the public eye due to the documentary series of the Serbian investigative television news programme *Insajder* ("Insider")<sup>14</sup>. The series discovered financial misconduct and malversation and made allegations of corruption in the EPS public company, including RB Kolubara. Following this story, numerous EPS management members and RB Kolubara executives, as well as several private businesses owners, were arrested for embezzlement in October 2011.

At the time when this research on the coal-impacted community of Lazarevac was being concluded, the *Insajder* released another documentary series about institutional capture in Serbia<sup>15</sup>, revealing that things have not improved when it comes to the operation of RB Kolubara. Governments in Serbia change, but the way the business gets done in state-owned enterprises apparently never does.

Every government, in addition to appointing staff at will, also has its businessmen who have their own companies. When the government changes, so do those who get jobs from the State. The interests of individuals always prevail over the interests of the State and citizens. The mechanisms are becoming more sophisticated, and corruption and abuse are becoming more visible. (From the series' introduction¹6)

These conclusions resonate with the residents of Lazarevac. Although this issue is beyond the scope of this study, it is essential to note that **there was not a single interlocutor in Lazarevac who has not complained about corruption** in their workplace, in the local society, or in the Republic of Serbia as a whole. In addition to corruption, they also complained about **lack of political will, lack of knowledge**, and **lack of awareness from the government** about what it means to work in **the public interest.** Residents of Vreoci were particularly eager to speak of the State's and the employer's malversations which followed their land expropriation and relocation process.<sup>17</sup>



Things are easily done in our municipality. You pass laws, you put everything in place, and it looks perfect on paper. In reality, though, these laws and regulations never get implemented. (Sandra, 33)

Documentary series "Robbery in Kolubara - Scam of the century", available at:: <a href="https://insajder.net/en/site/prevara-veka/">https://insajder.net/en/site/prevara-veka/</a>

Documentary series: "Politics as a business, the state as party's pray", available at: <a href="https://www.youtube.com/watch?v=OhTOTbrHZok">https://www.youtube.com/watch?v=OhTOTbrHZok</a>

<sup>16</sup> Available at: https://insajder.net/sr/sajt/tema/21738/

On this see e.g. CEE Bankwatch Network, "EBRD policy breaches at Serbia coal mine confirmed by bank's own complaint mechanism", 29 October 2015, available at: http://bit.ly/3p9loBd

- They have no clue about how much they do not understand. They are not careful and they do not question their actions. They are all connected, not by shared national interests, but by their material, personal interests. This is the main problem of Kolubara, and this is why Lazarevac remains silent. (Ana, 43)
- The majority of the funds allocated for land recultivation and the greenbelt, for example, have been misused in one way or another. Politics is always behind this. The municipality mayor would allocate the funds to his friends for various things unrelated to the environment, like buying computers for some local schools. (Nemanja, 47)
- Lazarevac is one of 17 Belgrade's municipalities. The law dictates that the polluter shall allocate a certain amount of money to the municipality where the mining works take place, so whatever money there is, it now goes to Belgrade. How much is Lazarevac going to get that depends on those in power in Belgrade, and because it is the same party, then some other things take priority, such as solid political connections with particular politicians in power in Belgrade. (Darko, 52)
- From 2004 to 2008 millions of euros were allocated to the environment fund of our municipality, which was part of the municipality's budget. Meanwhile, when Lazarevac became a municipality of Belgrade, the fund has been reallocated to the budget of the city of Belgrade and stayed there. This money used to be allocated to the municipality to improve the environmental conditions, but they didn't use it for this purpose. Instead, they covered the salaries of our local utility company's employees, for example. (Slobodan, 54)
- When the centralisation of EPS administration took place, the municipality's top man was left without any power, and the local administration became dependent on Kolubara's help and resources. Not to mention how many local problems used to be solved via one phone call to the right person! [...] If we are talking about the relationship between the local and the State government, I would say that there is no collaboration there, just a typical superior-subordinate relationship. (Nemanja, 47)
  - There is resistance as soon as you mention energy transition or air pollution. Here in Lazarevac, people are tacitly prohibited from even thinking about it, let alone speak out! (Milan, 63)
- Our politicians sign whatever is put in front of them just to secure their position or strengthen their partnership with the EU or whomever. The problem is that when they sign something they tell their residents nothing about it! Serbia's public is not informed and is convinced that things have to be done in a certain way. They need to know that it is a good thing and that nothing bad will happen to them. (Jasna, 36)
- That new mining basin for Kolubara B opened with great fanfare last year, then the national inspector responsible for Kolubara came and said that the coal is of low quality, like a stone. He also said that it lies very deep in the ground and Kolubara does not have the machinery to mine it. It is expensive coal exploitation. That's why they resumed the Kolubara B plan someone will get some money out of it! (Mila, 50)



They have become so distant from the people; they do not understand what our lives look like. They think that if you are not with them, it must mean that you are against them! They see you as their enemy! (Slobodan, 53)

Image 16: An old and rusty street sign nearby RB Kolubara, Lazarevac



## 5.2.2. Whom Lazarevac cannot trust?

#### The Union

18

Apart from the State and the largest employer, which the residents of Lazarevac believe to be corrupt, they also feel that they cannot trust their **trade union**, whose task should be to protect workers' rights and interests. The chairman of the EPS union participates in the proceedings of the local assembly in Lazarevac, along with 11 other representatives of the residents' group "Lazarevac, our home". This is one of the reasons that many believe that the union in reality serves the political interests of a small group of its members, or the interests of the State and local government. Either way, the interviewees from Lazarevac have the impression that workers are the ones being left behind:

- I used to be in a position where I could see how the union was spending its resources. Hundreds of euros for some scientific literature, thousands of euros to help some other unions. When I asked what other unions, they told me, you know, that's the money we actually used to finance our holidays in Greece! What a shame, we could have used that money to pay hospital bills for some of our children! (Dejan, 46)
  - Can you believe that the union paid for plastic surgery procedures for some of the young female employees? Every month I give a percentage of my salary to that union, and then it goes to plastic surgeries! Unbelievable! (Zoran, 34)
- Do you know Lazarevac's nickname for the chairman of our union? Tito!<sup>18</sup> [laughs] He has been here for decades, regardless of who is in power [at the State level]. I think he has survived six different Serbia governments and will survive the current one too. But the union stays silent, despite all the problems! And they even participate in our local assembly of the "residents' group" with about 14 or 15 assemblymen! Can you believe it? Basically, they avoid saying unpopular things because it is not in their interest. They don't want to be loved. It's in their best interest to remain practically invisible. (Slobodan, 53)
- In Lazarevac, we have a saying: God in the sky, the union on Earth! [laughs] Our union is just an extended arm of the State. They participate in the elections, and they participate in the local government. So, they cannot say anything against the State. And how do they keep the workers silent? They give them some small benefits like bonuses or better working conditions, or some holiday gift-card. Nobody speaks up because of some little personal benefits here and there. (Ana, 43)
- Almost all people who are employed in RB Kolubara are also members of the union. The authorities use the union to control the workers. The workers get many benefits to which it is hard to say "no", so they turn a blind eye when they see, for example, someone who becomes an important figure in the union getting promoted in his workplace practically overnight, without doing a thing! The union is a mafia; I have no other word to describe it. (Lazar, 58)

Referring to Josif Broz Tito, the president of the Socialist Federal Republic of Yugoslavia (1953-1980)

Image 17: The chimneys of the TE Kolubara in Veliki Crljeni



### The civil society sector in Serbia

The residents of Lazarevac feel that they cannot trust **the Serbian civil society sector** when it comes to the just transition implementation process. In informal conversations and structured interviews, many complained about not being sufficiently heard and not being sufficiently consulted by the organisations and initiatives that deal with environmental questions at the State level.

Non-governmental organisations do not understand how things work here. All they know is to come here and give us orders of how we should change some things and change them right now! Yes, we know that, but can you also tell us how? (Milan, 63)

You cannot change a thing with such an approach towards the residents! They use a vocabulary that ordinary people cannot understand, and they just say what should be done and what should absolutely not. You cannot just come here and say to your fellow citizens that TE Kolubara is poisoning us and we need to close it today, because so many people work in the TE Kolubara and their welfare depends on it. These organisations just create more problems instead of offering solutions for existing ones. TE Kolubara [A] was supposed to close, and we didn't know anything about it! These organisations certainly did, but they didn't give us that information and empower us to decide what we should do. (Sara, 39)

Unfortunately, the results of the online survey conducted with Serbian civil society organisations (CSOs) (Annex 2) cannot be used as a valid source of information to either confirm or reject the abovementioned assertions of Lazarevac's residents.

Following the completion of a database with thousands of environmental CSOs in Serbia, the survey was sent to more than 400 organisations, whose activities are described as related to energy and just transition issues. The survey aimed to discover the main activities of these CSOs, their accomplishments to date, and their opinion on how just transition should be communicated and implemented in Serbia's coal-impacted communities. They were also asked to specify if they had implemented any initiatives, or if they had any insights, on just transition attitudes and perceptions of Serbian citizens in general, and Lazarevac residents in particular.

Almost 100 e-mail addresses proved invalid, despite the addresses being clearly displayed on the official websites or the active social network pages of said CSOs. Therefore, the online survey has been delivered to approximately 300 CSOs in Serbia. Being faced with a low response rate, I repeated the process, sending the survey a second time, including to active social media pages, but the results were equally discouraging. **Only 21 CSOs accepted to participate in the online survey**, therefore the results do not provide a reliable picture of how environmental CSOs in Serbia perceive energy and just transition, how they communicate their messages, and what they see as future energy prospects for their country and society.

The reasons for the low turnout are manifold. The Serbian CSOs might have been occupied with the air pollution issue, particularly relevant during the winter months when the online survey was conducted. The multitude of invalid e-mail addresses could be an indication that Serbia's environmental CSOs are not very active, despite their surprisingly large number on paper. Some representatives of these organisations responded to my request stating that they did not intend to participate in a "rigged" survey, answer "police questions" or take an interest in something that "only benefits the Serbian State or international stakeholders". This could indicate that some Serbian environmental CSOs lack trust in the State, local and international organisations and institutions, or in researchers who pose such "controversial" questions.

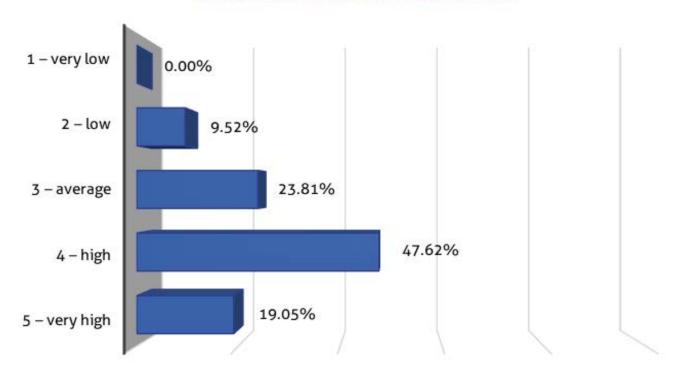
Among those who responded to the survey, 14 organisations were from Belgrade, including the coal-impacted municipalities of Obrenovac and Lazarevac, while others are headquarted in the Serbian cities of Pančevo, Šabac, Smederevo, Subotica, Zrenjanin, Trstenik or Sremski Karlovci. Regarding the number of employees (including full-time and part-time employees), only two organisations had a significant number of employees – one had 23 and the other had 40 employees in total. The largest number of respondents (5) do not have any employees, which could indicate that these CSOs remain active thanks to their members' and activists' voluntary work and engagement.

