

**Action plan for policy development: Decarbonization and restructuring of the Savinjsko-šaleška coal intensive region**

Prepared by:

Energy agency of Savinjska, Šaleška and Koroška region (KSSENA)

Activity:

DeCarb Action A5.1 "Action plans joint development"



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### General information

**Project:** DeCarb - Supporting the clean energy transition of coal-intensive EU regions

**Partner organization:** KSSENA, Energy Agency of Savinjska, Šaleska and Koroška Region (Zavod Energetska agencija za Savinjsko, Šaleško in Koroško regijo)

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### Policy context:

The Action Plan aims to impact:	
Investment for Growth and Jobs program	NO
European Territorial Cooperation program	NO
Other regional development policy instrument	YES
Name of the policy instrument addressed: -Operational program for implementation of the EU cohesion policy in period from 2021 to 2027	
Additional policy instruments addressed:  - <i>Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027</i>  - <i>Program of the Climate Change Funding for the period of 2021 – 2023</i>  - <i>National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition</i>	



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## 1. INTRODUCTION

This document covers the DeCarb activity A5.1 - Joint Development of Action Plans, to be implemented in semester 6 of the DeCarb project. The action plan certainly represents the main output as the most significant action method of the DeCarb project, with which the project partners will try to influence the development and implementation of legislative documentation or policy instruments directly related to the restructuring of the coal intensive regions. Coal exits differ in each individual region (due to different social, economic, environmental, geographic, and climate conditions), so the individual aspect of each region's fair transition is certainly important. Even though, many good examples of the coal-exit practices are known throughout the world, there are certainly more practices known by being associated with misery, structural unemployment, poverty, degradation of large areas, and so on. Therefore, it is necessary to be well prepared and to achieve a just transition both for the region and the country. Every coal-intensive region should be allowed a safe, efficient, and a perfectly just transition. Thus, are the political instruments that influence the restructuring of individual regions so very important. Implementing the DeCarb project results along with the action plan results is expected to bring the improvements to regional, state, and international (indirectly in the monitoring phase) development policies. Through the implementation of the action plan, expert analysis, social dialogue, and discussions, the DeCarb consortium will try to include project propositions, suggestions, comments, and disagreements in different policy instruments.

The following action plan describes the actions used and implemented by KSSENA, with the help of its stakeholders in ensuring the regional just transition. It also describes lessons that were learnt throughout the implementation of the DeCarb project, findings and understandings at the stakeholder meetings and public opinion achieved and noted on the discussions of the events. The action plan was developed based on the *Joint methodology of the preparation of the Action plans*, which was developed by the DeCarb project partner Lodzkie Region in November 2020. The original policy instrument to which this action plan should refer was the *Operational Program for the implementation of the EU Cohesion Policy from the period of 2014 to 2020*. Due to the program's validity expiration (and parallelly the prolongment of the program's validity duration due to the underspending related to the COVID-19 epidemic measures), the action plan now covers other important policy instruments (listed in the policy context of the general information of this document) and additionally also a new *Operational Program for the implementation of the EU Cohesion Policy from the period of 2021 to 2027*. This action plan was developed by KSSENA's employees, working on the DeCarb project in May 2021.

## 2. ABOUT THE DECARB PROJECT

The low-carbon energy shift of EU economies will have a profound economic & social impact on regions extensively involved in coal value chains. It is however acknowledged that this transition needs to be fair and just. To this end, project DeCarb will support public authorities to initiate efforts, join forces and exchange experiences to identify growth strategies, to mitigate the impact of decarbonisation, to make the most of EU funds & financing tools, and to promote public dialogue on conflicting interests. Regional action plans, that will improve the addressed policy instruments, benefiting managing authorities & beneficiaries present the main output or the most significant work activity of the project partners. Implementing the DeCarb project results is expected to bring the improvements to regional development policies. The DeCarb project represents not only the development and implementation of an action plan and other activities, but also monitoring activities that will be carried out in the PHASE II of the project. Through the implementation of the monitoring activities, the partner projects will ensure that all the activities described in the action plan are also implemented or being implemented, if they have not already been before the development of the regional action plan. It will be necessary to assess the overall situation, and considering all aspects of a fair transition, not just the energy one. Rate of the recognition of comments, suggestions and propositions sent to various policy makers must be evaluated. It will be necessary to present concrete results based on which the EU will be able to assess the implementation of the project. The stakeholder base, which ought to be developed and maintained, by the sustainable report as a part of the DeCarb project, shows the sustainable aspect of the project, which we will help by decarbonization of all member states in the future, and will support other nations (with coal-intensive regions), which are not part of the DeCarb project, but are surely entitled to a fair transition, by acting in the same direction.

### 3. MAIN PRIORITIES OF THE ACTION PLAN

The beginning of the industrialization of the Šaleška valley dates back to the start of the 19th century when the discovery of lignite brought business-seeking companies and skilled mining workforce to the valley. Shortly after Velenje Coal Mine started operating, the first thermal power plant was built in the immediate vicinity. After WWII, the Velenje Coal Mine began to operate at full capacity and a new industrial town of Velenje was created, to which various work seekers began to immigrate. Today, the town of Velenje is a large industrial town with a rich mining tradition. All aspects of operation and living are adapted to the mining history. The restructuring of the region will unveil major future industrial, social, economic, environmental, energy and resident policy problems, which the region will have to face. According to the research made by the local authorities, at least 5,000 jobs are currently linked to the energy transition and restructuring, which represents almost a third of the valley's working population. The action plan for this region gives priority to renewable energy sources. Many important decisions, actions and key guidelines are linked to the restructuring of the region. The most important goals are certainly, providing a social security for as many of future redundant individuals as possible, the revitalization of the deluded areas, provision of new added-value jobs, the construction of the third development axis, the promotion of entrepreneurship and the promotion of tourism related innovative ideas. The most important environmental goals, between ongoing restructuring and decarbonisation will certainly be ensuring a high percent of sustainable mobility in the region, introducing a circular and stable economy, introducing a new energy source (for hot sanitary water provision) and implementing both RES projects as well as R&D projects.

Achieving such a future in a relatively short period of time, requires many sets of goals, strategies, laws, and cooperation at the highest political and interregional level. For the purpose of restructuring, decarbonisation and a fair transition, quite a few legislative documents and political instruments have already been adopted, which in one way or another intertwine in various aspects of the restructuring process of the SAŠA region. Within the framework of this document, KSSENA has prepared an action plan in which the actions implemented by KSSENA (together with its stakeholders and within the DeCarb project) are presented and described, for the purpose of the fairest possible transition of the region. In the action plan, the actual background and implementation of the 5 most effective actions is presented. KSSENA, together with stakeholders, carried out the actions in order to achieve the best future for the region and to mitigate the negative impacts of a now already determined coal phase out.



#### 4. POLICY FRAMEWORK AND FUNDING OPPORTUNITIES

In the current cohesion period (until 2027), a sum of an approximately 12 billion EUR is earmarked for the state of the Republic of Slovenia from various European funding mechanisms. As part of the European action for recovery from the COVID-19 epidemic, 5 billion EUR was allocated to the Republic of Slovenia as part of the *Recovery and Resilience Plan*. These funds are divided into loans amounting to 3.8 billion EUR and grants amounting to 1.8 billion EUR. In addition to funds obtained directly from the mechanism of the *Recovery and Resilience Plan*, funds can currently still be drawn from the *Multiannual Financial Framework 2014 to 2020 (MFF 2014 to 2020)*, which precise allocation of funds is in the Republic of Slovenia directed by *Operational program for implementation of the EU cohesion policy in period from 2014 to 2020* and from the additional European program REACT - EU, which in order to mitigate the negative consequences of the epidemic COVID - 19, in the *MFF 2014 to 2020* releases additional funds in the amount of 385 million EUR. The drawdown period was also extended due to the large multinational underspending of these funds, in regards with the COVID - 19 epidemic.

Additional funds can also be drawn from the *Common Agricultural Policy (CAP)* mechanism worth 1.6 billion EUR. In the future, additional funds will also be available from the new *Multiannual Financial Framework in the period 2021 to 2027 (MFF 2021 to 2027)*. The allocation of funds in the new *MFF 2021 to 2027* will be precisely directed by the *Operational program for implementation of the EU cohesion policy in period from 2021 to 2027*, which is currently still being prepared by the Government Office for Development and European Cohesion Policy of Slovenia, which allocates all European funds earmarked for the state of the Republic of Slovenia in the following key areas; green transition, digital transformation, smart, sustainable and inclusive growth, and also health and social security.

