



4th Regional Nexus Roundtable in South-East Europe

Developing the project: Modern biomass and sustainable forest management in the Drin basin

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- Possibilities of using biomass offers great opportunities, but technical aspects and knowledge on organizing supply chains and operating biomass heating systems and quality control management are precondition for efficient use of biomass.
- Overall objective/goal of the project is to introduce energy and economy efficiency in use of wood as sustainably produced renewable source of energy and with that to impact on economy development, environment and climate well-being in the Drin River region in order to increase the capacity of local stakeholders in the Drin River basin to achieve their sustainable targets for improved livelihoods.
- Focus on two pilot regions: Debar Northern Macedonia and Niksic Montenegro

- Outcome 1: Improved quality of heating for the users attached to the new wood chips district heating plant and improved security and quality assurance for wood pellet consumers. MNE+MAC
- Outcome 2:
 - a) Elaborated and established wood chips supply chain for the public buildings heating facility in the city of Debar, based on the principles of sustainable development and MAC
 - (b) Elaborated and established wood pellet supply chain and pellet quality certification for selected pellet plants in Niksic, based on the principles of sustainable development. MNE

1. Preparation of feasibility studies for selected municipalities to assess possibilities to construct district heating system on locally produced wood biomass in Debar North Macedonia - The set of activities will set the ground for start of project implementation, by clearly defining the objects of intervention and roles and responsibilities of involved parties
2. Preparation of technical elaborates for heating facility and pipelines construction, including all necessary documentation up to the point of a construction permit, including preparation of appropriate elaborate for environmental impact of the facility in Debar North Macedonia - The set of activities will fulfill all necessary legal and technical elements for implementation of the project in North Macedonia pilot site
3. Preparation of documentation necessary for wood pellet producer sustainability and quality certification in Niksic Montenegro - The set of activities will fulfill all necessary legal and technical elements for implementation of the project in selected pilot site in Montenegro
4. Development of forest management practices for sustainable use of wood biomass for heating, including definition of needed interventions on the legislation in both countries - The set of activities will clearly address all forest management issues in practical and legal terms in both countries that directly affects sustainable production of biomass / wood chips for heating
5. Elaboration of proposals for establishment of functional value chains from the producer to the final consumers of biomass for production of energy and training for wood biomass production and quality management in both countries - The set of activities will explore the possible value chains and will give answers of the best possible model to be put in function in the selected pilot area. It will also create environment where biomass utilisation will be raised on level understandable for general public sharing the best practices and positive examples from the developed countries and pilot regions
6. Awareness raising campaign; promotional materials and organization of national and regional workshops, presenting the benefits of efficient wood biomass utilization and wood biomass quality management in both countries. This activity is oriented to decision makers to provide more support for further development of biomass utilization, as well as for the general public to become aware of benefits provided by sustainable use of biomass - The set of activities will enable conditions for establishment of biomass competence centre in one of the pilot regions

Stakeholders	Position in the future project	Roles and responsibilities
Wood pellet factories in the area of Niksic, Montenegro	Partners and beneficiaries	Participating in wood pellet production and quality certification; Participating in development of forest management practices; Participating in value chain development;
Private forest owners' associations Montenegro	Partners and beneficiaries	Participating in development of forest management practices; Participating in value chain development;
Local forest administration unit Nikšić Montenegro	Partners	Participating in development of forest management practices; Participating in value chain development;
Wood supply and processing companies Montenegro	Partners and beneficiaries	Participating in development of forest management practices; Participating in value chain development;
Municipality Nikšić Montenegro	Partner	Participating in development of forest management practices; Participating in awareness raising;
The Ministry of Agriculture, Forestry and Water Management (MAFW) Montenegro	Partner	Participating in development of forest management practices; Participating in awareness raising;
Implementing organization from Montenegro	Lead partner	All activities
Municipality of Debar North Macedonia	Partner and beneficiary	Development of feasibility studies and project documentation; participating in value chain development and participating in awareness raising.
Wood supply and processing companies North Macedonia	Partners and beneficiaries	Participating in development of forest management practices; Participating in value chain development;
Private forest owners associations North Macedonia	Partners and beneficiaries	Participating in development of forest management practices; Participating in value chain development;
Local forest administration unit Debar North Macedonia	Consider past experiences in forest biomass use and future plans	Participating in development of forest management practices; Participating in value chain development;
The Ministry of Agriculture, Forestry and Water Management (MAFW) North Macedonia	Obtain information on future timber allocation plans and plans for the reorganization of the forestry sector and what the implications will be for the utilization of timber and biomass.	Participating in development of forest management practices; Participating in awareness raising;
Implementing organization from Montenegro	Lead partner	All activities
Consultants for: forest certification, wood pellet quality certification, forest policy, biomass supply, biomass quality for both countries	Consultants	All activities

