



WP3: Testing, Activity 3.20  
**RES for Municipality development**

**Deliverable 3.20.1: RES development and  
investment plan for Srebrenik Municipality**

Final version, December 2018

**WP3 (TESTING) LEADER**

Technical University of Crete, School of Environmental Engineering, Renewable and Sustainable Energy Systems Lab (TUC ReSEL)

**RESPONSIBLE PARTNER: Srebrenik Municipality**

**DELIVERABLE 3.20.1: RES development and investment plan for Srebrenik Municipality**

FINAL VERSION, December 2018.

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## 1. INTRODUCTION

Srebrenik Municipality is oriented toward better energy efficiency and RES, and toward biomass as a future heating source.

Municipal Council, in 2009, adopted the concept of solving problem of the heating system, which will be carried out through the reconstruction of existing and construction of new mini biomass heating plants (from 1 to 4 MW).

In this regard, Municipality has already finished reconstruction of an existing heating plant and installed biomass heating system (4 MW) with a distribution pipe to the surrounding residential and commercial buildings. Now we within the process of seeking for solutions to purchase of machinery required for the preparation, transport and storage of wood (chips) for this plant.

In this regard, Municipality of Srebrenik, within COMPOSE project and its Pilot Action, is preparing second, new biomass heating plant reconstruction project, in order to exploit the potential of biomass in area and use it for heating of inhabitants that live in town. With this action better efficiency of RES use and lower air pollution will be gained. An appropriate business model will ensure an innovative approach in involving local actors to the local biomass value chain. The project will upgrade existing official concepts (Local energy concepts) with the possibility to involve local actors (suppliers, local investors and energy consumers) to the local energy supply chain.

Use of RES, hand to hand with EE and nature protection measures could improve the value of the local economy. The use of biomass in heating systems is beneficial because it uses agricultural, forest, urban and industrial residues and waste to produce heat with less effect on the environment than fossil fuels.

### 1.1. Planned deliverables:

- Re-Construction project for the second biomass heating plant prepared (2MW),
- Action plan and business model for operating biomass heating plant prepared.

Purpose of our pilot action is to prepare new heating plant reconstruction project, replacing the existing coal heating plant, in order to exploit the potential of biomass in our area and use it for heating of our town. With this action we will gain better efficiency of RES use and lower air pollution in the municipality.



The project and planned business model will upgrade existing official concepts (Local energy concepts) with the possibility to involve local actors (suppliers, local investors and energy consumers) to the local energy supply chain.

Developed model will be used also as a model for other similar activities.

## 2. ROLE OF COMPOSE PROJECT

### 2.1. About COMPOSE

COMPOSE builds on existing experience and know-how of MED/EU funded projects, existing initiatives and best practices, aiming to provide an integrated approach for RES planning models that will promote the increase of RES in the regional/local energy mix through the development of sustainable energy supply chains and the enhancement of local businesses.

In this way, COMPOSE will contribute to an increased capacity for sustainable RES projects development at the decision-making and planning levels and will support new business models and new technology applications aspiring to combine green economy by utilizing the local potential. At principle, the project addresses the knowledge and capacity needs, and deals with sectorial policies and financial instruments required to encourage sustainable use of local natural resources and green investments.

Use of RES, hand to hand with EE and nature protection measures could improve the value of the local economy. The use of biomass in heating systems is beneficial because it uses agricultural, forest, urban and industrial residues and waste to produce heat with less effect on the environment than fossil fuels.