Six of these organisations stated that they are primarily funded by international project funds, whereas three of them are funded by donations of individuals or legal entities, and three by their respective local municipality's budget. Regarding their primary activities, six CSOs stated environmental protection, three air pollution, and only two deal with energy transition. As many as nine organisations stated that their primary focus is citizen activism, whereas four focus on providing information and raising public awareness, and four on public policies advocacy. The majority of them (11) has 3 to 10 years of experience in their respective areas, six have been active for up to three years, while four had experience working on environmental protection in Serbia for more than ten years.

#### What do these Serbian CSOs we profiled think of the energy and just transition?

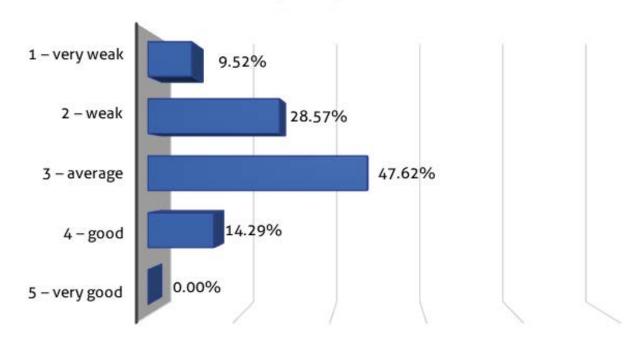
47.62% of the respondents rated **residents' awareness of the environmental issues** in their city or municipality as average, while 28.5% stated the awareness was low, and 9.52% considered it very low. 14.29% thought that the residents' awareness was high, while no organisation thought it was very high (Chart 19).

Chart 19:
How would you rate the awareness of inhabitants, in the city/municipality/village where you perform your activities, about the importance of environmental protection?



The respondents considered **their knowledge of energy transition** to be good: 47.2% said it is good, 23.81% that it is average, while 19.05% thought their knowledge is very good. No organisation opted for the "very weak" option. (Chart 20).

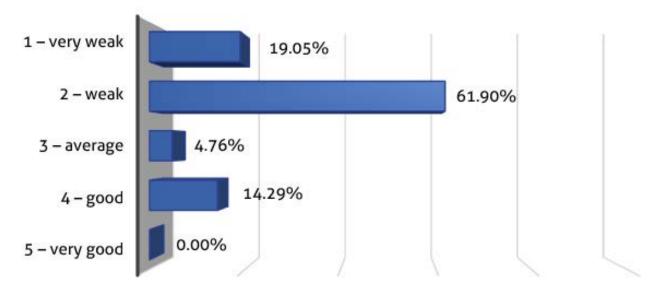
Chart 20:
How would you rate your knowledge about the energy transition topic and process?



On the other hand, when it comes to **residents' awareness about the importance of energy transition** (from fossil fuels, and above all coal, to renewable energy sources and energy efficiency), 61.9% stated that this awareness is low, while 19.05% considered it very low. Similarly to the previous question, 14.29% thought that awareness is high, and no organisation opted for the option "very high" (Chart 21).

Chart 21:

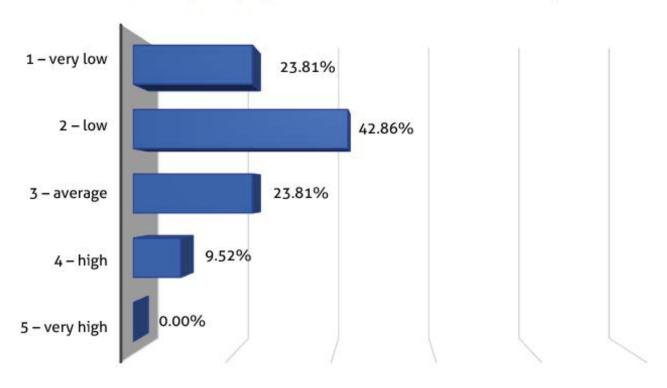
How would you rate the awareness of inhabitants, in the city/municipality/village where you perform your activities, about the importance of energy transition (from fossil fuels, and above all coal, to renewable energy sources and energy efficiency)?



Contrary to the results of the survey conducted among Lazarevac's residents, the CSOs which responded to the online survey believe that, among the residents of their respective cities/municipalities/villages, awareness of the importance of just transition is higher than awareness of the energy transition process in general. 42.86% responded with "low" and 23.81% with "very low" which amounts to 66.67%, compared to the same responses about the energy transition question (80.95% in total) (Chart 22).

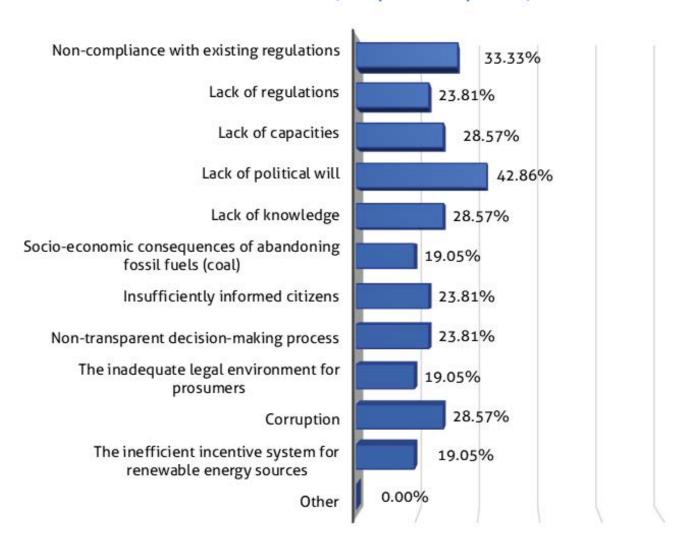
Chart 22:

How would you rate the awareness of inhabitants, in the city/municipality/village where you perform your activities, about the importance of just transition (which leaves no one without an employment and development perspective, in the future without fossil fuels)?

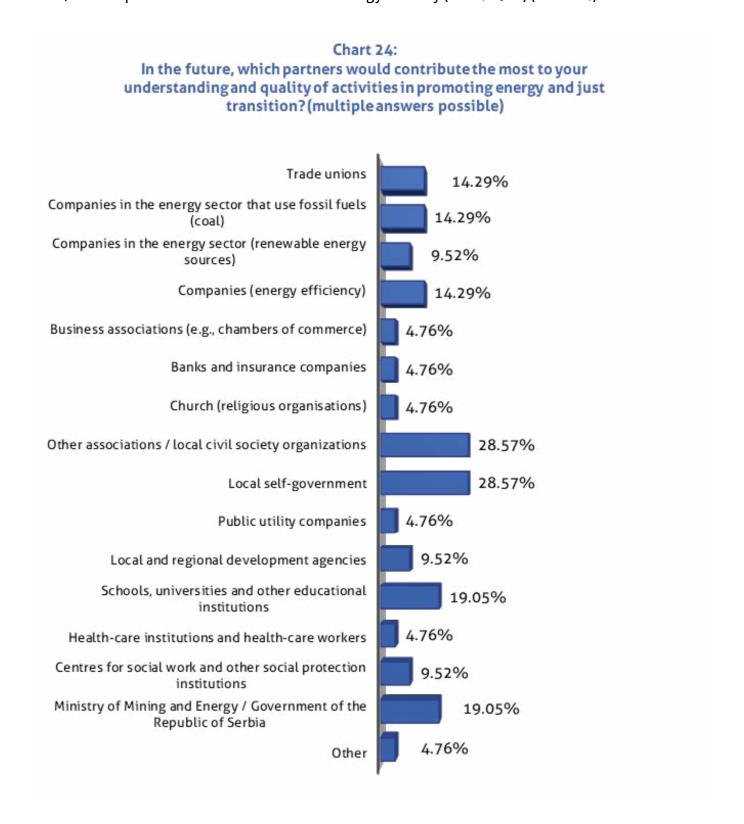


Considering the most significant future challenges when it comes to energy transition in Serbia, the participants shared the opinion of the coal-impacted community of Lazarevac, naming lack of political will (42.86%), non-compliance with existing regulations (33.33%), corruption (28.57%), and lack of knowledge and capacities (both 28.57%) as the most salient. These were followed by the lack of regulation in this field, insufficiently informed residents, and non-transparent decision-making process (all 23.81%) (Chart 23).

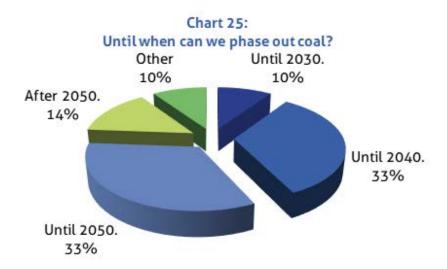
Chart 23:
What do you consider to be the most significant challenges for the energy transition in Serbia? (multiple answers possible)



The environmental CSOs in Serbia rely on the help and collaboration of various stakeholders to gain a better understanding and improve the quality of initiatives promoting energy and just transition in Serbia. They primarily expect support from other organisations and local civil associations, and local self-government institutions (both 28.57%). These are followed by schools, universities and other educational institutions, and the Ministry of Mining and Energy of the Republic of Serbia (both 19.05%). A lower percentage opted for the support of trade unions, companies in the energy sector that use fossil fuels, and the private sector of the renewable energy industry (all 14.29%) (Chart 24).



Lastly, this is the environmental organisations' opinion on when can Serbia phase out coal. 33% of participants thought it could happen by 2040 or 2050, a minority believed Serbia could phase out coal faster – by 2030 (10%), while 14% of participants were more pessimistic, stating that this would happen after 2050 (Chart 25).



In summary, the 21 Serbian environmental organisations which participated in the survey:

- consider residents to be insufficiently informed about environmental issues and energy transition, and, to some extent, are more aware of the importance of the just transition process;
- 2. share the opinion of the residents of Lazarevac that the issues of corruption, lack of political will, non-compliance with the existing laws and regulations, lack of know-how and lack of capacities represent the most significant challenges to the just transition process in Serbia;
- 3. rely on the help of their fellow organisations in Serbia, as well as on local self-government institutions, to gain a better understanding and promote the just transition process, and
- 4. believe that there is still much to be done before the country will be able to phase out coal.

Image 18: The red traffic light in front of "Kolubara Processing", Vreoci



#### The civil society sector in Lazarevac

The local community of Lazarevac believes that citizen activism regarding environmental questions is highly discouraged either by the local government or by the management of the Kolubara power plant. Some of Lazarevac's residents complained about being suspended or fired from work in the RB Kolubara, others got lower rank and lower paying positions, while others admitted to being followed or interrogated by the police. Media critical of the government have covered some of these individual stories, but without much impact on the status quo.