Activity	Actions
1. Preparation of feasibility studies for selected municipalities to assess possibilities to construct district heating system on locally produced wood biomass in Debar North Macedonia.	<p>1.1. Information meetings with municipal authorities and other stakeholders for elaboration of project approach, activities and expected results.</p> <p>1.2. Prepare list of facilities in municipal ownership that potentially may be considered for instalment of heating system and conduct appropriate scoring with the municipal authorities in the matrix table to narrow the list on 3 potential sites for instalment.</p> <p>1.3. Preparation of feasibility study for instalment of heating system on 3 selected facilities in municipality of Debar to recommend most appropriate site for investment, based on the results from the scoring in the matrix table.</p> <p>1.4. Prepare and conclude MoU with municipality for their active participation and their financial share in the investment.</p>
2. Preparation of technical elaborates for heating facility and pipelines construction, including all necessary documentation up to the point of a construction permit, including preparation of appropriate elaborate for environmental impact of the facility in Debar North Macedonia.	<p>2.1. Preparation of thermo-technical elaborate and detailed investment project for selected facility.</p> <p>2.2. Preparing documentation for construction permit</p> <p>2.3. Preparation and conducting of tender procedures for the selected facility.</p> <p>2.4. Construction of the infrastructure for the heating system</p> <p>2.5. Preparation of environmental impact assesment study for the project</p> <p>2.6. Purchase of heating equipement based on the specification and elaborates prepared in 2.1</p> <p>2.7. Instaling equipment and test the operation of the system</p>
3. Preparation of documentation necessary for wood chips/pellet producer sustainability and quality certification in Niksic Montenegro.	<p>3.1. Selection of pellet factories for the intervention</p> <p>3.2. Preparing MOU with pellet factories</p> <p>3.3. FSC COC certification</p> <p>3.4. EnPLus certification</p>
4. Development of forest management practices for sustainable use of wood biomass for heating, including definition of needed interventions on the legislation in both countries.	<p>4.1. Workshop on sustainable forest management practices with relevant stakeholders at municipal level in both countries</p> <p>4.2. Organisation of national workshops on wood biomass production and utilisation / benefits from local district heating systems and pellet production in the selected pilot regions</p> <p>4.3. Preparation of recommendations on national level for improvement fo forest legislation based on consultations done in activity 4.2</p> <p>4.4. Organisation of national technical working groups to prepapre all necessaery changes in legislation and practical implementation of sustainable wood biomass production based on recommendations from activity 4.3</p>
5. Elaboration of proposals for establishment of functional value chains from the producer to the final consumers of biomass for production of energy and training for wood biomass production and quality management in both countries.	<p>5.1. Mapping of most appropriate forest sites for sustainable production of the wood biomass for wood chips, based on the current plans for management of forests and forest resources condition.</p> <p>5.2. Capacity building to selected wood biomass operators on sustainable forest management and wood biomass for production of wood chips, including standard for wood chips (moisture, size, weight, drying process, storage).</p> <p>5.3. Value chain analysis for wood biomass supply in both pilot sites and its potential for wood chips production.</p>
6. Awareness raising campaign; promotional materials and organization of national and regional workshops, presenting the benefits of efficient wood biomass utilization and wood biomass quality management in both countries. This activity is oriented to decision makers to provide more support for further development of biomass utilization, as well as for the general public to become aware of benefits provided by sustainable use of biomass	<p>6.1. Organisation of local workshops for presentation of project possibilities and benefits for the communities</p> <p>6.2. Development of 3 promotional videos on respected topics</p> <p>6.3. Preparation of promotional leflets related to project topics</p> <p>6.4. Development of informational web site</p> <p>6.5. Preparation of succes stories from the project and present/dissimination trough social media</p> <p>6.6. Training of operators staff on educational and presentation skills for biomass utilisation and use inovative heating technologies</p> <p>6.7. Providing equipement for presentation and on site demonstration of biomass use and innovative heating systems for awarenes raising of general population</p>