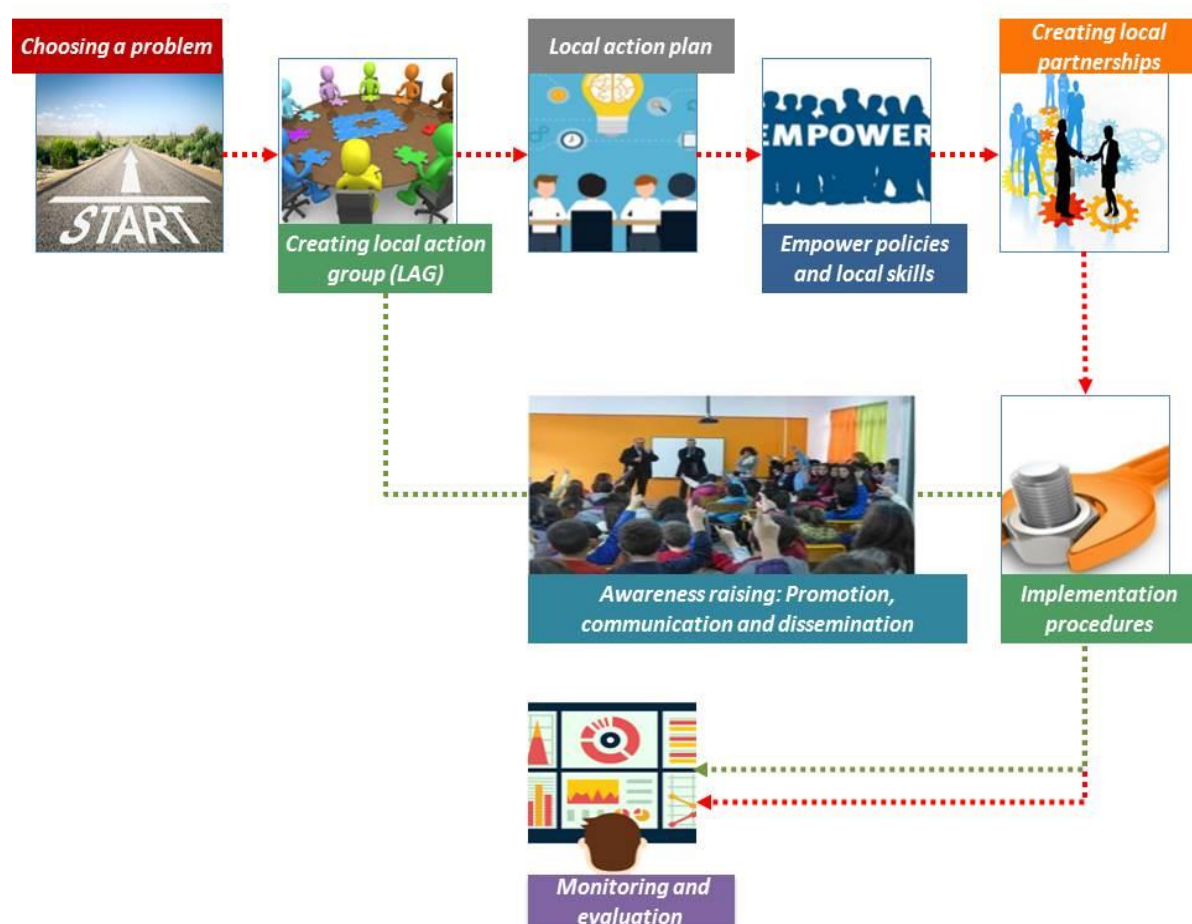
Biomass heating systems generate heat from biomass. The use of biomass in heating systems is beneficial because it uses agricultural, forest, urban and industrial residues and waste to produce heat and electricity with less effect on the environment than fossil fuels. Biomass heating projects are attractive from a public policy perspective for a number of reasons: Money spent on biomass keeps energy dollars in the local economy and supports jobs in the forest products industry.

At the previous stage, Municipality has already finished reconstruction of heating plant and installed biomass heating system (4 MW) with a distribution pipe to the surrounding residential and commercial buildings.



In the scope of COMPOSE project, and designed project for reconstruction of biomass heating plant and heat distribution network, we as a project partner discussed potential business models which can be used for investing in our biomass heating plant and in distribution network.

We have to underline that process of making decisions was a model that is adopted as a COMPOSE model. This point of the COMPOSE project is most important for the sustainability of our action and for a future projects that are going to be identified and implemented in Srebrenik. COMPOSE model that is used for implementation of our work is shown below.



**Picture 1:** Workflow of COMPOSE Common Methodology for Demonstration



### 3. DELIVERABLES

#### 3.1. Main project design for biomass heating plant for producing of energy from biomass and heat distribution network to consumers in Srebrenik zone II

For the second phase of the municipality's ongoing activities, in the framework of the COMPOSE pilot action, we prepared Main project design for biomass heating plant and heat distribution network in order to exploit the potential of biomass in our area.

Planned deliverable was:

- ReConstruction project for the second biomass heating plant prepared (2MW),

Main project design has been implemented by service provider company "URBIS Centar" d.o.o. Banjaluka, and currently legally requested revision of Main project design was done by service provider company "PRIMUS GRADUS" d.o.o. Srebrenik.

##### 3.1.1. Summary of the Main Project:

Existing boilers, three solid fuel boilers (coal), should be dismantled and installed in the same room to install a new 1 MW wood chopping unit. Initially submitted ToR was corrected in certain segments through the elaboration of the Main Project due to the fact that in the existing boiler room it was not possible to install the boiler plant's thermal capacity required for all planned consumers (estimated thermal input 2,335 MW). This was overcome by installing a 1 MW power plant in the boiler space and the remaining part, up to the peak load, by connecting the pipeline to the existing boiler room, built in stage I, which has the capacity to cover the peak loads of consumers in Zone II. The project assignment provides for a direct way of connecting objects to a heat network. The temperature operation of the network 90 / 70°C was adopted. As the outdoor temperature rises, the water temperature in the starting and return water is lowered while simultaneously reducing the temperature difference between the input and the return water relevant to delivering heat to consumers.