The residents of Lazarevac that are involved in some of the **local civil society organisations** (youth, women, environmental) seem to be informed about the energy transition issue in general, but a bit less about just transition in particular. None of them seem to be actively involved in raising awareness about these issues, focusing instead on more pressing and "tangible" problems, such as air, water and soil pollution, inefficient heating system, health issues connected to air-pollution, etc. However, partially due to lack of resources and support from the local government, even these issues seem to be addressed in a manner that is not efficient, noticeable or impactful.

Some residents of Lazarevac believe that some local organisations are financed directly by, or are otherwise connected to either the local government or the management of the RB Kolubara. Therefore, according to this belief, the activities of these organisations only serve the interests of their own sponsors. Despite the fact that local organisations could be better positioned to understand the current situation in Lazarevac, they are again seen by many as intertwined with local and State authorities, serving their own interests and not actually believing in the ideas they purportedly try to promote. The Green Party of Lazarevac has a representative in the local government, who secured the position following the party's pre-election coalition with the Movement for the Restoration of the Kingdom of Serbia, a minor monarchist and conservative political party. The residents of Lazarevac find it hard to comprehend how these two parties on the opposite ends of the ideological spectrum can possibly find common ground, and wonder whether the understanding behind this deal has less to do with the greater idea they purport to promote rather than with the personal power they try to obtain.

None of these organisations here in Lazarevac has ever been actually dedicated to environmental issues. They usually register an organisation just to become a residents' association or movement, and then they aim even higher, to participate in the local elections! And what happens next? They need to get along with the politicians in order to get their share of power, which means they haven't been honest from the very beginning! (Slobodan, 54)

It is tough to portray yourself as an eco-friendly organisation in the Lazarevac community that predominantly depends on coal and Kolubara. If you dare to do so, you will clash with the authorities, with potentially catastrophic consequences, because they are the ones who control your life and you even gave them permission for it! (Lazar, 58)

Ecological organisations in Lazarevac have hit a wall. You cannot achieve anything if your idea or opinion contradicts the State. No matter how good your idea or suggestion is, you cannot do anything if you are seen as the opposition [to the government]. We have experienced it here in our municipality. If you have a good idea, you have to cooperate with the local government, and then they are automatically in a position to have control over you. (Sara, 39)

#### 5.2.3. Why is Lazarevac angry?

As the five-month bottom-up research suggests, residents who contributed to the research feel that corruption is omnipresent and represents a major challenge that cannot be handled by a handful of local activists and active residents. They are watching how their municipality should not be run on a daily basis, but are silenced when they suggest how things can change for the better.

In general, Lazarevac feels afraid to speak, to raise its voice, to fight for its rights. Having felt this way for decades, Lazarevac has become a stunned and passive community of people who live in the comfort of their high and secure salaries and are unwilling to take a look at the broader picture.

Overall, the majority of respondents from Lazarevac feel they cannot trust the EU, the State, the local government, the trade unions or the civil society sector. In the end, Lazarevac feels it cannot trust itself:

- We first need to change public consciousness, but as long as they [people] have money in abundance, we cannot expect that consciousness to change. And they will have money in abundance as long as there's coal, which we will have for at least 20 more years! (Slobodan, 54)
- It [the transition] cannot be implemented painlessly and it cannot be done overnight. They say the system is to blame, but it is the people who make this system, not some aliens from the sky! The system is not an autonomous entity to change things on its own. If we all raise our voice, even a little bit, we will be able to change things for the better! But people chose to remain quiet or complain how bad things are and play the martyr because it's easier this way. The hardest thing is to change ourselves. We cannot just press a button and install democracy and human rights and freedoms, neither someone can just come and say here it is, serve yourself! It's a question of individual and national maturity. Maybe you cannot immediately change public consciousness, but you can change yourself! (Ljubica, 42)
- I love to believe that people have been manipulated, but then I ask myself for how much longer will we look for excuses for these people? This one is blackmailed, that one is frightened OK, I am sure there are many people like that, but then again I believe that people are simply like that, it is in their character to be bought and led by personal interests. These people are tacitly identifying with those in power, wishing to become part of that world. (Ana, 43)
- We are in ruins! We have to do something, starting from very basic things, so that we know what we invest in, and ensure that in 50 years our children will have better lives. [...] We will explode from all the things we keep inside us, and by staying silent, we are becoming accomplices. When you say nothing, it means you support the status quo. (Sandra, 33)

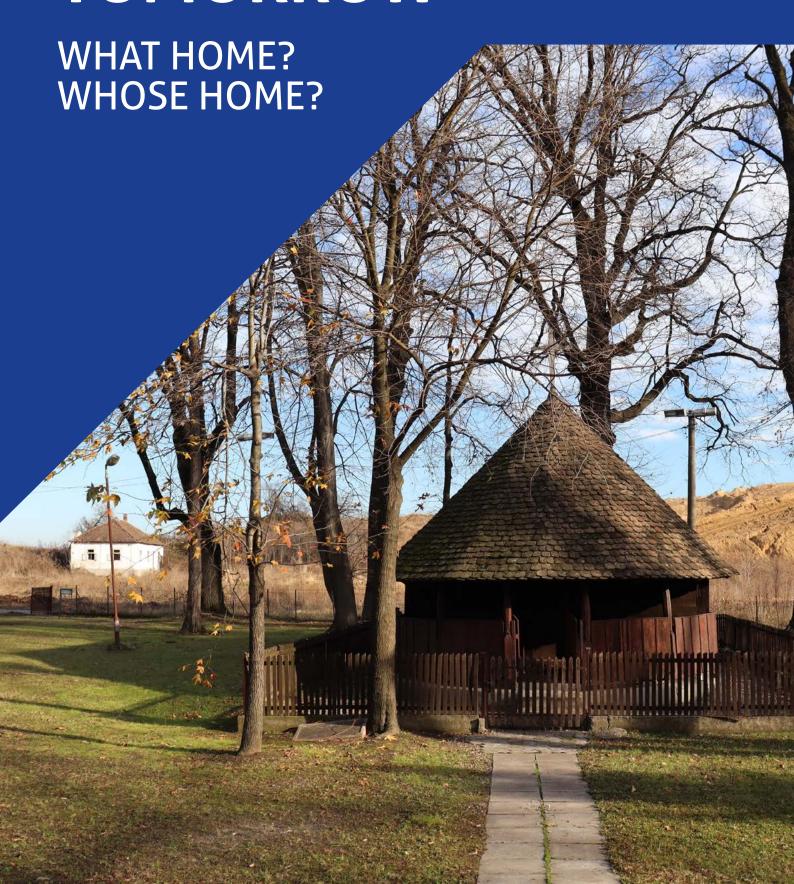
Image 19: Working on "Tamnava" coal mine expansion near Radljevo



Image 20: Working on coal mines in Vreoci



## LAZAREVAC TOMORROW



### 6. LAZAREVAC TOMORROW

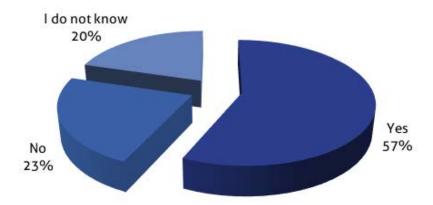
#### 6.1. What home?

Lazarevac will live as long as RB Kolubara lives. When the coal exploitation ends, Lazarevac will end too. (Milan, 63)

Regarding the question "do you believe that the closure of TE Kolubara and phasing out coal is inevitable in the years or decades ahead", 23% of respondents replied with "no", while 20% of them replied "I do not know". 57% of the respondents believed that it is impossible to avoid TE Kolubara's closure and the elimination of coal mining in the following years or decades (Chart 26). Respondents from 46 to 60 years of age were the most convinced of the necessity of TE Kolubara's closure.

Chart 26:

Do you believe that the closure of TE Kolubara and phasing out coal in the Kolubara mining basin is inevitable in the years or decades ahead?



Those who answered affirmatively to this question were also more willing to give a short explanation of their answer. Many respondents believe that TE Kolubara will inevitably close because there will be no coal left for extraction. Some of the issues raised earlier in this study also resurfaced, such as a possible shut down imposed by EU rules and regulations, and the existence of an inefficient and corrupt system that is not sustainable in the long term. These are some of the responses of those who think that TE Kolubara will shut down in the following years or decades:

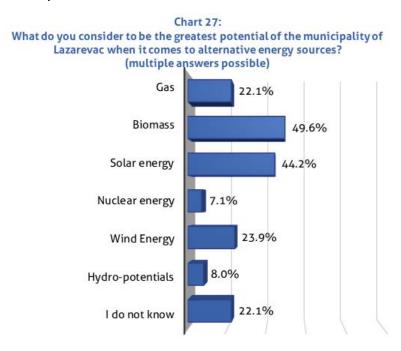
- We are in some short of Bermuda triangle where money is disappearing. We will either go bankrupt or forced to close due to EU accession.
- The developed world, Europe and we as a part of Europe is going to reduce air pollution and carbon dioxide emissions. Thermal power plants are the main polluters. Someone must stand in their way and do something to protect our people who live near coal mines and thermal power plants.

- The coal deposits are decreasing; the quality of coal is getting worse. It is also inevitable that such a large polluter will be phased out and we will switch to another energy source. Thermal power plants are likely to switch to gas, if they survive. It will be more profitable than digging coal.
  - Electricity production from Kolubara lignite is a costly process. Not to mention environmental pollution; coal users themselves are slowly switching to pellets as an alternative for heating.
  - There is an agreement at the intra-state level that talks about reducing the use of coal and promoting the use of renewable energy sources.
  - It is inevitable that it will close, but apparently that's only because it will be consuming too many resources. Cost-effectiveness is the only thing that is taken into consideration in Kolubara.
  - Nobody will ask us; they will make us.

On the other hand, below are the responses of those who thought that phasing out coal **would not happen** in their municipality. The answers might be short, but they send a pretty clear message:

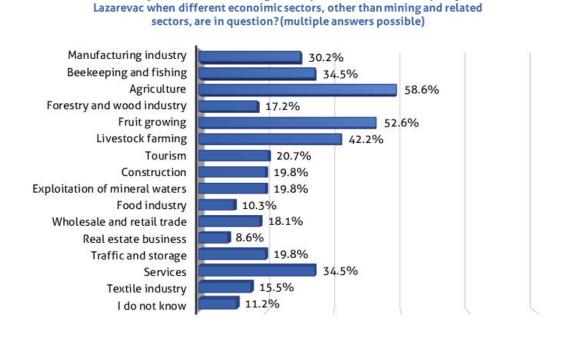
- If the State invests money in the development of standard environmental protection, there is no reason to close it. There are mines and power plants like this everywhere in the world; it is just a matter of State awareness and care.
- **J** We still do not have enough renewable energy sources.
- Many people, many families would be left without jobs. They need to build some new factories here, to create the conditions for something else to thrive, like vegetable farming, forest exploitation and similar.
- How will the people live then? Everyone works there!
- **J** That would be economic suicide. God forbid!
- If the questionnaire is a way to inform the residents of Lazarevac that you will close the thermal plant, then we are all in big trouble!

The questionnaire participants were also asked what they see as the alternative energy source with the most significant potential in their municipality. The majority indicated **biomass** as a potential replacement for coal (49.6%), followed by **solar** (44.2%) and **wind energy** (23.9%). **Gas** has been chosen by 22.1% of the respondents (Chart 27).