The funds in the amount of 2.5 billion EUR allocated to the area of green transition are primarily provided for; maximizing the supply of renewable energy sources, efficient use of energy with an emphasis on the sustainable renovation of buildings, a clean and safe environment, sustainable mobility and circular economy with an emphasis on the efficient use of natural resources. The funds in the amount of 440 million EUR allocated to the area of digital transformation are primarily provided for the digitalisation of the public sector, public administration, and the economy.

The funds in the amount of 1.2 billion EUR allocated to the area of smart, sustainable and inclusive growth, are primarily provided for; research, development and innovation projects, boosting the national productivity, developing a friendly business environment attractive for the investors, measures for reducing the consequences of negative structural trends in the labour market, promotion and transformation of Slovenian tourism, new investments in the field of tourism infrastructure development and cultural heritage and also the strengthening of digital competences and skills required by new fields of profession. The funds in the amount of 1.5 billion EUR allocated to the area of health and social security, are primarily provided for ensuring an efficient health care system, an efficient social security system, long-term care for the population and a comprehensive approach to housing policy.

Coal-intensive SAŠA and the Zasavska region will also be able to secure funds from the *Just Transition Fund (JTF)*, which, as a specific mechanism, will be only a part of the new *Multiannual Financial Framework in the period 2021 to 2027* as a framework for outlining potential projects and investments to reduce the impact of the forthcoming decarbonisation process on the region. For this purpose, all the municipalities falling to the two regions were invited to prepare their regional plans.

Indirectly, funds for the just transition and safe economic restructuring of the SAŠA region, can be also drawn from all other mechanisms (funded by other EU programs, mechanisms, and funds), as long as they are spent on justified projects and investments, approved by the state and EU. Such funding is also represented by the DeCarb project, which will highly contribute to regional restructuring process, policy development and local transition awareness over the years of its implementation.

## 5. ADRESSED POLICY INSTRUMENTS

The distribution of cohesion funds in Slovenia is controlled by the Government Office for Development and European Cohesion Policy of Slovenia. In practice, it is directed by the *Operational program for implementation of the EU cohesion policy*, which is renewed by every cohesion period (according to MFF described in the previous chapter). The *Operational program for implementation of the EU cohesion policy in the period from 2014 to 2020* is also the main policy instrument on which this action plan and KSSENA's operation (on the DeCarb project) was primarily based, and which will now be replaced by the new *Operational program for the implementation of the EU cohesion policy in the period from 2021 to 2027*. All other state funding mechanism, which allocate cohesion funds, are primarily based on the *Operational program for the implementation of EU cohesion policy*, as is the preparation of regional plans for the *Just Transition Fund* (235 million EUR allocated for Slovenia), which will also be a part of the *Multiannual Financial Framework 2021 to 2027* and will also be directed by the new *Operational program for the implementation of the EU cohesion policy in the period from 2021 to 2027*. All the actions described in this action plan are thus directly or indirectly linked to the KSSENA's political instrument that it, as a partner in the DeCarb project, wishes to influence on. In addition to *Operational program for the implementation of the EU cohesion policy in the period from 2021 to 2027*, we have also added additional policy instruments to this action plan, due to the purpose of providing more concrete results in the PHASE II (of the DeCarb project). Additionally addressed political instruments, which will have a profound impact on the success rate of the future regional restructuring, are addressed as constructively and critically as possible, in order to ensure the fairest possible transition as it is possible by the DeCarb project's operation. Additional policy instruments addressed are *the Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027*, *Program of the Climate Change Funding for the period of 2021 – 2023* and *the National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition*.

The policy instrument: *Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027* serves to explore the status quo, weaknesses, shortcomings, challenges, threats and potentials of the SAŠA region. The program also describes the timeline and guidelines for solving the regional problems and the measures with the ways to deal with it.

The policy instrument: *Program of the Climate Change Funding for the period of 2021 to 2023* represent a crucial instrument of ensuring the reversibility of the regional funds, which are being accumulated in the *Climate Change Fund*, due to the purchase of CO<sub>2</sub> emission coupons (directly by Šoštanj Thermal Power Plant and indirectly by all local citizens and entities).

The policy instrument: *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition* will be the first legitimate government political instrument, developed for the cause of ensuring the just transition and on which, all the future legal acts will be based and will rely on.

## 6. ACTION 1 – Indication of 5 key action areas, by participating in the SAŠA region low carbon committee

### 6.1 The background and relevance to the DeCarb project

KSSENA, along with its stakeholders and representatives, mag. Iztok Mori (also president of the *committee*) and mag. Katarina Ostruh of Municipality of Velenje, Mr. Radenko Tešanović of Municipality of Ljubno, Ms. Albina Štifter of Municipality of Solčava, dr. Janez Rošer and dr. Jerneja Sedlar of Velenje Coal Mine, dr. Selma Filipančič Jenko as a representative of NVOs, Ms. Biljana Škarja of Development agency of the Savinjsko-šaleška Region, and other stakeholders (not present on the first meeting) participates in *the SAŠA region low carbon committee*. The first meeting of the *committee* was held on 17th of June 2020 and the stakeholders listed above were present. KSSENA's representatives present, were Mr. Boštjan Krajnc and Mr. Niko Natek. The *committee* emphasizes the region's key challenges, key action areas, untapped potentials, future actions, project propositions and strategic objectives on the fields of decarbonisation and regional restructuring.

In regards with the ACTION 1, KSEENA participated in the following sub-actions; the analysis of the current situation, key challenges, target stakeholders and key potentials of the SAŠA region. It also suggested some project propositions, within the *committee*.

Based on the analysis, the *Regional Development Programme of the Savinjsko-šaleška region for the period from 2021 to 2027* was introduced and developed. The region's key challenges identified by the *committee* are introduced as positive changes in the fields of energy (energy efficiency, renewable energy sources, smart energy systems and storage of local energy), adaptation and monitoring of climate change, sustainable water management, the transition to circular and low-carbon economy, urban-green infrastructure, pollution reduction, broadband connections, transport infrastructure and sustainable mobility. Each of the fields contains precisely stated shortages and untapped potentials of the SAŠA region, stated by KSEENA and other members of the *committee*.

The context of the ACTION 1 stands behind the activity A - exchange of experiences, A 1.3 (SWOT analysis to determine decarbonisation growth pathways in partner's territories) of the DeCarb project. In the first, second and third semester of the DeCarb project, project partners dealt with SWOT analysis, thus recognizing the internal strengths and the shortcomings of the region, as well as external interregional challenges and threats. After the finalization of the activity A 1.3, it was very comfortable for KSSENA employees to make suggestions for the untapped potentials of the SAŠA region, because many similar ones were recognized by KSSENA and other project partners in the implementation of the activity A 1.3, thus interregional cooperation became beneficial for providers of good examples over the consortium of partners on the DeCarb project and receivers (KSSENA, with its stakeholders), which used this transferred "know-how" at a consortium of the SAŠA region low carbon *committee*.

The energy context includes untapped potentials of hydropower (rivers Savinja, Dreta, Ljubija, Lučnica, Ljubnica, Paka, etc.), solar energy, agricultural and wood biomass, appropriate energy infrastructure and technological equipment. Many shortages are visible in the field of informing and encouraging citizens about the possibility of using funds from the ECO Fund and the Ministry of Infrastructure, for the purposes of energy renovation of facilities and implementation of RES technologies. The SAŠA region withholds a lot of energy know-how and skilled energy workforce. The region also has a strong support structure, designed for promoting innovative energy solutions. Most potentials are recognized based on sustainable use of water resources, waste management and production of alternative fuels. The region contains enough farm water, suitable fertile land and has a good ecological knowledge for food production. The region is recognizable by "all-season tourist destinations" and has a good supply chain of local organic farming. However, there are lots of untapped, unregulated and unprotected water resources. Future-abandoned coal shafts represent a great potential for waste disposal. Thermal Power Plant Šoštanj could be used for waste incineration. For instance, SKAZA company located in Municipality of Velenje, has lot of potentials (crucial know-how and several years of experience in the field of renewable plastics production) for processing the plastic waste and turning it in to reused plastic. The region has a lot of unspoiled nature, lakes, rivers, arranged mountain trails and many other natural areas and spaces. There is also a lot of potential in the field of sustainable mobility (awareness, infrastructure, grants or subsidies, hydrogen city buses, improvements on the bicycle rental system, etc.).