Heat consumption: It is envisaged to connect 12 facilities, which will be connected to the planned facility via the new biomass heating plant which is going to be in the basement floor of Cultural and Information Center Srebrenik.





**Picture 2:** The future state of the new biomass heating plant.

In accordance with the requirement in the project assignment and in accordance with the applicable regulations for these installations, this project has provided a solution for the installation of heat pipes between the boiler, housed in the "House of Culture" facility, and facilities that are connected to the new plant.



**Picture 3:** Heat distribution network from the new biomass heating plant to consumers.



### 3.2. Action plan & business model for operating biomass heating plant

After preparation of the above mentioned Main project design for biomass heating plant and heat distribution network reconstruction project design, the following deliverable is foreseen:

- Action plan and business model for operating biomass heating plant.

This activity was made by using COMPOSE model. It came from many meetings which were organized within LAG, and local partnerships.

We had good opportunity because last year our State Parliament adopted Law on public private partnership. This was the model that was unknown in Bosnia and Hercegovina and also in our Municipality. After adoption of the Law we started to choose projects that can be implemented as a public private partnership projects. Biomass heating plant and distribution network for district heating in Srebrenik was one among other projects.

With this plan we also gained transferability to our operations, because public private partnership as a model for operating biomass heating plant can be used also in the other countries.

We developed annual and mid term plan of potential public private partnership projects. This plans were adopted by our Municipal Council, then by the Tuzla Canton Ministry it was published in local bosnian language and also english and german languages.

Our project is promoted as one of 44 project in Tuzla Canton.

As per the existing plan, the planned Business Model for operating biomass heating plant will have to includes following parts:

- Timing for development of project
- Dynamic and financial plans for reconstruction of heating plant,
- Possible sources of finances,
- Cost and benefit analyses,
- Public and private partnership analysis
- Project proposal (ToR) development or Feasibility Study for possible future investors.

We are going to develop some more models till the end of COMPOSE project.





<b>Project Title:</b> <b>2nd phase of toplification of Srebrenik Municipality, Biomass Heating plant and distribution network</b>								
<b>Project Goal:</b> Biomass heating plant reconstructed, heat distribution network builded and residential and public buildings connected to new biomass heating plant.								
<b>Long-term Impact or Outcome:</b> <ul style="list-style-type: none"><li>Produced 2.000 kWh/y energy from biomass, Increased air quality, Improved quality of life, Created new jobs.</li></ul>								
No	Activity	Implementer	2018	2019	2020	2021	2022	2023-30
1	Designing Main project of biomass heating plant for producing of energy from biomass and distribution to consumers in srebrenik zone II	COMPOSE Project team						
2	Preparation of documents (location permit, construction permit, feasibility study, procurement documents, public call, etc.)	Municipal service for planing and environmental protection						
3	Announcement of public call for selection of private partners	Municipal service for local economic development						
4	Consideration of received applications through a public call and negotiating with potential private partners	Municipal service for local economic development						
5	Signing contracts and starting the implementation of the investment in biomass heating plant and heat distribution network	Mayor						
6	Between 2023 – 2030 Biomass heating plant reconstructed and operated, and also heat distribution network builded: Private partner operate district heating sistem in Srebrenik Municipality. We estimate that by 2030 as a reference year we will use total capacity of installed biomass heating plants that will save usage of 6000t coal as a fossil fuel.	Private parner and Srebrenik Municipality						



## 4. LONG TERM IMPACT OF THE PROJECT

### 4.1. Environmental burden

For the last 10 years Srebrenik has significant problem of air pollution during the heating season, because of the large number of individual heating units on fossil fuel, which is reflected in the low energy efficiency, expressed as air pollution and increased fire-threat. To address this problem, strategy of the integrated development of the Srebrenik Municipality foresees the project of finding adequate solutions and building an appropriate heating system. So far, we finished a Feasibility study for selection of an energy system for heating system. Municipal Council, in 2009 adopted the concept of solving problem of the heating system, which will be carried out through the reconstruction of existing and construction of new mini biomass heating plants (from 1 to 4 MW).

In the framework of the pilot action, we are preparing some model for operating our biomass heating plant. One of the new models in our area is PPP (Public Private Partnership) model. This model can be replicable in other area also.