Regarding sectors of the economy, other than mining and related sectors, the residents of Lazarevac thought that their municipality's most significant potential lies in agriculture (58.6%), fruit farming (52.6%), and livestock farming (42.2%). These sectors are followed by beekeeping and fishing (34.5%), services (34.5%), and manufacturing industry (30.2%) (Chart 28). Compared to other age groups, respondents from 18 to 30 years of age were more inclined to see an economic alternative in services, real estate business, wholesale and retail trade, or the forest and wood industry. Those who are older than 60 years of age were the most convinced about the potential of mineral water exploitation, compared to the other age groups.

Chart 28:
What do you consider to be the greatest potential of the municipality of



When we look at the respondents' answers to how they see "Lazarevac of the future", the picture becomes very dark and gloomy (Figure 6).

Figure 6: "Lazarevac of the future", summarized answers



My interlocutors and interviewees shared a similar vision of their future within the coal-impacted community of Lazarevac. Most of them expressed scepticism when I would ask about the alternatives for Lazarevac once the power-plant gets closed. They believe that there is no potential in tourism as what they have to offer does not interest even those who reside in the area (for example, historical and religious heritage). They also dismiss agriculture as an alternative, because they believe the mismanagement of coal exploitation has polluted their land and made it practically unusable. Moreover, they seem to not have any faith in the relationship between the State and potential future investors:

- Lazarevac missed the opportunity for a future development, a long time ago. The politicians have not been thinking about it, because their only policy is to get a high salary and then who cares about the environmental situation?! (Milan, 63)
- Is there any land recultivation, forestation? No, there isn't. Are we already late when it comes to energy transition? Yes, we are. Even if took matters into our own hands tomorrow, we are lagging too far behind. (Dejan, 46)

Any talk of shutting up the thermal plant would cause total hysteria in Lazarevac because we have maybe five to ten percent of positive examples of foreign direct investment and their factories here in Serbia. People aren't satisfied with their jobs, salaries and working conditions. To persuade the coal-impacted communities to cooperate, you need to offer conditions than are an improvement over what they already have. Somebody needs to come and offer a better solution, but they treat us like cheap labour. We need at least the same treatment. Otherwise, there will be resistance every step of the way. That is, I believe, the key issue. (Darko, 52)

We are not even close to having some alternative options for Lazarevac! It [energy transition] is hard to explain to the people. They have children living here, in this polluted environment, and they say "we don't care". How can you not care? (Sonja, 32)

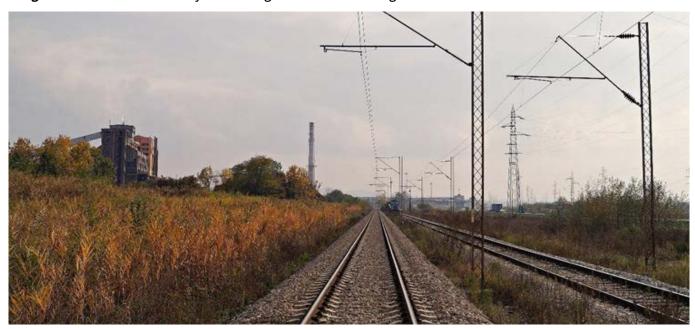
People don't understand that when all this shuts down, we will become a blind spot, 15 kilometres away from the highway, without any alternatives, without any new factory. People have the ecological consciousness of a cockroach! Even a little worm or a caterpillar cares more about the environment than them! (Jasna, 36)

#### 6.2. Whose home?

No matter how loud you scream from such a small place like Lazarevac, it is never loud enough. (Petar, 44)

Based on formal and informal interviews and participant and non-participant observation, it seems that for the local community in Lazarevac, the energy and just transition issues are perceived as taboo topics. The residents of Lazarevac either think that shutting down the Kolubara power-plant is out of the question and should not happen under any circumstances, or that they can do nothing to raise collective awareness and promptly start planning coal phase-out. They often say that this issue has been raised for decades and nothing has ever changed so why it should be any different now, or they believe they should not do something that the EU is pressuring them to do "when the EU itself does not follow the same rules".

Image 21: The industrial railway connecting the Kolubara mining basins with the TENT in Obrenovac



Passivity and disinterest characterise all generations of people in Lazarevac. Older generations have provided for their families, have secured jobs for their children, and are not motivated to participate in the process that could endanger their future (financial) prospects. Middle-aged generations have secure jobs, a simple life for their families, and often loyalty towards their employers or the State and the local government officials. Younger generations are satisfied with the good salaries, and the lifestyle these salaries provide:

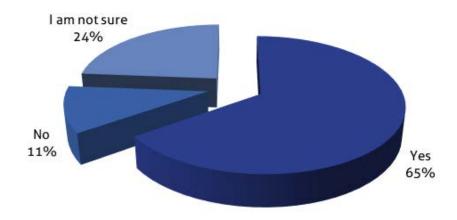
What are you going to do here, if you lose your job? An average salary here in Lazarevac is around 100,000 dinars, so who cares that we are dying of pollution? People choose to ignore such an important issue because they are afraid of what will happen to them tomorrow. They believe we are doomed if we are left without coal. (Nemanja, 47)

An entire generation needs different life priorities, if it is to become empowered to act in their best interest in the future. The governments don't care what will happen in 40 years, that's why we need to care! Unfortunately, there are not enough conscious people in Lazarevic who can be convinced that the things we are doing today are for the benefit of our children tomorrow. (Ana, 43)

Other groups of people who are aware of the necessity of energy transition and see its benefits, feel misunderstood and underappreciated by their local community and decide to emigrate to Belgrade or abroad. They predominantly believe that Lazarevac will become a "ghost town" if the mine closes, and many of them have already bought or are planning to buy apartments in Belgrade and continue their lives there. If they had the opportunity to leave the municipality of Lazarevac and move to another city or municipality in Serbia or abroad, the majority of the questionnaire respondents – 65% of them, stated that they would do so, 11% said that they would not leave Lazarevac, while 24% was not sure (Chart 29).

Chart 29:

If you had the opportunity to leave the municipality of Lazarevac and move to another city/municipality in Serbia or abroad, would you do so?



When we look at the respondents' answers to why would they leave Lazarevac in the future, the picture is again very pessimistic (Figure 7). The reasons summarize almost all the key issues raised in this study, such as air pollution, corruption, insufficient infrastructure, and dependency on coal mining and related industries. The respondents said that leaving Lazarevac would mean getting a better living standard and providing a healthier environment for their children. Many said that they are willing to emigrate abroad.

Figure 7: Reasons for leaving Lazarevac, summarized answers



The interviewed residents of Lazarevac felt that there is not enough **social cohesion and unity**, a **collective identity** of this coal-impacted community, **motivation** among the youth, nor sufficient **public consciousness** on issues of critical importance for the future well-being of this particular local society.

To the young people of Lazarevac, our historical and cultural heritage means nothing. You can count on the fingers of one hand the passers-by here [in Lazarevac] who would know when the Battle of Kolubara happened, for example. People lack education, both formal and informal. (Milan, 63)

Young people here in Lazarevac do not have that entrepreneurial spirit like some youngsters in Valjevo or Aranđelovac, for example [neighbouring municipalities]. Here too many of them work in Kolubara after their parents worked there too, and their entire lives they have remained connected to Kolubara, complacent and disinterested. It would have been different if they had to worry more about their basic needs, like children in some other municipalities all over Serbia. (Sara, 39)

What do the young people in Lazarevac identify with the most? The answer is smartphones. Through our work, we try to motivate these children to be socially responsible and work for the benefit of society, but these children are not willing to stay here. There are some brilliant and

good children in Lazarevac, but they all plan to leave Serbia because they know they will have a better life abroad. (Milan, 63)

- We need to be more informed and better educated. We need to teach our children that Kolubara is a polluter, that it does operate legally or adequately, and is poisoning us every day. It's not our children's fault because they don't know these things. The fault is only ours. (Zoran, 34)
- Lazarevac was a small community before coal mining. People used to come from all Yugoslavia regions to work here; people of different nationalities, professions, mentalities, and interests. So, there is no typical "Lazarevac spirit", a sense of belonging to this community. For example, I was born here, but my parents came to Lazarevac because of the work opportunities. [...] Whoever came to Lazarevac, they are only looking after their own interests. Nobody has looked at Lazarevac as a place where they are going to stay permanently. That's why we don't care what will happen to us in the future; most of these people have already prepared a "plan B". (Ana, 43)
- I am afraid our local community is not mature enough to go through the energy transition process. I wish I were mistaken, but I believe that we won't be ready in 40 years either! We need to set the foundations for change now. We should not bother with issues too complicated for us to comprehend, like installing solar panels and all the lacking and inadequate regulation, but think of more basic stuff, things that can we change little by little. Whoever has ever led Kolubara, didn't have any alternative in their mind. There cannot be coal forever, it is not a renewable resource, is there anyone to think about it more thoroughly and with more dedication? (Mila, 50)
- We shouldn't be changing the representatives, but ourselves, the people. The people should know that when they are voting, they are voting for themselves. What change in consciousness can we expect when they wait for the president to tell them what to do in every aspect of their lives? Those who are conscious are leaving this city. Those who are not conscious are so complacent that they do not even try to get more informed and educated. (Petar, 44)
  - The problem took time to develop, it will need at least as much time to be solved. But first, we need to improve our public consciousness, to wake up as a society. (Sonja, 32)

#### A wake-up call from Lazarevac



After taking me on a full-day trip around the coal mines of Kolubara and guiding me through the municipality's neighbourhoods, tourist attractions and other hidden gems of Lazarevac, visibly distressed by what we have witnessed and upset that he is not capable of improving things on his own, Dejan felt the need to share with me a couple of more thoughts. Visibly concerned about the impression his dusty and sooty working suit from the night shift in Kolubara might be making on me, he suddenly felt the need to pour his feelings out:

I am not afraid for my activism, or better, of the consequences I might face because of my activism. I cannot change everything, but I can change a small thing here and there, little by little, as much as I can with my skills and abilities. On the other hand, when I look back, all I can say is that this activism has only brought problems into my life. I find it hard to even talk about it.

Tell me, then, in one word only, what motivates you to be active and loud despite facing consequences?