The activities related to the operation on the perception of this potentials, key challenges and consequently action areas, made by KSSENA within the *committee*, were initiated in order to influence the development of the *Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027* and its evolving drafts. The final version of the *Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027* was developed through comprehensive regional cooperation of the local stakeholders participating in one of the following committees; *Sustainable and smart SAŠA region committee*, *SAŠA region low carbon committee*, *Committee for the social SAŠA region*, *Committee for sustainable and integrated development of the SAŠA region* and the *Committee for the just transition of the SAŠA region*. KSSENA has had a significant impact on the development of this policy instrument's content related to the low-carbon, green and connected SAŠA region. ACTION 1, described in this chapter, has already shown very good results in the short-term context, as all project propositions proposed by KSSENA were included in the future planning, the analysis was recognized as very good, and the final version of the document also included all the untapped potentials, key challenges and key action areas proposed and developed by KSSENA. Because ACTION 1 was so focused and decisive, we can measure both the short-term results of the ACTION 1, which are immediately visible, as well as the long-term results. The long-term results of ACTION 1 will be measurable in PHASE II of the DeCarb project, when the MFF from 2021 to 2027 will also enter active phase.

## 6.2 Nature of the action

KSSENA is actively participating in the SAŠA *region low carbon committee*. It represents the local authority with the elaboration of expert guidelines. KSSENA was able to suggest the 5 key action areas (which will be crucial in the future), by recognizing (with the implemented sub-actions, described below) the key challenges and untapped potentials in the fields of sustainable energy supply, low-carbon future, circular economy, and sustainable mobility. KSEENA participated in the following sub-actions; the analysis; of the current situation, on the key challenges, on the target stakeholders and on the key potentials of the SAŠA region. Within the *committee*, KSSENA also suggested some project propositions.

### **Suggested 5 key action areas:**

**I. Energy know-how and skilled energy workforce.** Due to more than a hundred-year tradition of coal mining in the Velenje Coal Mine and generation of electricity in the Šoštanj Thermal Power Plant, a lot of energy knowledge is available in the region. Skilled energy workforce, with lots of energy background and work experience, could be used and trained for new ventures and projects during and after the restructuring process of the region. Such actions could bring innovative business solutions to the region (also indirectly creating new value-added jobs), which would secure the future employment of the valley.

**II. Unused wood and agricultural biomass.** The valley is surrounded by hills and mountains rich in quality timber. Most of the region is densely forested, so it presents an excellent basis for biomass processing associated with circular economy. Due to its own unprofitability, there is still huge amount of wood biomass potential, which remains unused. Clearing the forest would also improve and beautify the tourist image of the region. In addition, the region contains large amounts of unused agricultural biomass, which is also currently unprofitable and unused.

**III. Waste management.** The region lacks a good strategic plan in the field of waste management. The old landfill already exceeds its full capacity. Future abandoned coal shafts represent a great potential for waste disposal. Shafts could be filled with waste and serve as an underground landfill. The future upgraded infrastructure of Šoštanj Thermal Power Plant could be used for different technologies of waste incineration. Plastic processing companies (e.g., SKAZA company) could be involved in the production of renewable plastic. All the actions could be integrated into an efficient and sustainable circular economy.

**IV. Sustainable water management.** The region is rich in water resources (lakes, rivers, ponds, bogs, and groundwater). With the right water management, the region could be self-sufficient sanitary water intended for household, tourist, industrial and agricultural activities.

**V. Sustainable mobility.** In the area of sustainable mobility, many household related emissions could be reduced (personal cars emissions). Electric vehicles (especially cars and bicycles) present a new trend, which urgently needs a suitable infrastructure and local support in the ways of charging, storage, and establishment of a sustainable traffic system.

### 6.3 Stakeholders involved

The following stakeholders involved in the action are the *Committee* members, which elaborated by the development of the strategic plan, regarding indication of 5 key action areas.

**Municipality of Solčava** - As a local administrative and executive authority and a stakeholder in the committee, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

**Municipality of Ljubno** - As a local administrative and executive authority and a stakeholder in the committee, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

**City Municipality of Velenje** – It represent the leading stakeholder in the committee. As a local administrative and executive authority and a stakeholder in the committee, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development. It is also the municipality in which the main stakeholders, representatives of the coal industry and other legal entities of the committee are based. The operation of the coal industry has a great influence on the management and decision-making directions of municipal public administration, because it takes place on a large area of the local municipality, therefore a common language on the municipal level is necessary and critical, when considering decarbonisation and restructuring of the local region.

**KSSENA, Energy Agency of Savinjska, Saleška and Koroška Region** - KSSENA, as a local energy agency provides expert advice in the field of energy and the RES future. It possesses the know-how necessary to implement the proposed measures and actions. As a partner in the DeCarb project, it systematically deals with outlining the direction of decarbonisation and restructuring the region.

**Velenje Coal Mine** - In the committee it represents a company with a coal production or almost the entire coal industry based in the municipality of Velenje. With its own excavation method and know-how, it represents expertise in the field of coal mining, storage, transport, and processing of Lignite (brown coal).

**dr. Selma Filipančič Jenko** - Appears on the committee as a representative of the non-governmental organisations.

Development agency of the Savinjsko-šaleška Region - Acts on the committee as a representative of the entrepreneurial profession. It operates in the context of providing new value-added jobs and better business conditions in the area.

**Other stakeholders whose operation is influenced by the development of the strategic plan and whose interest has been equally represented or considered in the *committee* and which have not yet been fully actively involved in the development of the regional development plan**

Municipality of Luče - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Municipality of Gornji Grad - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Municipality of Nazarje - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Municipality of Rečica ob Savinji - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Municipality of Mozirje - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Municipality of Šmartno ob Paki - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.



Municipality of Šoštanj - As a local administrative and executive authority and a stakeholder in the *committee*, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Šoštanj Thermal Power Plant - As the main provider of electricity in the region and in the Republic of Slovenia, it represents the main object related to the development of strategic plans for decarbonisation and restructuring of the region, which are directly related to the operation of the power plant. It represents an important stakeholder. Most Slovenian emissions are related to the combustion of coal in the Šoštanj Thermal Power plant, which is therefore also the largest buyer of CO<sub>2</sub> emission coupons and the main buyer of lignite provided by Velenje Coal Mine.

Public Utility Company Velenje - It supplies residents and industry in the municipality of Velenje, the municipality of Šoštanj and the municipality of Šmartno ob Paki with various energy sources. As the main provider of district heating (Heating with water that cogenerates, when electricity is generated in Šoštanj Thermal Power Plant), hot and sanitary water supply, natural gas through the gas network and other communal goods, it represents a very important stakeholder, when considering the future decarbonisation and restructuring of the region.

Holding of the Slovenian Power Plant (HSE) - As the parent company of the Velenje Coal Mine and the Šoštanj Thermal Power Plant, it is both a major energy provider and a very important stakeholder.

## 6.4 Timeframe

The *committee* first gathered on the 17<sup>th</sup> of June 2020, when the first meeting was called, and the *committee* immediately began to work. The action started on the 17<sup>th</sup> of June 2020 (at the first meeting) and was concluded towards the end of the 2020, when the conclusions on the internal briefings were drawn up. Although the action, in which KSSENA listed 5 key areas, has already been completed in 2020, there is still a part of the action ongoing, because the *committee* is still meeting and it will be meeting in the future as well, until the common regional “low carbon goals” of the region are achieved.

## 6.5 Costs

KSSENA’s costs (with VAT already included) already incurred by the participation on the conferences and work done by implementing the activities of the ACTION 1 can be rounded as:

- gross hourly rate (23,7 EUR) of the work done for the cause
- travel costs (gross; 0,38 EUR /km), that incurred while investigating, participating, etc.
- other cost (roughly estimated) incurred while actively working for the cause (direct costs of internal briefings and other related costs, costs of the investigation process, costs related to outsourcing and data processing, costs of other equipment, small inventory costs etc.)

There were two employees working on the cause full-time, for 14 days. Estimated KSSENA’s costs on the ACTION 1 were approximately 7483,00 (including VAT).

The costs will continue to be incurred in the future, until the end of the project, because ACTION 1 is not yet fully completed. The costs of other stakeholders and participants of the committees involved in ACTION 1 are N/A.