Action	Stakeholders	Resources	When?	Indicators	Sources of verification	Risks
1.1. Information meetings with municipal authorities and other stakeholders for elaboration of project approach, activities and expected results.	-project staff - forestry experts / employee in PE National forests - biomass experts -local municipality staff	meeting room; IT equipment: refreshments; travel costs 800 euro	first month of the project	Agreed project objectives		Willingnes of stakeholders to take part in the information meetings; political situation on local or national level;
1.2. Prepare list of facilities in municipal ownership that potentially may be considered for instalment of heating system and conduct appropriate scoring with the municipal authorities in the matrix table to narrow the list on 3 potential sites for instalment.	-project staff - forestry experts / employee in PE National forests - biomass experts -local municipality staff		first and second month of the project	at least 6 mapped suitable objects for project implementation	List of mapped facilities	
1.3. Preparation of feasibility study for instalment of heating system on 3 selected facilities in municipality of Debar to recommend most appropriate site for investment, based on the results from the scoring in the matrix table.	- expert in heating systems -biomass expert	1 feasibility study 20,000 euro	first 6 month of the project	1 feasibility study prepared	Contract with experts/company; prepared study	
1.4. Prepare and conclude MoU with municipality for their active participation and their financial share in the investment.	-project staff - local municipality staff	travel costs; 300 euro	first month of the project	1 signed MoU	Signed MoU document	Political situation on local level; change in governing structure of the municipality;
2.1. Preparation of thermo-technical elaborate and detailed investment project for selected facility.	- expert in heating systems -biomass expert	Thermo technical elaborate 10 000 euro	first 10 month of the project	1 elaborate prepared	Contract with experts/company; prepared elaborate	
2.2. Preparing documentation for construction permit	-project staff -local municipality staff	travel costs; administratvie costs; 2000 euro	first 10 month of the project	1 construction permit obtained	Construction permit; administrative documentation for construction permit	willingnes of national and local authorities to contribute to the project; political situation in the country
2.3. Preparation and conducting of tender procedures for the selected facility.	-project staff - local municipality staff	administrative costs; 1000 euro	first 10 month of the project	1 tender prepared	Published tender	
2.4. Construction of the infrastructure for the heating system	-project staff -local municipality staff - construction company	30 000 euro	first 18 month of the project	1 heating infrastructure constructed	Fnalised construction work; reports from field work; operational heating system	Slow response of institutions in monitoring and control of the construction; unpredicted site jobs that can increase costs of the construction
2.5. Preparation of environmental impact assesment study for the project	EIA expert	4 000 euro	first 14 months of the project	1 Environmental impact assesment document prepatad	Signed contract with EIA expert; prepared document	
2.6. Purchase of heating equipement based on the specification and elaborates prepared in 2.1	project staff - Local municipality staff - heating	40000 - 150 000 euro	18 - 24 months of the project	1 operational heating system	Invocies; teneder procedures; heating svstem on site	Availability of such systems on the market due to turbulent economic situation in general in the

Logframe to be completed by end of July

Project document to be completed by end of August

Thank you for your attention

Any questions?