**Children**, he said.

Acknowledging the gravity of meaning this one word carried at that moment, I posed another question to him:

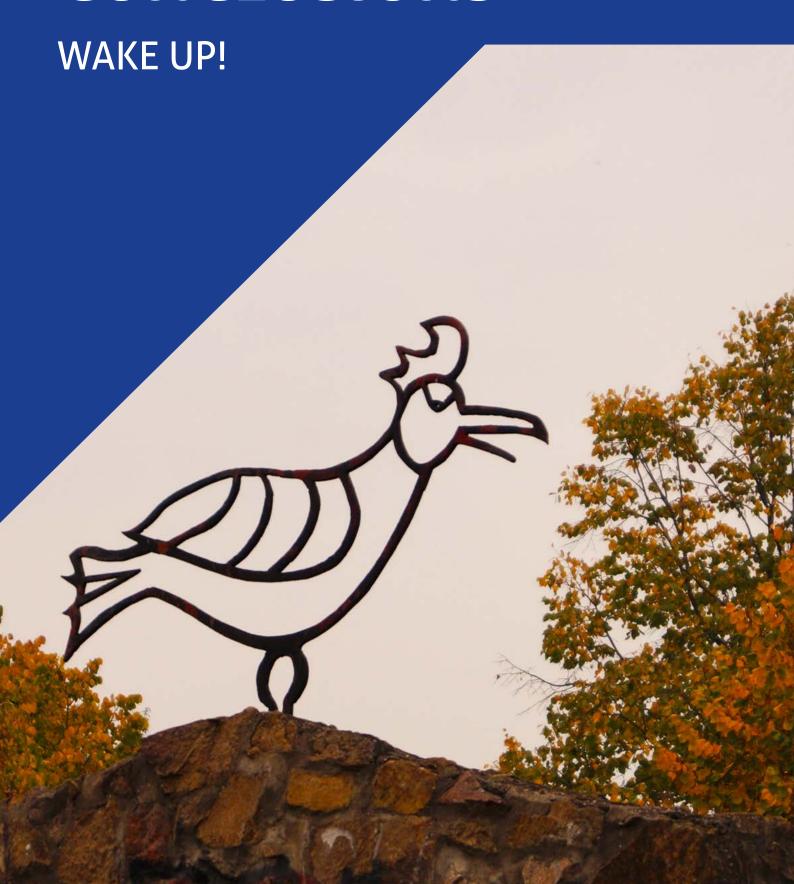
Would you tell me, in one sentence only, what needs to happen for you to be happy?

**99** We need to wake up.

When you say "we", who do you have in mind?

Just..., he paused and shrugged his shoulders. Just all of us.

# CONCLUSIONS



#### 7. CONCLUSIONS

#### 7.1. Key findings

According to the research respondents' answers there is a substantial amount of apathy, passivity and inertia within the local community in Lazarevac with regards to environmental degradation and protection in general.

Economic topics are frequently spoken about, primarily when pointing out the benefits of living in an economically developed municipality where most residents work for or in cooperation with TE Kolubara, and have (on average) high and secure salaries. Today's population is well-aware of the benefits of living in Lazarevac. When asked to choose what are, in their opinion, the most significant advantages of living in the Lazarevac municipality, three out of five top answers involved economic prosperity – the municipality's economic standard, high earnings, and employment opportunities.

On the other hand, the majority of respondents acknowledged environmental issues, such as air, soil and water pollution, as the most significant disadvantage of living in Lazarevac.

## How informed are the residents of Lazarevac about environmental issues?

Some residents of Lazarevac are aware of the impacts that environmental pollution has on the local community, including the negative impact on the natural ecosystem, quantity and quality of agricultural land, the quality of social life of the people that live in close proximity to the coal mines and TE Kolubara, as well as the impact on their and their family members' health. However, the respondents also mention the lack of hard, statistical data concerning environmental pollution and protection, which would help raise public awareness.

The respondents have not noticed any increase in residents' awareness about the environmental problems in recent years. According to their answers, the residents of Lazarevac believe that both the central and the local authorities and institutions have not done enough to raise

public awareness about their municipality's environmental problems.

All sides pollute Lazarevac: the stakeholders involved in coal-mining activities, and the residents of Lazarevac. When it comes to the latter, they contribute to this problem either by polluting the environment themselves or by remaining silent when it comes to naming and shaming those responsible for the status quo. According to this study's findings, the residents of Lazarevac believe that the majority of residents:

- are not informed in a timely and adequate manner regarding environmental protection and related issues;
- mainly care about conformism and materialism, not about the natural environment;
- are complacent and passive;
- are not aware of environmental issues due to their own fault, because they tend to follow the example of stakeholders that bear greater responsibility, such as the local self-government, various local businesses connected to the activities of RB Kolubara, their employer (RB Kolubara and EPS), or the State.

## How much does Lazarevac know about energy and just transition?

Amongst the research respondents there is some level of understanding of the meaning of energy transition, whereas the percentage of those who understand the concept of just transition is much lower.

The minority of the respondents who understand the concepts of energy and just transition belongs to the following groups:

- urban, more educated, young and middleaged people; who
- possess a good knowledge about this topic;
   and
- can be reached through some modern channels of communication, such as Internet portals and social media.

The residents that are engaged in some of the local environmental movements and organisations seem to be informed about energy transition, but a bit less about just transition. None of them seem to be actively engaged in raising awareness about these issues, focusing instead on more pressing and tangible local environmental problems. However, even these issues seem to be addressed in a manner that is not efficient, noticeable or impactful, mainly because these individuals and organisations lack resources, know-how and support from the relevant stakeholders.

The majority of the research respondents do understand energy and just transition concepts after these are explained to them. They mostly perceive them negatively and choose to remain silent when asked about their attitudes, perceptions and hopes for the future. When confronted about the silence, the researcher understands that it's caused by the fear to speak freely. The research respondents, and their fellow residents, are afraid of:

- losing their jobs and privileges in the RB Kolubara and related business entities;
- the reactions of both State and local authorities;
- the actions of their employer (RB Kolubara and EPS);
- being left behind by the international stakeholders, primarily the European Union.

## How included the residents of Lazarevac are in the local decision-making process?

The research respondents from Lazarevac think that the local government is not sincerely dedicated and involved in solving the community's environmental problems. The residents of Lazarevac who believe that they should pay more attention and give more importance to the environmental problems in their municipality, also believe that they lack support from the local self-government to achieve these goals.

Moreover, the activists and members of the civil society organisations feel excluded (even purposely) from the local decision-

making process. Residents' activism regarding environmental questions is highly discouraged, by the local government and/or the management of TE Kolubara. This often has a domino effect on the remaining active citizens, discouraging them from continuing their efforts. Some activists complained about being suspended or fired from their jobs at RB Kolubara, while some were demoted to lower rank and lower paying positions, and others were followed and interrogated by the police.

Furthermore, this study has discovered that there is not enough collective consciousness to get the residents' voice heard in the local community's affairs because:

- most residents do not actively participate in solving their local community's problems, including the ones concerning environmental pollution;
- hose residents who are reluctant to take more initiative believe that they should not act because they do not have enough support from their fellow citizens or because they believe they cannot achieve anything this way (on their own); while
- active citizens think that even when they do act, their activism could remain unnoticed by the wider local community.

All these points reveal a certain level of disengagement and disinterest within the community of Lazarevac regarding the severe consequences of local environmental pollution.

## Who are recognised as the leading stakeholders in planning local development?

According to research respondents the residents of Lazarevac believe that:

- the Government of Serbia (Ministry of Mining and Energy and Ministry of Environmental Protection),
- · EPS; and
- Lazarevac's local authorities and institutions,

should be the main stakeholders responsible to provide information about energy and just transition, and should assume the leading role in implementing these policies and mechanisms. A notable percentage of the research respondents expects to receive information from local environmental organisations and associations, and educational institutions' activities.

Regarding the role of the European Union in this process, the coal-impacted community of Lazarevac believes that:

- The EU should be more involved in the just transition process in Serbia and Lazarevac in particular;
- he European Union is a legitimate partner whose guidance and know-how they are ready to accept;
- The European Union should not be the leader of the just transition implementation in their local community, but should remain involved to advise and control the process.

The residents of Lazarevac recognised biomass, solar and wind energy as the renewable energy sources with the most significant potential in their municipality. When it comes to different sectors of the economy, other than mining and related sectors, the residents of Lazarevac thought that their municipality's greatest potential lies in agriculture, fruit farming, and livestock farming.

When asked to name what do they consider to be the most significant challenges or problems for the implementation of just transition in Lazarevac, more than half of the respondents chose these issues as the most salient ones:

- · non-compliance with existing regulation;
- corruption;
- · lack of knowledge; and
- · lack of political will.

#### Who are the prospective agents of change?

The research respondents feel that they do not have ownership over the just transition process in their local community. Moreover, the ownership does not belong to the local self-government either, remaining instead the privilege of the leading decision-makers in the country, within the central government.

The fear of being left behind is rooted in the fundamental distrust towards practically all of the stakeholders involved in the just transition process, including the local political authorities, the employer (RB Kolubara and EPS), the EPS union, the government of Serbia, the European Union, CSOs at the State and local level, as well as the majority of their fellow citizens in Lazarevac.

The distrust originates from the impression of omnipresent corruption characterizing all the stakeholders mentioned above. This explains why the issue of coal phase-out seems to be a taboo topic for this coal-impacted community in Serbia. Therefore, the stakeholders who are seen as the main agents of the just transition process in Lazarevac are, at the same time, considered to be disinterested and unwilling to work for the public good at the expense of their political or personal interests. This makes the residents of Lazarevac angry.

This study also concludes that environmental organisations in Serbia:

- consider residents in Serbia to be insufficiently informed about environmental issues and energy transition, and to some extent, more aware of the importance of the just transition process;
- share the opinion of the residents of Lazarevac that the most significant challenges to the just transition process in Serbia are high-level corruption, lack of political will, non-compliance with existing laws and regulations, lack of know-how and lack of capacities; and
- rely on the support of their fellow organisations in Serbia, as well as on local self-governments, to gain a better understanding and promote the just transition mechanism.

### How does the community of Lazarevac see its future without coal?

In addition to the abovementioned problems, Lazarevac feels that there is not enough social cohesion and unity, a collective identity of this coal-impacted community of people, motivation among the youth, or public consciousness about the issues of critical importance for the future well-being of this particular local society.

Passivity and disinterest pervades all generations in Lazarevac. Older generations have provided for their families, have secured jobs for their children, and are not motivated to participate in the process that could endanger their future (financial) prospects. Middle-aged generations have secure jobs, a simple life for their families, and often loyalty towards their employers or the State and the local government officials. Younger generations are satisfied with the good salaries, and the lifestyle these salaries provide. Younger people who are aware of the necessity of energy transition and see the benefits of it feel misunderstood and underappreciated by their local community and often decide to emigrate to Belgrade or abroad.

The residents of Lazarevac predominantly believe that their city will become a ghost town without coal exploitation, unless all the stakeholders involved in the just transition process decide to "wake up" by drastically addressing existing problems and working for the improvement of the conditions of this coalimpacted region and its inhabitants.

#### 7.2. Recommendations

This study investigates the level of awareness and the attitudes of the residents of Lazarevac towards energy and just transition and offers recommendations on how to better communicate and inform all stakeholders about these issues. The overall objective is to contribute to the region's long-term just-transition by providing a bottom-up perspective, in order to establish concrete action points.

The study shows that communication concerning just transition in the municipality of Lazarevac requires a multi-layered solution, that includes various stakeholders at the local, regional, national and EU level. The success of this process requires several steps:

- 1. providing all necessary information to stakeholders, at all levels;
- enabling information exchange among stakeholders;

- 3. motivating stakeholders to act; leading to
- enabling them to engage and assume an active role in the energy and just transition processes.

#### The residents of Lazarevac

Residents of Lazarevac municipality should be the core beneficiary/target group of the abovementioned activities, and the first ones to be included in the process. The goal of citizen-focused activities should be to raise awareness about energy and just transition and offer information on the processes, their benefits, and on what residents should expect.