## 6.6 Funding sources

The meetings of the *committees* in charge of the development of the *Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027* are financed by the Development agency of the Savinjsko-šaleška Region, which as a public institution, finances both, physical and virtual meetings and all costs related to the meetings (as are for instance; rental of business conference facilities, snacks, drinks, equipment, small inventory, outsourced activities, hired personnel etc.), as well as the activities for the development of the document of the Regional Development Program of the Savinjsko-šaleška region for the period from 2021 to 2027 and all the other costs related the operation of the development. Thus, only the work (inputted by the participating entities) and the travel costs, which are related to the individual tasks (made for the cause of analysing and developing the context up on to which, the development of the program is based) were and are self-financed by the entities participating in one of the five *committees*.

## **7. ACTION 2 - Formulation of suggestions for the improvements on the Program Proposition for the use of the Climate Change Fund in the period 2021 – 2023**

### **7.1 The background and relevance to the DeCarb project**

ACTION 2 represents an important operation, which has been done by KSSENA (with its stakeholders) directly for the cause of ensuring the just transition for the region. The key goal of the DeCarb project is to constructively (with a well-developed action plan) effect the development of the political instruments, which legally address the areas of the decarbonisation and restructuring, and that is what the ACTION 2 is basically about. It was developed through the interregional learning from the polish DeCarb partners, Lodzkie Region. In the beginning of the DeCarb project, when the project activities were based on studies, good practices and analyses, the Polish partners presented the strategy of Poland's coal phase out. Poland is not yet paying for CO<sub>2</sub> emission coupon. Thus, the operation of the Polish energy system is still economically viable and solvent. Poland also agreed to phase out coal all coal mines only in 2049. It is different in our country, where the CO<sub>2</sub> emissions are being paid annually. The operation of the Šoštanj Thermal Power Plant is gradually becoming insolvent, economically unstable, and pointless, due to the rapid increase of prices in the CO<sub>2</sub> emission coupons market. Even more devastating for SAŠA region, however, is the non-refundability of CO<sub>2</sub> emission coupons from the *Climate Change Fund*. ACTION 2 was carried for that purpose, to improve the refundability model for the use of the *Climate Change Fund*, and to influence on the distribution of the funds, directed by the *Program of the Climate Change Funding for the period of 2021 - 2023*.

In the new *Program Proposition of the Climate Change Funding for the period of 2021 - 2023*, 17 million EUR less funding was intended for co-financing of NGOs and 5.4 million EUR less funding was intended for co-financing LIFE projects. The shortage of funds was also visible in the field of international climate projects, for which 7.5 million EUR less funding was intended. There was also 11 million EUR less funding intended for sustainable construction with wood. On the other hand, in the new *Program Proposition*, substantial funds were provided for the areas of emission reductions, energy efficiency of transport and supporting the transition to a circular, low-carbon and climate economy, but it lacked clarity regarding the planned allocation (for instance by the regions or municipalities) of resources in the areas itself. Given that we are talking about a very important energy field (supporting the transition to a circular, low-carbon and climate economy), the funding was described in too general terms and the funding of the specific industries was not specified and not regionalized. There ere some substantial funds provided for the field of energy renovation of public buildings, in the amount of 2 million EUR, which is very reasonable (although it could be even more substantial – judging by EU guidelines).

Overall, we have felt a serious lack of funding in the fields of the construction of infrastructure for alternative fuels and the purchase of alternative fuel vehicles (10,2 million EUR less funding), financial promotion of sustainable mobility for companies (3.8 million EUR less funding) and in the fields of new passenger transport vehicles

purchase and passenger transport implementation (12 million EUR less funding). The ineligibility of the value added tax cost, proposed in new *Program Proposition* represented a high barrier for projects with a high initial investment. It does, at the same time significantly reduce the amount of co-financing and it is only a poorly disguised shortage. There were also shortages of regional or local funding support schemes, through which local energy agencies could be funded, although they are significantly important when it comes to the areas of sustainable energy use, emission reduction, sustainable mobility, etc. Funding of local energy agencies should have been considered in the new *Program Proposition*. Adding a co-financing item to the *Program Proposition* for the procuRE project as a pilot project for the validation of energy self-sufficient public buildings technologies, should have also been considered.

## 7.2 Nature of the action

The *Program of the Climate Change Funding for the period of 2020 - 2023*, which was at the time officially published in the *Official Gazette of the Republic of Slovenia*, was expected to be replaced by the new *Program Proposition of the Climate Change Funding for the period of 2021 – 2023*, which was under review at the time and was expected to be published by the end of the year. For the fair use of funds, during the exchange of programs, KSSENA has planned an overview of changes in spending the state funds and filed out an audit (which was virtually sent to the government), with which the main state decision-makers could have divert funds from less important areas to the areas more significant for the safe transition and the decarbonisation of the SAŠA coal region.

**Suggestions for the improvements (comments) on the *Program Proposition for the use of the Climate Change Fund in the period 2021 – 2023*, that were presented are described in the following measures:**

**I. To increase** funding for the implementation of measures related to the promotion of sustainable mobility and in particular "Encouraging the construction of infrastructure for alternative fuels and the purchase of alternative fuel vehicles"

**Explanation:** 10,2 million EUR less funds available in the *Program Proposition*

**II. To increase** funding for the implementation for the measure "Financial incentives for company investments in sustainable mobility"

**Explanation:** 3,84 million EUR less funds available in the *Program Proposition*

**III. To reduce** criteria for the measure energy revitalization of public buildings and elimination of ineligibility of VAT tax or raising the share for co-financing investment demanding projects (up to 100%), with the purpose of practical co-financing of VAT.

**Explanation:** The ineligibility of the VAT cost is a high barrier for projects with a high initial investment.

**IV. Adding a new measure to the *Program Proposition*, regarding the co-financing of reuse centres.**

**Explanation:** There are quite a few recycling and reuse centres in Slovenia, which should be properly funded by the state.

**V. Adding a new measure to the *Program Proposition*, regarding the co-financing of local energy agencies and for co-financing projects funded by different EU programs (Horizon2020, Life, etc.)**

**Explanation:** E.g. – Co-financing the procuRE project (Pre-commercial Procurement of Breakthrough Solutions for 100% Renewable Energy Supply in Buildings) as a pilot project to validate energy self-sufficient public building technologies. Providing substantial funding due to the highest level of importance of the project, regarding the national fight against climate change and due to a unique opportunity of gaining experiences and crucial know-how.

**VI. Adding a new measure to the *Program Proposition*, regarding the transition to a green economy in the Šaleška valley.**

**Explanation:** The region is facing the challenges of restructuring and decarbonisation, while contributing the most to the *Climate Fund* (CO<sub>2</sub> emission coupons), so it would be fair to encourage the transition to a green economy, focusing on promoting research and innovation in the low-carbon technologies, new energy sources, incentives for demonstration projects and investments in the green economy.

**VII. Adding a new measure to the *Program Proposition*, regarding modernization and restoration of the Celje - Velenje railway system.**

**Explanation:** The valley should be more competitive, compared to the road transport (freight and passenger transport) and it would be necessary to merge regional railway system with Maribor railway, thus reducing the pressure on the Ljubljana highway bypass, which would reduce the carbon footprint of the road traffic.

**VIII. To redefine funding for the measure “Purchases of new, environmentally friendly municipal utility vehicles”**

**Explanation:** Municipalities that do not have a valid decree on such purchases, should also be included in the measure.

**IX. To redefine funding for the measure “Replacements of the old heating appliances with new ones”**

**Explanation:** Funds should be available for all municipalities, including those where a decree on air quality has not been adopted. For example, redevelopment should also take place in rural areas of municipalities, air quality should be constant, and it should improve.

**X. To reactivate** the measure “Construction of cycling infrastructure”.

**Explanation:** In the new *Program Proposition*, funds are not intended for the construction of cycling infrastructure in general. Funds are allocated only to the areas with pre-planned construction of the cycling system. Funds should be reactivated, due to sustainable aspect of the measure. Such measures increase the level of regional sustainable mobility and should be unconditionally accessible and active to all municipalities.

**XI. To redefine** funding for the measure “Decarbonisation, greenhouse gas emissions, waste management”

**Explanation:** This measure should also include various innovation projects in the field of mono-incineration, not only in the field of sludge processing.

**XII. To redefine** funding for the measure “Decarbonisation, greenhouse gas emissions and economy measures”

**Explanation:** Indirect Cost Criterion should be redefined, due to the cost of CO<sub>2</sub> emission coupons. If we take a closer look, the production price of thermal energy at Šoštanj Thermal Power Plant is regularly burdened due to the high cost of CO<sub>2</sub> emission coupons. It is planned to finance compensation to cover indirect costs. Municipalities take part of the cost burden by subsidizing heat prices to end users. If there were no costs for CO<sub>2</sub> emission coupons to produce thermal energy, there would be no subsidies. SAŠA region should be funded primarily.