Therefore, the following recommendations are put forward:

Separate communication goals and key messages have to be established and provided for different target groups:

- youth (18-29 years of age) have to be better informed about the current status quo and its impact on their lives. Communication needs to get their attention first, then convey simple yet impactful messages;
- middle-aged group (46-60) needs to be provided with more actionable information;
- the older population (older than 60 years of age) needs to be motivated to act, at least in raising public awareness;
- women have to be informed about social and economic benefits, focusing on the better employment opportunities they might have.

Public awareness-raising campaigns on just transition should be conducted at the local level. Information about just transition should be made available to residents of Lazarevac in Serbian language through the media they use the most (Internet portals, social media, and media with national coverage – TV, radio, press). Already existing information should be made more accessible.

The following activities are proposed:

 translation of selected existing information to the Serbian language;

- distribution of this information to relevant information hubs, primarily CSOs dealing with just transition, local and national media;
- creation of national energy and just transition communication network and hub, an online platform (consisting of a website, social media presence, and network communication channels) which would include all relevant stakeholders and become a nexus of information about just transition;
- awareness-raising activities about just and energy transition: videos/interviews with advocates of change, distributed through social media, national and local TV coverage, press releases and articles posted on online media/websites, press releases in local and national media outlets, distribution of information on positive case studies (articles, videos), outdoor advertising and posters oin key points of interest of the local community, radio shows, talks and podcasts;
- round tables, discussions and panels should be held at the local level, involving national, regional and local stakeholders.

#### The civil society sector in Serbia

In view of the fact that there is a high level of distrust towards all stakeholders at the local level, these activities need to be carried out by trustworthy agents of change. Based on the data collected in the field, agents of change would ideally be local or national-level independent expert(s) or CSO(s) specializing in energy and just transition, whereby:

- communication has to be transparent, and information has to be fact-based;
- communication has to address the residents' concerns such as socio-economic consequences, long-term impact on nature, the mine reclamation process, etc.;
- messages should present captivating reasons for personal motivation;
- accent has to be put on the benefits of just transition for the local community, but also on what could be lost if the transition does not take place;

 messages should provide information about action – what individuals can actually do.

Planned activities should increase knowledge about energy and just transition among residents, the benefits of undertaking the transition, and the residents' possible roles in the processes. The tone of the messages should encourage participation and involvement, in order for the process to be inclusive and give residents ownership of the decision-making process. The messages need to convey a feeling of security and care so that residents are confident that they are not left behind.

#### The potential agents of change at the local level

A further subcategory of the local population needs to be identified and enabled to assist in the information process, most likely those who are active in CSOs and have engaged in local environmental protection activities. If properly engaged, this group of residents can act as a local agent of change, support the local community by providing accurate and timely information, and help organise awareness raising activities at the local level. However, in order to become agents of change, the capabilities of these residents need to be enhanced, from several aspects:

- human resource capabilities need to be improved – technical assistance (TA) needs to be provided to local CSOs. This TA needs to focus on core activities of CSOs (increasing their knowledge about energy and just transition, environmental protection) and on increasing the capability of CSOs to perform their activities better (project proposal preparation and management, networking, funding, and similar);
- financial capabilities of local activists need to be improved. Support needs to be provided to better communicate their case to local, regional, national, bilateral and international donors;
- networking local activists need to be better connected and included in national and international energy and just transition and environmental protection networks.

 support to local activists needs to be provided by identified national-level agents of change, but also international networks of organisations, active in the sector (such as CAN Europe).

#### The state and local authorities

To prevent local residents, active or not, from feeling left behind or fear when talking about energy and just transition or the impact that coal mining has on their lives, they have to be provided with national-level support. This can be achieved by providing information about energy and just transition in Lazarevac to the general public and national-level CSOs and other stakeholders, motivating them to take part in the process of just transition in Lazarevac, and in Serbia as a whole.

These actions aim to put enough pressure on local and national authorities to assume a more active role in energy and just transition processes. If the authorities are involved in the process and speak openly about just transition in Lazarevac, the local population's fear would be reduced, contributing to their more proactive approach.

#### The role of the international actors

However, public pressure alone (if possible at all) is not enough to induce changes to the way things are run locally. It will take much more than that - national (and, through them, local authorities) need to feel actual pressure from international and EU institutions to address the issue with more consideration. EU and international institutions need to implement a stricter control over the funding they provide to Serbia's energy sector and more severe sanctions in case of failure to utilize the funds for the intended purposes. On the other hand, they need to support public institutions and bodies in assuming a more active role in the processes, including them in international networks, programmes, projects and activities, making the funds for energy and just transition issues more readily accessible.

International CSOs need to advocate for such actions from the EU and international institutions as the dust and rust from Lazarevac pollutes the entire continent, regardless of Serbia's EU membership status.

# **ANNEX**



Thank you for participating in the survey on the attitudes, perceptions and activities of the inhabitants of Lazarevac regarding the transition from fossil fuels, coal in particular, to renewable energy sources.

This questionnaire was compiled in order to gain a better understanding of 1) the existing level of knowledge and understanding of the concepts of just transition and energy transition among the inhabitants of Lazarevac; 2) attitudes towards just transition and the respondents' expectations from the changes that this transition brings.

This questionnaire is part of a broader study conducted for the Climate Action Network (CAN) Europe. CAN Europe is a European network of civil society organisations that brings together over 170 members from 38 European countries to promote sustainable climate, energy and development policies.

The data collected through this questionnaire are anonymous and will be used exclusively for the purposes of cumulative analysis, i.e. presentation in the summary report on the conducted research.

clf you have any technical problems, questions, or other difficulties with the questionnaire, please contact the head of the research, Maja Pupovac, at the e-mail address above.

## 1. In your opinion, what are the most significant advantages of living in the municipality of Lazarevac? (multiple answers possible)

- 1. Economic standard
- 2. Employment opportunities
- 3. High earnings
- 4. Favourable geographical position
- 5. Good infrastructure
- 6. Natural resources
- 7. Cultural heritage
- 8. Proximity to Belgrade

- 9. Adequate consideration of local authorities and institutions for the needs of residents
- Developed healthcare and social protection systems
- 11. Cultural content and offerings
- 12. Educational institutions/vocational education
- 13. Peaceful and safe environment
- 14. Other\_\_\_\_\_

## 2. In your opinion, what are the most significant disadvantages of living in the municipality of Lazarevac? (multiple answers possible)

- 1. Low earnings
- 2. Unemployment
- 3. Environmental issues (e.g. pollution)
- 4. Underdeveloped agriculture
- 5. Poverty
- 6. Unsatisfactory infrastructure
- Underdevelopment of other sectors of the economy, other than mining and related sectors
- 8. Insufficient cultural offerings

- 9. Inadequate consideration of local authorities and institutions for the needs of residents
- Underdeveloped healthcare and social protection systems
- 11. Lack of prospects for young people
- 12. Insufficient quality and diversification of educational institutions
- 13. Crime
- 14. Corruption
- 15. Other\_\_\_\_\_

| 3. Are you a men  | mber of any of the   | following associ              | ation         | s and organisatio   | ons? (multiple answers                              |  |  |  |
|---|--|-------------------------------|---------------|---|---|--|--|--|
| 1. Sports club  |  | 6.                            | Ecol          | ogical organizatio  | n / association /                                   |  |  |  |
| 2. Non-governme   | ental organisation   |                               | mov           | rement  |   |  |  |  |
| 3. Political party  |  | 7.                            |               | Art organisations/groups (theatre, gallery, library, choir, folklore, etc.) |   |  |  |  |
| 4. Political move   | ment   | 8.                            | Reli          | Religious associations/groups   |   |  |  |  |
| 5. Union  |  | 9.                            | Oth           | er  |   |  |  |  |
| 4. Have you taken community in the  | • • •  | oated in, any actio           | n or i        | nitiative to solve  | a problem in your local                             |  |  |  |
| 1. Yes  |  | 2.                            | No            |   |   |  |  |  |
| <ul> <li>5. If the answer to question 4 is "Yes", briefly describe the most important activities you have carried out, and the results you have achieved:</li> <li></li></ul> |  |                               |               |   |   |  |  |  |
| 1 - Very unnoticed  | 2 - unnoticed  | 3 – neither noticed unnoticed | nor           | <b>4</b> - noticed  | <b>5</b> - very noticed                             |  |  |  |
|   | -  |                               |               | •   | nitiated or participated<br>tiple answers possible) |  |  |  |
| 1. You do not have  | ve enough time   | 6.                            |               | are afraid of the re  | eactions of the local                               |  |  |  |
| 2. You are not int engagement   | erested in such an   | 7.                            | You           | eaction of the local  |   |  |  |  |
|   | ieve that you can ac   |                               | auth<br>      |   |   |  |  |  |
| anything  |  |                               | I do not know |   |   |  |  |  |
| 4. You do not kno   |  |                               | Oth           | er  |   |  |  |  |
| 5. You do not thin support from f   | nk you would have e<br>Fellow citizens   | nough                         |               |   |   |  |  |  |
| _   | e opportunity to lear<br>or abroad, wou  | _                             | lity c        | of Lazarevac and  | move to another city/                               |  |  |  |
| 1. Yes  | 2.   | No                            |               | 3. l am r   | not sure  |  |  |  |
| 9. If your answer<br>Lazarevac?   | 9. If your answer to question 8 is "Yes", what would be the reasons for leaving the municipality of Lazarevac? |                               |               |   |   |  |  |  |
| 10. If your answer  | r to question 8 is "N  | o", what would be             | the i         | reasons for staying   | g in the municipality of                            |  |  |  |

| 11. How do you get informed about current socio-political issues in Serbia? (multiple answers possible) |   |  |  |  |  |
|---|---|--|--|--|--|
| 1. Media with national coverage (radio, TV)   | 6. From friends, acquaintances or family    |  |  |  |  |
| 2. Local media (radio, TV)  | members                                     |  |  |  |  |
|   | 7 The organisation/association Lam a member |  |  |  |  |

- 4. Print media (daily newspapers, weeklies, magazines)
- 5. Internet portals

3. Social media

- The organisation/association I am a member of
- 8. I do not know
- 9. Other\_\_\_\_\_

## 12. How would you rate your level of awareness regarding environmental issues in the municipality of Lazarevac (e.g., air, water, soil, waste management, nature protection, chemicals management, noise)?

| 1 – very low | <b>2</b> – low | <b>3</b> – average | <b>4</b> – high | 5 – very high |
|--------------|----------------|--------------------|-----------------|---------------|
|              |                |                    |                 |               |

## 13. In recent years, have you noticed a higher level of citizen awareness about the environmental issues in the municipality of Lazarevac? (multiple answers possible)

- 1. Yes, thanks to more media coverage
- 2. Yes, thanks to the greater involvement of the local authorities and institutions
- 3. Yes, thanks to the growing and obvious environmental problems in the municipality of Lazarevac
- 4. Yes, thanks to the pressure of international organisations and institutions

- 5. Yes, thanks to the activities of the nongovernmental sector
- 6. Yes, thanks to the greater consideration of the state authorities about this issue
- 7. Yes, thanks to the activism of individuals
- 8. No, I have not noticed
- 9. I do not know
- 10. Other\_\_\_\_\_