**XIII. To redefine** funding for the measure “Energy efficiency and Industry”

**Explanation:** If the implementation of energy efficiency measures in buildings, electricity efficiency measures, waste heat use and increased use of renewable energy sources is co-financed, financing of modernization of distribution systems (complete reorganization of pipelines, renovation of thermal insulation, use of new technologies in pipeline systems etc.) should also be considered.

**XIV. To redefine** funding for the measure “Energy efficiency of buildings”

**Explanation:** Only state and municipal buildings are eligible. Buildings that are not owned by the state or local government, but are owned by public companies, should be eligible for funding in this segment.

### 7.3 Stakeholders involved

City Municipality of Velenje – As a local administrative and executive authority and an important stakeholder, it represents the interests of its citizens and local legal entities. Due to its own regional interests of restructuring the coal region and decarbonisation of the area, it has jointly formulated new propositions for the use of funds in *the Program Proposition of the Climate Change Funding for the period of 2021 – 2023*.

KSSENA, Energy Agency of Savinjska, Saleška and Koroška Region – Was in charge of a complete review of the changes to the new *Program Proposition* in relation to the already accepted 2020-2023 climate change fund program published in the Official Gazette of the Republic of Slovenia. Together with stakeholders, it provided new guidelines and propositions for the use of funds in the new *Program Proposition* for the use of the Climate Change Fund in the period 2021 – 2023.

**Other stakeholders whose interest was also represented in the formulation of suggestions for the improvements on the Program Proposition of the Climate Change Funding for the period of 2021 – 2023, and whose operation depended on changes to the new Program Proposition**

Public Utility Company Velenje - It supplies residents and industry in the municipality of Velenje, the municipality of Šoštanj and the municipality of Šmartno ob Paki with various energy sources. As the main provider of district heating (Heating with water that cogenerates, when electricity is generated in Šoštanj Thermal Power Plant), hot and sanitary water supply, natural gas through the gas network and other communal goods, it represents a very important stakeholder, when considering the future decarbonisation and restructuring of the region.

Šoštanj Thermal Power Plant - As the main provider of electricity in the region and in the Republic of Slovenia, it represents the main object related to the development of strategic plans for decarbonisation and restructuring of the region, which are directly related to the operation of the power plant. It represents an important stakeholder. Most Slovenian emissions are related to the combustion of coal in the Šoštanj Thermal Power plant, which is therefore also the largest buyer of CO<sub>2</sub> emission coupons and the main buyer of lignite provided by Velenje Coal Mine.

Velenje Coal Mine - As a company that supplies the Šoštanj thermal power plant with coal, it represents a production part of the Šaleška coal industry and an important stakeholder.

Municipality of Šoštanj - As a local administrative and executive authority and a stakeholder, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for local development.

Holding of the Slovenian Power Plant (HSE) - As the parent company of the Velenje Coal Mine and the Šoštanj Thermal Power Plant, it is both a major energy provider and a very important stakeholder.

#### **7.4 Timeframe**

The ACTION 2 started within the beginning of the February 2021, when the *Program Proposition of the Climate Change Funding for the period of 2021 – 2023* was first introduced and presented in public. An extensive operation of KSENA and its stakeholders (on the ACTION 2) began on the 13<sup>th</sup> of February. The ACTION 2 was concluded on the 25<sup>th</sup> of June, when the new *the Program of the Climate Change Funding for the period of 2021 – 2023* was adopted at the 83. regular government session.

#### **7.5 Costs**

The costs of the ACTION 2 originated directly from the preparation for the public consultation process (costs of the gross hourly rate - 23,7 EUR, of the work done for the cause).

Estimated KSENA's costs on the ACTION 2 were approximately 5308,00 EUR (including VAT). The costs of the City Municipality of Velenje, were very similar. The costs of the entire action were somewhere around 10.000,00 EUR.

#### **7.6 Funding sources**

The work on the action was entirely carried out by the employees of both the Energy Agency of Savinjska, Šaleška and Koroška Region – KSENA and the City Municipality of Velenje, therefore it was also co-financed by both entities. It was funded from the annual budget.



## **8. ACTION 3 - Communication with the Minister of the Ministry of the Environment and Spatial Planning to implement the planned strategic measures**

### **8.1 The background and relevance to the DeCarb project**

Most funding processes of the technology investments related to the circular economy, sustainable mobility, and renewable energy sources, take place at the state level. KSSENA, as the local energy agency of the SAŠA region, represents the north-eastern industrial part of the country. Interactive and mutual (state and regional) communication is very important for ensuring as many resources and funds as possible, eligible for the local development and strong political support of various R&D projects. KSSENA negotiates and communicates with current national decision-makers in various possible ways, to ensure the maximum state support. Personal communication is very important, but sometimes difficult to implement, even more so at the time of the COVID-19 epidemic. In such times a lot of communication takes place in written forms (e-mails, open letters, memorandums etc.), through telephone calls or by online video conferencing.

The ACTION 3 was triggered by the necessity of providing the state support to our region, and due to interregional learning, by the context of the DeCarb project and Interreg Europe program. The regional opinion was heard (by the state), but rarely taken into account or even considered. During the implementation of the DeCarb project, KSSENA as a project partner discovered, that regional communication with national decision makers is poor when compared to the communication of other partners. In particular, the Danish communication model can be highlighted, where the politicians have open street offices in which all the citizens are invited to, whenever and whatever they wish to communicate. The level of political support is at a completely different level than in our country. ACTION 3 was organized and developed in this spirit, to present projects and project propositions, before the legislation of the *Operational program for implementation of the EU cohesion policy in period from 2021 to 2027* from the *MFF 2021 to 2027* even goes through and to "pre-achieve" strong and firm cooperation (between the regional and state decision makers) during the restructuring process and for the future consideration of all local aspects and project propositions. KSSENA, together with our stakeholders, implemented the sub-actions with which, the ACTION 3 - The meeting with the Minister of the Environment and Spatial Planning (to include aspects of our region in our political instruments) was triggered.

The most significant problem in SAŠA region is the non-refundability of the funds provided by CO<sub>2</sub> emission coupons, which are charged for large amounts of coal-burning emissions of the SAŠA region. Due to the largest electricity supply on the Slovenian energy market, the Šoštanj Thermal Power Plant produces the most CO<sub>2</sub> emissions (average annual purchase is around 100.000 coupons), which is why it spends more (on buying the CO<sub>2</sub> emission coupons), than any other energy related entity in Slovenia. In addition, Thermal Power Plant Šoštanj, as a stable provider, provides one third of Slovenian electricity. The funds obtained through the purchase

process of CO<sub>2</sub> emission coupons, are strategically collected in the *Climate Fund*, from which they are mainly used for the state RES investments.

Public Utility Company Velenje, as a provider of hot sanitary water, produced along with cogeneration process in Šoštanj Thermal Power Plant, also has a loss of around 4 million EUR per year, just for buying the heat, co-generated and produced by Šoštanj Thermal Power Plant. Most of these funds should be strategically relocated from *Climate Fund* to the SAŠA region. The State should return the funds in the form of numerous “low-carbon” and “restructuring” projects, which would mitigate the negative social and economic consequences of the exit from the coal age in the region, or in any other possible way.

In the SAŠA region, there is a shortage for a good waste management plan. SAŠA region, as a region with dense population, produces a lot of waste, which is exported to the neighbouring city of Celje, where it is burnt in the local waste burning plant. The waste transport is demanding and expensive. At the same time, it does not solve any sustainable issues. The Public Utility Company of Velenje, which controls waste management, faces many waste problems. The SAŠA region is in a great need of a new and its own solution for waste material, which would include waste collection, transport, and processing in an ecological and environmental way.

A great opportunity for new RES technologies in the SAŠA region is also the possibility of installing a hydrogen filling station with an auxiliary high pressure hydrogen electrolyser at the Šoštanj's Thermal Power Plant, which would initially power at least six local buses with renewable hydrogen. The new RES project of the first usable hydrogen filling station with an additional electrolyser in SAŠA region, urgently needs state financial and legal support. It can present only a small and irrelevant effort, or it could present the first large and working traffic hydrogen filling station in Slovenia.

## **8.2 Nature of the action**

KSSENA (together with its stakeholders) sent several open letters and e-mails concerning the restructuring and decarbonisation of the region to the Minister of Environment and Spatial Planning and his colleagues. Several telephone calls were also made to the Ministry of Infrastructure and the Ministry of the Environment and Spatial Planning to ensure, that the meeting will go through. The meeting with the Minister of the Environment and Spatial Planning, mag. Andrej Vizjak happened, but took place via an online video conference, because of the COVID-19 epidemic related measures.