#### 14. Indicate the extent to which you agree with the following statements:

#### (1-Strongly disagree, 2-Disagree, 3-Neither agree nor disagree 4-Agree, 5-Strongly Agree)

| Statement   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Every individual is obliged to take care of the environment.  | 1 | 2 | 3 | 4 | 5 |
| Air, water and soil pollution are inevitable in coal-dependent regions, and it is the price that must be paid in exchange for the economic prosperity of residents.   | 1 | 2 | 3 | 4 | 5 |
| The state authorities and institutions should provide certain incentives to residents in order to better preserve the environment.  | 1 | 2 | 3 | 4 | 5 |
| It is too late to change anything for the better when it comes to environmental pollution in the municipality of Lazarevac.   | 1 | 2 | 3 | 4 | 5 |
| I would get involved in environmental protection activities if other individuals in the municipality of Lazarevac did the same.   | 1 | 2 | 3 | 4 | 5 |
| There are much more pressing problems in the municipality of Lazarevac than the issue of environmental protection.  | 1 | 2 | 3 | 4 | 5 |
| When it comes to environmental protection, radical changes in the collective consciousness of residents are needed.   | 1 | 2 | 3 | 4 | 5 |
| Radical measures by the state and local authorities (including sanctions) are needed to make individuals more committed to environmental protection.  | 1 | 2 | 3 | 4 | 5 |
| People are too focused on their everyday problems to take care of the environment.  | 1 | 2 | 3 | 4 | 5 |
| The problem of environmental pollution in the municipality of Lazarevac is given more importance than it deserves.  | 1 | 2 | 3 | 4 | 5 |
| The media gives conflicting and often false information about the state of the environment in the municipality of Lazarevac, causing alarm to the residents for no actual reason.                                 | 1 | 2 | 3 | 4 | 5 |
| There is no point for individuals to engage in activities to prevent environmental pollution when the responsible authorities and institutions do nothing to address the problem or do not address it adequately. | 1 | 2 | 3 | 4 | 5 |
| Generally speaking, the local authorities and institutions are sincerely committed to preserving a healthy environment in our municipality.   | 1 | 2 | 3 | 4 | 5 |

| <b>15</b> . | To  | the   | best  | of  | your  | knowl   | edge,   | has | environmental | pollution | (air, | land, | water) | in | your | local |
|-------------|-----|-------|-------|-----|-------|---------|---------|-----|---------------|-----------|-------|-------|--------|----|------|-------|
| con         | nmu | ınity | dired | tly | affec | ted you | ır heal | th  |               |           |       |       |        |    |      |       |

| community directly affe  | <b>5</b> ·   | ital pollution (air, land, water) in your local                |  |  |
|--------------------------|--|--|--|--|
| 1. Yes                   | 2. No 3. I do not know   |  |  |  |
| -                        | ur knowledge, has environmen<br>ected the health of a family men | tal pollution (air, land, water) in your local nber or friend? |  |  |
| 1. Yes                   | 2. No  | 3. I do not know   |  |  |
| 17. If there have been h | nealth problems, what diseases v                                 | were involved?   |  |  |
| •                        | ny other impacts/effects of envi                                 | ronmental pollution (air, land, water) on your                 |  |  |

2. No

1. Yes

3. I do not know

| 19          | 19. If the answer to question 17 is "Yes", please briefly state what these impacts/effects are: |           |   |  |  |  |  |
|-------------|---|-----------|---|--|--|--|--|
| 20          | 20. Do you know what "Energy Transition" is?  |           |   |  |  |  |  |
| 1.          | Yes   | 2.        | No  |  |  |  |  |
| 21          | If the answer to question 19 is "Yes", give you   | ur own    | understanding of energy transition.                 |  |  |  |  |
| 22          | Do you know what "Just Transition" is?  |           |   |  |  |  |  |
| 1.          | Yes   | 2.        | No  |  |  |  |  |
| 23          | . If the answer to question 21 is "Yes", give you   | ur own    | understanding of just transition.                   |  |  |  |  |
|             | . If you are familiar with the Energy and Just 1 em? (multiple answers possible)                |           | on concepts, how did you get informed about         |  |  |  |  |
| 1.          | Media with national coverage (radio, TV,  | 7.        | Scientific journals and publications                |  |  |  |  |
|             | press)  | 8.        | From friends, acquaintances and/or family           |  |  |  |  |
| 2.          | Local media (radio, TV, press)  |           | members   |  |  |  |  |
| 3.          | Local authorities and institutions  | 9.        | The organisation/association I am a member          |  |  |  |  |
| 4.          | Social media  |           | of  |  |  |  |  |
| 5.          | Printed media (daily newspapers, weeklies, magazines)   | 10        | . From environmental organisations/<br>associations |  |  |  |  |
| 6.          | Internet portals  | 11        | . I do not know                                     |  |  |  |  |
| oer portets |   | 12. Other |   |  |  |  |  |
|             | . Do you believe that the closure of TE Kolubar evitable in the years or decades ahead?         | a and c   | oal phase-out in the Kolubara mining basin is       |  |  |  |  |
| 1.          | Yes 2. No   |           | 3. I do not know                                    |  |  |  |  |
| 26          | . Explain the previous answer briefly, whether  | you an    | swered with "yes" or "no".                          |  |  |  |  |

Just transition entails a gradual, decades-long transition from fossil fuels (coal in particular) to renewable energy sources, in communities/regions whose economy and income are depend mostly on the coal industry, i.e., the lignite mine and the thermal-energy industry, for which it is primarily intended (e.g., Kolubara district). Just transition takes into consideration and places particular attention to the interests of each individual affected by the transition, for the purposes of a timely and optimal planning of processes and activities that would ensure job preservation (e.g., retraining, reskilling, upskilling), the development of other industries in the community/region, and the preservation of the economic and personal prosperity of every individual.

## 27. In view of the above, who do you believe should contribute the most in promoting activities that would lead to a better understanding of Energy Transition and Just Transition in the municipality of Lazarevac? (multiple answers possible)

- 1. Local authorities and institutions
- 2. Non-governmental organisations
- 3. Local environmental organisations and associations
- 4. Local and regional development agencies
- 5. Business associations (e.g., chambers of commerce)
- 6. Banks and insurance companies
- 7. Trade unions
- 8. Church (religious institutions)
- 9. Ministry of Mining and Energy/Government of the Republic of Serbia
- 10. Ministry of Environmental protection/ Government of the Republic of Serbia

- 11. Public utility companies
- 12. Companies in the energy sector that use fossil fuels (coal)
- 13. Companies in the energy sector (renewable energy sources)
- 14. Schools, colleges and other educational institutions
- 15. Healthcare institutions and health workers
- 16. Centres for social work and other social protection institutions
- 17. I do not know
- 18. Other\_\_\_\_\_

## 28. Who do you believe should be the main agent for planning and implementation of Just Transition in the municipality of Lazarevac? (multiple answers possible)

- 1. Local government
- 2. Electric Power Industry of Serbia (EPS)
- 3. Trade unions
- 4. Government of Serbia
- Regional Development Agency of the City of Belgrade
- 6. Banks and other financial institutions
- 7. Chamber of Commerce and other business associations

- 8. Renewable energy investors
- 9. Local and national civil society organisations
- 10. Media
- 11. International development partners
- 12. Educational institutions
- 13. I do not know
- 14. Other\_\_\_\_\_

#### 29. Indicate the extent to which you agree with the following statements:

#### (1-Strongly disagree, 2-Disagree, 3-Neither agree nor Disagree 4-Agree, 5-Strongly Agree)

| Statement   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| a) The European Union should be the primary agent for the planning and implementation of Just Transition in coal-impacted regions, such as the Kolubara district and the municipality of Lazarevac. |   | 2 | 3 | 4 | 5 |
| b) The European Union should take initiative to better inform residents about the process of Just Transition in coal-impacted regions.  | 1 | 2 | 3 | 4 | 5 |
| c) The European Union should not be advising non-member states (such as Serbia) on how and when to manage fossil fuels, including on the transition to renewable energy sources.                    | 1 | 2 | 3 | 4 | 5 |
| d) The European Union itself is not implementing specific measures related to Energy and Just Transition and is not in a position to demand from non-member states to address these issues.         | 1 | 2 | 3 | 4 | 5 |
| e) When it comes to creating and implementing a Just Transition, it is desirable to be guided by the EU member states' knowledge and experience.  | 1 | 2 | 3 | 4 | 5 |
| f) The European Union should monitor more closely how the funds earmarked for Just Transition in Serbia are spent.  | 1 | 2 | 3 | 4 | 5 |
| g) The European Union should leave the process of planning and implementing Just Transition to each individual country.   | 1 | 2 | 3 | 4 | 5 |

## 30. What do you consider to be the most significant challenges/problems for implementing Just Transition in the municipality of Lazarevac? (multiple answers possible)

| individual in the informerpotity of a | -ozorevoer (mottipie onswers | Possible |
|---------------------------------------|------------------------------|----------|
|                                       |                              |          |
|                                       |                              |          |

- 1. Non-compliance with existing regulations
- 2. Missing regulations
- 3. Lack of capabilities
- 4. Lack of political will
- 5. Lack of knowledge
- 6. Lack of trust in bodies and institutions that plan and implement the Just Transition
- 7. Socio-economic consequences of abandoning fossil fuels (coal)

- 8. Insufficiently informed residents
- 9. Insufficiently interested residents
- 10. Insufficient involvement of residents in the decision-making process
- 11. Corruption
- 12. Inefficient incentive system for alternative (renewable) energy sources
- 13. I do not know
- 14. Other\_\_\_\_\_

## 31. Which do you consider as the renewable energy source with the most significant potential for the municipality of Lazarevac when it comes to alternative energy sources? (multiple answers possible)