## Consultation with the Minister of the Ministry of the Environment and Spatial Planning regarding the co-financing of decarbonisation project in the SAŠA region

Velenje, 25. February 2021 – Within the scope of the DeCarb project activities representatives of KSEENA, the Mayor of the Municipality of Velenje Peter Dermol and Director of the Municipal Administration mag. Iztok Mori gathered online via video conference with the Minister of the Environment and Spatial Planning of the Republic of Slovenia mag. Andrej Vizjak to discuss the terms regarding co-financing of decarbonisation projects in the SAŠA region and other important topics related to the restructuring of the coal intensive region. They highlighted number of topics and projects that could make a significant contribution to the development of the valley's future. The minister presented the guidelines and position of the state, including the projects that it will support and co-finance.



Figure 1: The consultation with the Minister of the Environment and Spatial Planning, Mr. Andrej Vizjak

**KSEENA and its stakeholders proposed and presented the following propositions of measures to mag. Andrej Vizjak:**

**Proposition I** – The state funds obtained through buying the CO<sub>2</sub> emission coupons, and gathered in the *Climate Fund*, should be mostly returned to the SAŠA region. The money would be mainly spent on projects working in the direction with decarbonisation and on the necessary development of the region during the restructuring process itself. (funding of new value-added jobs, new industrial zones, local entrepreneurship, local

area tourism plan, housing issues, sustainable mobility measures etc.). Mayor Peter Dermol emphasized once again that in the region, we have an increasing cost with the purchase of CO<sub>2</sub> emission coupons, which represent a great burden. We have repeatedly suggested that we should be exempted from paying the coupons or that we find a model within the *Climate Fund* that would allow funds (obtained by buying the CO<sub>2</sub> emission coupons) to be returned into the valley.

**Proposition II** – The representatives of KSENA and regional decision makers presented the great potential that the region has at the level of local waste management. They proposed greater state support from Minister Vizjak and his colleagues. The region is suitable, and the local management is interested in the new waste management plant, which would process all the recycled waste material, but urgently needs full state support, both in economic and legal terms.

**Proposition III** – The united consortium expressed a great need of full state support in installing a hydrogen filling station with an auxiliary high pressure hydrogen electrolyser at the Šoštanj Thermal Power Plant, which would initially power at least six local buses with renewable hydrogen. All the stakeholders agree and are aware, that without full state support and funding, the project is more likely difficult to be implemented.

### 8.3 Stakeholders involved

City Municipality of Velenje – As a local administrative and executive authority and an important stakeholder, it represents the interests of its citizens and local legal entities. Due to its own regional interests of restructuring the coal region and decarbonisation of the area, it has jointly (with KSENA) formulated propositions, that were suggested to mag. Andrej Vizijak.

KSENA, Energy Agency of Savinjska, Saleška and Koroška Region as a local energy agency provides expert advice in the field of energy and the RES future. It possesses the know-how necessary to implement the proposed measures and actions. As a partner in the DeCarb project, it systematically deals with outlining guidelines for the direction of decarbonisation and region restructuring. Together with the municipality of Velenje, the company provided guidelines, propositions and support measures described to mag. Andrej Vizijak.

#### Other important stakeholders

Šoštanj Thermal Power Plant - As the main provider of electricity in the region and in the Republic of Slovenia, it represents the main object related to the development of strategic plans for decarbonisation and restructuring of the region, which are directly related to the operation of the power plant. It represents an important stakeholder. Most Slovenian emissions are related to the combustion of coal in the Šoštanj Thermal Power plant, which is therefore also the largest buyer of CO<sub>2</sub> emission coupons and the main buyer of lignite provided by Velenje Coal Mine.

Velenje Coal Mine - As a company that supplies the Šoštanj thermal power plant with coal, it represents a production part of the Šaleška coal industry. As the majority owner of the tourist destinations of the valley, associated with the purchase of the land due to activity of surface subsidence in the past, the company represents an important capital owner and a stakeholder in the field of regional restructuring.

Holding of the Slovenian Power Plant (HSE) - As the parent company of the Velenje Coal Mine and the Šoštanj Thermal Power Plant, it is both a major energy provider and a very important stakeholder.

Public Utility Company Velenje - It supplies residents and industry in the municipality of Velenje, the municipality of Šoštanj and the municipality of Šmartno ob Paki with various energy sources. As the main provider of district heating (Heating with water that cogenerates, when electricity is generated in Šoštanj Thermal Power Plant), hot and sanitary water supply, natural gas through the gas network and other communal goods, it represents a very important stakeholder, when considering the future decarbonisation and restructuring of the region.

#### **8.4 Timeframe**

The ACTION 3 took place on the 25<sup>th</sup> of February 2021. However, the long-term implementation is still ongoing (until Operational program for implementation of the EU cohesion policy in period from 2021 to 2027 will be legislated). The results of the ACTION 3 will be measurable somewhere in the PHASE II of the DeCarb project, when the next state cohesion guidelines (for the multiannual financial framework in the period of 2021 to 2017) are drawn up and presented.

#### **8.5 Costs**

In addition to a very valuable and powerful action, the costs of the implementation of the ACTION 3 weren't too high. Due to severe movement-restrictive measures, related to the COVID-19 epidemic, the meeting was forced to be implemented as hybrid, so there was no travel cost. With the organization of the meeting there were some other costs (equipment, food, drinks, small inventory, other supplies etc.), which can be rounded up to 500,00 EUR. Most of the costs of the action originate directly from the preparation for the meeting (costs of the gross hourly rate - 23,7 EUR, of the work done for the cause).

Estimated KSSENA's costs on the ACTION 3 were approximately 3145,00 EUR (including VAT). The costs of the City Municipality of Velenje, were very similar. The costs of the entire action were somewhere around 6800,00 EUR.

#### **8.6 Funding sources**

The ACTION 3, was funded by KSSENA and the City Municipality of Velenje. It was funded by the annual budget.

## 9. ACTION 4 - Comments and suggestions on the National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition

### 9.1 The background and relevance to the DeCarb project

The first draft of the *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition* was developed and introduced in the October 2020, by Deloitte company (developed with its stakeholders and partners). They had presented and predefined 3 different scenarios according to which, the coal exit of the SAŠA region could be predicted. Scenario A (“ambitious” scenario) predicted exit from coal in the year of 2033, scenario B (“financially stable” scenario) in the year of 2038 and scenario C (“flexible” scenario) in the year of 2042. In the first draft of the *National strategy*, scenario B was favoured, according to which, the Velenje Coal Mine would be closed by the end of 2038 at the latest, which would allow the valley’s decision makers enough time for a good and just transition.

Due to an updated environmental report, a second draft of *National strategy* was published for public consultation process in March 2021. The Ministry of Infrastructure of the Republic of Slovenia initiated it together with an updated environmental report. The second draft developed by Deloitte foreseen 3 predefined scenarios for the phasing out of coal in the region. Scenario A (formerly known as the “ambitious” scenario, in the second draft titled the “Hospitable region”) foresees a complete phasing out of coal by 2033, while scenarios B (previously the “Financially sustainable” scenario, newly named “From coal to entrepreneurship”) and scenario C (now known as the “Harmonious” scenario) set a timeline for the closure by 2038 and 2042, respectively. The revised draft of the strategy in relation to the previous version issued in October 2020 has moved up the projected timeline for the closure of the Velenje Coal Mine to 2033 following an updated environmental report provided by the consortium of expert organisations led by the Milan Vidmar Electric Power Research Institute. The environmental impact analysis covering 20 indicators from areas related to health, environmental protection, sustainable use of resources, natural heritage and landscape indicates only one discretion between outlined scenarios - the mitigation and adaptation to climate change (Zero greenhouse gas emissions gases by 2050, coordinated by EU). Evaluations for all other 19 indicators of the comprehensive analysis are otherwise the same for all three scenarios.

Scenario A in the second draft favoured the phasing out of coal by 2033. In this way, Slovenia would have followed most ambitious EU member states that plan the coal exit by the year 2030. The scenario was at the time presented as the only one acceptable in terms of the climate change mitigation, meaning that significant impacts could occur after 2035, when Šoštanj’s Thermal Power Plant emissions should exceed the cumulative GHG limits for the period 2021-2050 and additional measures would become necessary.