- 1. Gas
- 2. Biomass
- 3. Solar energy
- 4. Nuclear energy

- 5. Wind Energy
- 6. Hydropower
- 7. I do not know
- 8. Other\_\_\_\_\_

|    | . Which economic sector, ot eatest potential in the munici     |           | •                            | rs, do you consider as having the ers possible) |  |  |  |
|----|--|-----------|------------------------------|---|--|--|--|
| 1. | Manufacturing industry   | 8. Co     | nstruction                   | 15. Textile industry                            |  |  |  |
| 2. | Beekeeping and fishing   | 9. Ex     | ploitation of mineral waters | 16. I do not know                               |  |  |  |
| 3. | 3. Agriculture 10. Food industry 17. Other                     |           |                              |   |  |  |  |
| 4. | . Forest and wood industry 11. Wholesale and retail trade      |           |                              |   |  |  |  |
| 5. | Fruit farming  | 12. Re    | al estate business           |   |  |  |  |
| 6. | Livestock farming  | 13. Tra   | ensportation and storage     |   |  |  |  |
| 7. | Tourism  | 14. Se    | rvices                       |   |  |  |  |
|    | . Describe in one sentence ho<br>d residents) if/when the mini | •         |                              | re" (including the local community              |  |  |  |
|    | NERAL QUESTIONS  Gender: 1) Female                             | 2) Ma     | le                           |   |  |  |  |
| 2. | Age: (exact num  | ber)      |                              |   |  |  |  |
| 3. | Place of residence:  | (full na  | me)                          |   |  |  |  |
| 4. | Education:   |           |                              |   |  |  |  |
| 1) | Elementary school or lower                                     |           | 4) Pupil or stud             | dent  |  |  |  |
| 2) | II- and III-degree high school                                 |           | 5) University o              | 5) University or college                        |  |  |  |
| 3) | Four-year high school  |           | 6) Postgraduat               | 6) Postgraduate studies (master, doctorate)     |  |  |  |
| 5. | Employment:  |           |                              |   |  |  |  |
|    | Executive (director), public of                                | ficial or | 9) Military                  |   |  |  |  |
| le | gislator   |           | 10) Miner                    | 10) Miner                                       |  |  |  |
| 2) | Artisan or artist  |           | 11) Pensioner                | 11) Pensioner                                   |  |  |  |
| 3) | Engineer, tradesman or techn                                   | ician     | 12) Unemploy                 | 12) Unemployed                                  |  |  |  |
| 4) | Civil servant  |           | 13) Does not v               | 13) Does not work or search for employment due  |  |  |  |

to health condition

15) Other\_\_\_\_\_

14) Student

5) Service and trade occupations

6) Agriculture, forestry, fishermen

8) Machine and plant operator, fitter or driver

7) Craftsman

| 6. If you were not born in Lazarevac, from which country/city/municipality are you originally?          |  |  |  |  |
|---|--|--|--|--|
| 7. If you belong to the category of residents who n<br>Lazarevac? (enter the exact or approximate numbe | •  |  |  |  |
| 8. If you belong to the category of residents who move?   | noved to Lazarevac, what were the reasons for your             |  |  |  |
| 1) Employment   | 5) The search for a better standard of living                  |  |  |  |
| 2) Marriage   | 6) Proximity of Belgrade                                       |  |  |  |
| 3) Refugee  | 7) Other   |  |  |  |
| 4) Relocation due to expansion of surface mines   |  |  |  |  |
| 9. To which of the following categories does your h   | ousehold belong?   |  |  |  |
| 1) (Un)Married couple without children  | 5) Single household  |  |  |  |
| 2) (Un)Married couple with minors   | 6) Single parent   |  |  |  |
| 3) (Un)Married couple with both minors and adult children   | 7) Multigenerational family (parents, children, grandchildren) |  |  |  |
| 4) (Un)Married couple with adult children   | 8) Other   |  |  |  |
| 10. What is the average monthly income of your ho   | usehold? RSD   |  |  |  |

Thank you for your valuable input!

Thank you for participating in the survey on the activities and attitudes of the Civil Society Organisations (CSOs) in the Republic of Serbia regarding just transition from fossil fuels, coal in particular, to renewable energy sources and energy efficiency (energy transition).

This questionnaire was compiled in order to gain a better understanding of 1) the current level of knowledge and understanding of the concepts of just transition and energy transition among the CSOs active in the areas of environmental protection and sustainable development; 2) attitudes towards just transition and the expectations of the respondents regarding the changes that this transition brings, especially in local communities/regions whose economy and income depend mainly on the coal industry (i.e. the lignite mines and the thermal energy sector for which it is primarily intended)

This questionnaire is part of a broader study conducted for the Climate Action Network (CAN) Europe. CAN Europe is a European network of civil society organisations that brings together over 170 members from 38 European countries to promote sustainable climate, energy and development policies.

The data collected through this questionnaire are anonymous and will be used exclusively for the purposes of cumulative analysis, i.e. presentation in the summary report on the conducted research.

If you have any technical problems, questions, or other difficulties with the questionnaire, please contact the head of the research, Maja Pupovac, at the e-mail address above.

#### INFORMATION ABOUT ORGANISATION

| 1. | Organisation |
|----|--------------|
|    | name         |

- 2. Organisation location (municipality)
- 3. Number of employees (including full-time and part-time employees)
- 4. Please indicate the sources of funding for your organisation (multiple answers possible)
- 1. Membership fees
- 2. Individual donations from individuals and/or legal entities
- 3. Local self-government budget
- 4. National funds

- 5. International organisations
- 6. Foreign donations (bilateral development assistance)
- 7. Other\_\_\_\_\_

5. If your organisation has a statement of mission, vision, or values, list them here:

#### AREA OF ACTIVITY OF ORGANISATION

- 6. Indicate the fields in which your organisation is primarily active: (multiple answers possible)
- Financing in the fields of environment and climate change
- 2. Horizontal legislation
- 3. Air quality
- 4. Waste management
- 5. Water quality
- 6. Protection of nature

- 7. Chemicals management
- 8. Noise
- 9. Climate change
- 10. Energy
- 11. Forestry
- 12. Other\_\_\_\_\_

| 7. The focus of your activities: (multiple answers  | s possible)  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| 1. Conducting research and analysis   | 5. Civic activism  |  |  |  |  |  |  |  |
| 2. Formulation and advocacy of public policies  | 6. Providing information and raising public                                |  |  |  |  |  |  |  |
| 3. Participation in the implementation of public  |  |  |  |  |  |  |  |  |
| policies  | 7. Other   |  |  |  |  |  |  |  |
| 4. Monitoring and evaluation  |  |  |  |  |  |  |  |  |
| 8. Duration of activity/experience of your organisation in the areas of your focus:   |  |  |  |  |  |  |  |  |
| 1. 0-3 years 2. 3-10 year   | rs 3. Over ten years   |  |  |  |  |  |  |  |
| 9. List the municipalities in which your organisa   | tion currently operates and/or provides services:                          |  |  |  |  |  |  |  |
| ATTITUDES  10. How would you rate awareness of the importance of environmental protection, of the inhabitants of the city/municipality/village where you operate?   |  |  |  |  |  |  |  |  |
| 1 – very low 2 – low 3 – average  | 4 – high 5 – very high   |  |  |  |  |  |  |  |
| in particular, to renewable energy sources and municipality/village where you operate?  1 - very weak 2 - weak 3 - average  | d energy efficiency), of the inhabitants of the city/  4-good  5-very good |  |  |  |  |  |  |  |
| 12. How would you rate your knowledge about e   |  |  |  |  |  |  |  |  |
| 1 – very weak 2 – weak 3 – average  | 4 – good 5 – very good   |  |  |  |  |  |  |  |
| 13. How would you rate awareness of the importance of just transition (that leaves no one without employment and growth prospects, in a future without fossil fuels) of the inhabitants of the city/municipality/village where you operate? |  |  |  |  |  |  |  |  |
| 1 – very low 2 – low 3 – average  | 4 – high 5 – very high   |  |  |  |  |  |  |  |
| 14. Has your organisation participated in joint activities with partner organisations (other CSOs, companies, local and national authorities and institutions) focusing on energy and/or just transition issues?                            |  |  |  |  |  |  |  |  |
| 1. Yes  | 2. No  |  |  |  |  |  |  |  |
| 15. How do you get information about current possible)  | t socio-political issues in Serbia? (multiple answers                      |  |  |  |  |  |  |  |
| 1. Media with national coverage (radio, TV)   | 6. From friends, acquaintances and/or family                               |  |  |  |  |  |  |  |
| 2. Local media (radio, TV)  | members  |  |  |  |  |  |  |  |
| 3. Social media   | <ol><li>The organisation/association I am a member of</li></ol>            |  |  |  |  |  |  |  |
| <ol> <li>Print media (daily newspapers, weeklies, magazines)</li> </ol>   | 8. I do not know   |  |  |  |  |  |  |  |
| 5. Internet portals   | 9. Other   |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |

| 16  | What do you consider to be the r                            | most significant ch | halla  | anges to energy transition in Serbia? (multiple                  |  |
|---|---|---------------------|--|--|--|
| 16. What do you consider to be the most significant challenges to energy transition in Serbia? (multiple answers possible)  |   |                     |  |  |  |
| 1.  | Non-compliance with existing re                             | gulations           | 7.   | Insufficiently informed residents                                |  |
| 2.  | Lack of regulations   |                     | 8.   | Non-transparent decision-making process                          |  |
| 3.  | Lack of capacities  |                     | 9.   | Inadequate legal framework for prosumers                         |  |
| 4.  | Lack of political will                                      |                     | 10.  | Corruption   |  |
| 5.  | Lack of knowledge   |                     | 11.  | Inefficient incentive system for renewable energy                |  |
| 6.  | Socio-economic consequences of fossil fuels (coal)          | of abandoning       | 12.  | Other  |  |
| 17. In the future, which partners could contribute the most to your understanding and the quality of activities promoting energy and just transition? (multiple answers possible) |   |                     |  |  |  |
| 1.  | Trade unions  |                     | 9.   | Local self-government  |  |
| 2.  | Companies in the energy sector that use fossil fuels (coal) | 10.                 | Public utility companies                                     |  |  |
|   |   | 11.                 | Local and regional development agencies                      |  |  |
| 3.  | Companies in the energy sector energy sources)              | or (renewable       | 12. Schools, universities and other educational institutions |  |  |
| 4.  | Companies (energy efficiency)                               |                     | 13. Healthcare institutions and healthc<br>workers           |  |  |
| 5.  | Business associations (e.g.,                                | chambers of         |  |  |  |
| 6.  | commerce) Banks and insurance companies                     | •                   |  | Centres for social work and other social protection institutions |  |
| 7.  | Church (religious organisations)                            |                     | 15.  | Ministry of Mining and Energy / Government                       |  |
| 8.  | Other associations / local organisations                    | civil society       | 16.  | of the Republic of Serbia Other                                  |  |
| 18. When do you believe that coal will be phased out?   |   |                     |  |  |  |
| 1.  | By 2030   | 3. By 2050          |  | 5. Other:  |  |
| 2.  | By 2040   | 4. After 2050       |  |  |  |
| 19. Do your organisation's activities include addressing issues of just transition in the municipality of   |   |                     |  |  |  |

#### f Lazarevac and/or Kolubara district?

1. Yes (go to question 19)

2. No (go to question 20)

#### **JUST TRANSITION - LAZAREVAC**

| 20. If you have conducted research related to t | tne issue of just transition in the m | unicipality of Lazarevac, |
|---|---------------------------------------|---------------------------|
| please provide details of the research below    | <i>/</i> :                            |                           |
|   |                                       |                           |
|   |                                       |                           |
|   |                                       |                           |
|   |                                       |                           |

| 21. Who do you consider to be the main stakeholders for planning just transition in the municipality of Lazarevac? |   |  |                                       |  |  |  |
|--|---|--|---------------------------------------|--|--|--|
| 1.   | Local self-government                               | 8.                                     | Investors in renewable energy sources |  |  |  |
| 2.   | Electric Power Industry of Serbia (EPS)             | 9.                                     | Local and/or national civil society   |  |  |  |
| 3.   | Unions  |  | organisations                         |  |  |  |
| 4.   | Government of Serbia                                | 10. The media                          |                                       |  |  |  |
| _  | Regional Development Agency of the City of Belgrade | 11. International development partners |                                       |  |  |  |
| 5.   |   | 12                                     | . Educational institutions            |  |  |  |
| 6.   | Banks and other financial institutions              | 13                                     | . Other:                              |  |  |  |
| 7.   | Chamber of Commerce and other business associations |  |                                       |  |  |  |
| 22. If there is anything else you would like us to know about your organisation, please list it below:             |   |  |                                       |  |  |  |

Thank you for your valuable input!