After 2033, Šoštanj's Thermal Power Plant financial operations should (based on the second draft of the *National strategy*) become increasingly unsustainable due to the expected cost pressure as a result of rising prices of carbon emission allowances. The requirements for hiring new personnel in the Velenje Coal Mine are already minimized relative to the necessary capacity that still allows the proper functioning of the coal mining activities and even once the coal mine initiates the closure, several hundreds of experienced staff members will remain working on the site for several years. The biggest issue is therefore not redundant workers per se, but rather the timeline mismatch on how to carry out the shutdown so as to uphold the personnel structure that will allow for the effective and safe implementation of coal mining activities with which it will still be able to service the requirements of the Thermal power plant Šoštanj, while establishing new opportunities for younger employees that will not be able to continue their careers in coal mining activities past the closure date.

Regarding the fact that this scenario offers a 12-year window of opportunity for a comprehensive restructuring of both regions and Slovenian's energy system, it also requires the most ambitious approach towards achieving all regional development priorities. It requires well-coordinated, feasible investments in prepared development projects with great multiplication potential for facilitating the required job growth and economic restructuring within the private sector. Political support represents an essential aspect for promoting the change, but it also poses the risk for success of achieving the objectives of fair transition in a relatively short period of time.

KSSENA (together with its stakeholders and important partners) sent its comments and suggestions on the second draft (which was in public consultation process) to the Ministry of Infrastructure. The good practices used for the argumentation of the comments and suggestions in regards with the *National strategy* in public consultation process, were perceived by the Danish (House of energy) and German (Ministry for Economic Affairs and Energy, State of Brandenburg) DeCarb partners. We have learned practically (by them) that action must be taken immediately at the beginning of the restructuring process, and not after funding has already been secured. They were able to give us efficient examples of good practices, because their restructuring process has already started much earlier than ours. ACTION 4 represents an important operation, which has been done by KSSENA (with its stakeholders) directly for the cause of ensuring the just transition for the region. The key goal of the DeCarb project is to constructively (with a well-developed action plan) effect the development of the political instruments, which legally address the areas of the decarbonisation and restructuring, and that is what the ACTION 4 is basically about. Through the well thought out facts and through the correctly designed explanation (in the form of an extensive table of comments and suggestions) sent (by KSSENA and the City Municipality of Velenje together with other stakeholders) to the Ministry of Infrastructure in the process of public hearing, the local authorities will try to introduce and implement good practices (demonstrated by other interregional partners – Danish and German) to the region and indirectly contribute to the just transition of the region.

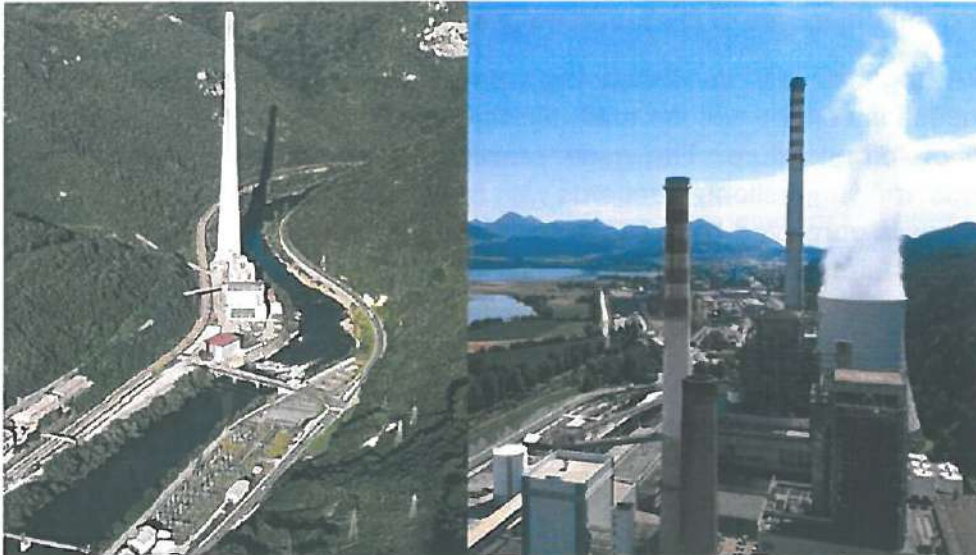
## 9.2 Nature of the action

When the public consultation process of the second draft of the *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition* began, KSENA participated in three sub-actions related to the ACTION 4 (crucial for the development of the comments and suggestions on the document), that were triggered (From the 15th of March to the 15th of April 2021) for the cause and were crucial at the time, for the public understanding of the content presented in the second draft. The ACTION 4 was implemented in the form of sub-actions presented in the next paragraph.



REPUBLIKA SLOVENIJA  
MINISTRSTVO ZA INFRASTRUKTURO

### Nacionalna strategija za izstop iz premoga in prestrukturiranje premogovnih regij v skladu z načeli pravičnega prehoda



Marec 2021

Figure 2: The second draft of the *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition*



### **Sub-action I. - Consultation with stakeholders and regional decisionmakers**

Immediately after the publication of the second draft of the *National strategy*, regional project partners and stakeholders began actively communicating. The 6<sup>th</sup> DeCarb Stakeholders meeting was convened to discuss the second draft. The meeting was chaired by KSSENA's representatives. It was crucial that all the stakeholders form a common position and opinion on the second draft of the *National strategy* before the public consultation process is completed. The meeting was very productive. Stakeholders agreed that the new draft of the *National strategy* has a significant impact on all regional strategic documents important for the valley's decarbonisation and the consortium also agreed that the timing of the coal phase out, will have a significant impact on the future decarbonisation and restructuring procedures of the region. They determined that, before considering the time of closure itself, it is necessary to first determine the measures that will ensure a just transition for the region. At the meeting, they have already begun to formulate their comments and suggestions, which were being prepared for the public consultation process, supervised by the Ministry of Infrastructure. A heated discussion followed at the end of the meeting, which included the assessment of the documentation's suitability of the updated environmental report (of consortium led by the Milan Vidmar Electric Power Research Institute) and the second draft in line with the principles of a just transition and the DeCarb project.

### **Sub-action II. – Public Relations**

News on the publication of the second draft of the *National strategy* (with an updated environmental report) aroused a great deal of public interest. The media wrote widely about the closure of the Velenje Coal Mine and Šoštanj Thermal Power Plant as early as in the year of 2033, which provoked demanding reactions in the public. Within the stakeholder consortium, KSSENA took care on the understanding and interpreting the content of the environmental report and the second draft of the *National strategy*. KSSENA provided intellectual and qualified support to all stakeholders who had the most work by appearing in public (Representatives of Šoštanj Thermal Power Plant, representatives of Velenje Coal Mine, representatives of the City Municipality of Velenje, representatives of trade union SPEES - Coal Mine Velenje etc.). Mr. mayor Peter Dermol also had a lot of work, related to appearing in public. He had to explain the position of the public administration to the media, as well as explaining the conditions of a just transition and the valley's public opinion on the 2033 closure scenario. The Finance Newspaper organized a full-day video conference in the form of a hybrid event, at which all the important players explained their views and opinion on the second draft of the *National strategy* and the environmental report. An emergency session of the Velenje City Municipality council also took place on the 13th of April 2021 (two days before the end of the public hearing process).

KSSENA, within its capabilities, informed the public through all its social network pages, website, and e-mail marketing. It informed citizens about the context of the public hearing and the content of the second draft. KSSENA's employees also had to answer numerous phone calls and emails, sent from concerned citizens.

### **Sub-action III. - Development of the internal strategy and organization of internal briefings related to the development of comments and suggestions on the second draft of the *National strategy*.**

KSSENA immediately began developing a strategy to formulate its comments and suggestions, on the second draft of the *National strategy*. All employees of the DeCarb project participated. In just one month, as many as 4 internal briefings were convened on the topic. At the last meeting, the employees combined all their suggestions and comments into a joint KSSENA's strategy (opinion), which was extensive and covered the complete document of the second draft of the *National strategy*.

#### **Proposed comments and suggestions**

A very detailed and extensive document, containing more than 40 extensive comments and suggestions on the *National strategy* was sent to the Ministry of Infrastructure. It was developed by KSSENA, together with its most important stakeholder City Municipality of Velenje. Comments and suggestions are described in the form of an extensive table. Each individual comment or a suggestion refers to an indication in the second draft of the *National strategy* and is indicated by the page and a paragraph number. At an emergency session of the Velenje City Municipality council, the invited state secretary Blaž Košorok promised to consider and acknowledge all comments and suggestions that were presented at the meeting itself and which were sent to the Ministry of Infrastructure (in regards with the public hearing). A table of comments and suggestions is kept by the curator (KSSENA, Energy Agency of Savinjska, Šaleska and Koroška Region) of this document. For the insight into the table, please contact the documents curator.

#### **9.3 Stakeholders involved**

**Municipality of Šoštanj** - As a local administrative and executive authority and a stakeholder, it represents the interests of its citizens and cooperates with its local legal entities who are in any way connected with the transition to a low-carbon region. It manages the data of its region and state funds intended for the local development.

**Public Utility Company Velenje** - It supplies residents and industry in the municipality of Velenje, the municipality of Šoštanj and the municipality of Šmartno ob Paki with various energy sources. As the main provider of district heating (Heating with water that cogenerates, when electricity is generated in Šoštanj Thermal Power Plant), hot and sanitary water supply, natural gas through the gas network and other communal goods, it represents a very important stakeholder, when considering the future decarbonisation and restructuring of the region. Currently, the main heat source distributed by the Public Utility Company Velenje is the hot sanitary water obtained from the cogeneration in the Šoštanj Thermal Power Plant, so the operation of the Public Utility Company Velenje is crucially related to the operation of the Velenje coal mine and the Šoštanj Thermal Power Plant.

KSSENA, Energy Agency of Savinjska, Saleška and Koroška Region as a local energy agency provides expert advice in the field of energy and the RES future. It possesses the know-how necessary to implement the proposed measures and actions. As a highly valued local organization and as a partner in the DeCarb project, it systematically deals with outlining guidelines for the direction of decarbonisation and region restructuring.

Šoštanj Thermal Power Plant - As the main provider of electricity in the region and in the Republic of Slovenia, it represents the main object related to the development of strategic plans for decarbonisation and restructuring of the region, which are directly related to the operation of the power plant. It represents an important stakeholder. Most Slovenian emissions are related to the combustion of coal in the Šoštanj Thermal Power plant, which is therefore also the largest buyer of CO<sub>2</sub> emission coupons and the main buyer of lignite provided by Velenje Coal Mine.

Velenje Coal Mine - As a company that supplies the Šoštanj thermal power plant with coal, it represents a production part of the Šaleška coal industry. As the only operating coal mine in Slovenia, it represents the legal entity to which the *National strategy* refers and the main closure object.

Holding of the Slovenian Power Plant (HSE) - As the parent company of the Velenje Coal Mine and the Šoštanj Thermal Power Plant, it is both a major energy provider and a very important stakeholder.

Deloitte - A company that has developed the *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition*.

#### **Other important stakeholders**

Ministry of Infrastructure – state representative

Ministry of the Environment and Spatial Planning – state representative

Milan Vidmar Electric Power Research Institute - The company responsible for developing the environmental report

SPESS - Velenje Coal Mine trade union (representatives of the workforce)

SDRESS – Trade union of Miners and Energy workers of Slovenia (representatives of the workforce)

Savinjsko-Šaleška Chamber of Commerce and Industry – Representatives of the regional economy

Development agency of the Savinjsko-šaleška Region – Representatives of the regional development programs

## 9.4 Timeframe

The activities carried out under ACTION 4 (for the purpose of ensuring a just transition of the region) were performed during a public consultation process of the second draft of the *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition*, which started on the 15<sup>th</sup> of March and lasted to the 15<sup>th</sup> of April 2020. During the public consultation process of the second draft, comments and suggestions could be published at the Ministry of Infrastructure, by any state or regional stakeholder. This was possible through the online platform E-government (slo. E-uprava). As the second draft of the *National Strategy* was published (with an updated environmental report) in March 2021, KSENA (together with all important regional stakeholders) had only a few days before the start of the public consultation process, which lasted only one month. Only suggestions and comments sent to the Ministry of Infrastructure during the process were considered, therefore the local aspect (opinion, strategy) had to be shaped and bureaucratized in just over 30 days.

## 9.5 Costs

The costs of the action are very much related to the research, communication and development of comments and suggestions. KSENA's costs (with VAT already included) incurred by the participation on the conferences and work done by implementing the activities of the ACTION 4 can be rounded as:

- gross hourly rate (23,7 EUR) of the work done for the cause
- travel costs (gross; 0,38 EUR /km), that incurred while investigating, participating, etc.
- other cost (roughly estimated) incurred while actively working for the cause (direct costs of internal briefings and other related costs, costs of the investigation process, costs related to outsourcing and data processing, costs of other equipment, small inventory costs etc.)

There were no special travel costs related to the ACTION 4 and are therefore counted as zero. There were 3 employees working (one of the employees worked full-time, and the other two only part-time) on the cause for 23 days.

Estimated KSENA's costs on the ACTION 4 were approximately 9584,00 EUR (including VAT). The costs of other stakeholders are N/A.

## 9.6 Funding sources

The ACTION 4 was funded by KSENA and its most important stakeholder the City Municipality of Velenje, which as a local administrative and executive authority, represents the most important entity, when developing the local constructive and critical aspects, which are shaped to cause changes and improvements in the documentation of the newly adopted state and EU policy instruments. Thus, the *National strategy for phasing out coal and restructuring of coal intensive regions in line with the principles of a just transition* represents a fundamental political document when it comes to the decarbonisation of the SAŠA region and consequently also the Slovenian energy system. It represents the first state political instrument developed only for the purpose of restructuring and decarbonization of the only two Slovenian coal-intensive regions left, and which will have a key impact on the development of the Act on the Gradual closure of the Velenje Coal mine and the development of the Act on the restructuring of the SAŠA region. The funds spent by KSENA and the Municipality of Velenje for the purpose of publishing comments and suggestions on the second draft of the *National strategy*, public understanding of the second draft and for development of the local aspect (on the second draft) were provided from annual budgets of both public entities mentioned. Of course, other stakeholders (Public Utility Company Velenje, Development agency of the Savinjsko-šaleška Region, Coal Mine Velenje etc.) also took part in the operation of the ACTION 4, but their share of the funding sources is pretty much negligible. The costs incurred are described in the chapter above.

## 10. CONCLUSION

As a partner of the DeCarb consortium, KSENA operated on four strategically oriented actions, which were specific, but crucial for ensuring a bright social, economic, environmental, and technological future of the SAŠA region. Although the end of the cohesion period (from 2014 to 2020) forced us to choose new policy instruments stemming from the 2014-2020 MFF, the actions indirectly influenced the chosen political instrument (*Operational program for implementation of the EU cohesion policy in period from 2021 to 2027*), from which the money derives directly or indirectly. Estimated KSENA's total costs of the actions were 25.529,00 EUR. However, if we also consider the operation of primary (The City Municipality of Velenje) and secondary stakeholders in all campaigns, the final total costs of all actions are estimated at around 60.000,00 €. The results of ACTION 1, ACTION 3 and ACTION 4 will only be measurable in the PHASE II of the DeCarb project, when the MFF from 2021 to 2027 enters the active phase, when the *National Strategy* will be supported by legislations and when the state efforts and measures for ensuring the just transition will be publicly guaranteed by the government and other national decision-makers.

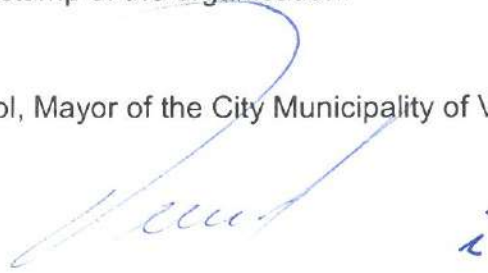
ACTION (x)	START DATE	ONGOING (related to the action's results)	COSTS (EUR)
1	17.06.2020	YES	7483,00
2	13.02.2021	NO	5308,00
3	25.02.2021	YES	3154,00
4	15.03.2021	YES	9584,00
<b>TOTAL COSTS</b>			<b>25.529,00</b>

Table 1: Total cost of the actions, funded only by KSENA

Date of the version: 9.11.2021

Signatures and stamp of the organisation:

Mr. Peter Dermol, Mayor of the City Municipality of Velenje



Mr. Boštjan Krajnc, Director of Energy Agency of Savinjska, Šaleška and Koroška Region - KSSENA



Ms. Biljana Škarja, Director of Development Agency of the Savinjsko-šaleška Region



Mr. Niko Natek, Energy Agency of Savinjska, Šaleška and Koroška Region – KSSENA



Mr. Matevž Šilc, Energy Agency of Savinjska, Šaleška and Koroška Region – KSSENA