### 4.2. Impact on the local economy

Biomass heating systems generate heat from biomass. The use of biomass in heating systems is beneficial because it uses agricultural, forest, urban and industrial residues and waste to produce heat and electricity with less effect on the environment than fossil fuels. Biomass heating projects are attractive from a public policy perspective for a number of reasons:

- Money spent on biomass keeps energy dollars in the local economy and supports jobs in the forest products industry.
- Burning wood for energy instead of fossil fuels has a positive impact in moderating global climate change. Carbon dioxide (CO<sub>2</sub>) buildup in the atmosphere is a significant contributor to global climate change. The net effect of burning wood fuel is that no new CO<sub>2</sub> is added to the atmosphere. Avoiding use of fossil fuel (and electricity) for heat mitigates climate change further eliminating the release of sequestered carbon for this purpose.
- Despite the wide range of biomass options, the one material in abundant supply in Srebrenik area is wood. Wood fuel can come in all shapes and sizes: Low-quality trees felled, bucked, and split into firewood; slabs cut off saw logs fed to a sawmills chipper; dust from sawing logs into lumber; and tree tops from whole-tree timber harvests chipped into the back of box trailers. All of these forms of wood fuels have various benefits.



In the case of the Srebrenik Municipality, the demonstration value of using an indigenous source of energy in a sustainable manner cannot be overstated. While all of these benefits are important from a public policy perspective, probably the most compelling reason for a facility to decide on biomass heating is that the cost of biomass fuel is always much less than the cost of fossil fuels.

### 4.3. Foreseen impact

- Produced 2.000 kWh/y energy from biomass;
- Implementation of new concept will directly result with 5 new working places;
- Additional 20 new working places within the chain of biomass supply;
- 400 households (apartments) will be directly connected to the new heating plant, which is app. 1.200 inhabitants;

### 4.4. Impact on the promotion of EE and RES

#### 4.4.1. Macro objectives

- Increased air quality,
- Improved quality of life,
- Created new jobs

#### 4.4.2. Specific objectives

- Improving local based energy supply chains,
- Establishment of RES cooperative,
- Rising awareness of the importance of biomass heating systems;
- Increased local based energy economy.



## 5. ANNEXES


Biomass potential in Srebrenik area and using RES for Municipality development	
Description	<p>Municipality of Srebrenik aims to prepare a biomass heating plant reconstruction project, in order to exploit the potential of biomass in area and use it for heating of inhabitants that live in town. With this action we will gain better efficiency of RES use and lower air pollution. An appropriate business model will ensure an innovative approach in involving local actors to the local biomass value chain.</p> <ul style="list-style-type: none"><li>•ReConstruction project for the second biomass heating plant prepared (2MW)</li><li>•Action plan and business model for operating biomass heating plant prepared</li></ul>

The deliverable will consist of the following annexes, as noted in the pilot action description:

- 5.1. ANNEX 1 - MAIN DESIGN OF PROJECT OF BIOMASS HEATING PLANT FOR PRODUCING OF ENERGY FROM BIOMASS AND DISTRIBUTION TO CONSUMERS IN SREBRENİK ZONE II,
- 5.2. ANNEX 2 - ACTION PLAN & BUSINESS MODEL FOR OPERATING BIOMASS HEATING PLANT/ PUBLIC PRIVATE PARTNERSHIP MODEL.



**ANNEXI MAIN DESIGN OF PROJECT OF BIOMASS HEATING PLANT FOR PRODUCING OF ENERGY FROM BIOMASS AND DISTRIBUTION TO CONSUMERS IN SREBRENİK ZONE II**

DESIGNED PROJECT NAME	MAIN PROJECT OF BIOMASS HEATING PLANT FOR PRODUCING OF ENERGY FROM BIOMASS AND DISTRIBUTION TO CONSUMERS IN SREBRENİK ZONE II
PROJECT BUREAU	 <b>URBIS CENTAR</b> d.o.o. BANJALUKA <b>PLANIRANJE, PROJEKTOVANJE I KONSALTING</b> 78000 Banja Luka, Bulevar vojvode Stepe Stepanovića 101A. E-mail: <a href="mailto:office@urbiscentar.com">office@urbiscentar.com</a> ; <a href="http://www.urbiscentar.com">http: www.urbiscentar.com</a>
PROJECT TEAM	Stevo Ždrnja, Mechanical engineer Ljubiša Adamović, Architecture Engineer Irena Janko, Construction Engineer Risto Stjepanović, Construction Engineer Dejana Pantić, Electrical Engineer Mr. Milan Pržulj, Electrical Engineer
OBJECT	BIOMASS HEATING PLANT AND ENERGY DISTRIBUTION SYSTEM
PLACE OF INVESTMENT	SREBRENİK, BiH
TYPE OF THE PROJECT	MAIN PROJECT
<p align="center"> <b>Deliverable 3.20: RES for Municipality development</b>  <b>Biomass potential in Srebrenik area and using RES for Municipality development</b>  <b>(Case of Srebrenik)</b> </p>	
PROJECT NAME	COMPOSE – Rural Communities engaged with positive energy
LEAD PARTNER	Chamber of agriculture and forestry of Slovenia, Agriculture and forestry institution Maribor
WP3 (TESTING) LEADER	Technical University of Crete, School of Environmental Engineering, Renewable and Sustainable Energy Systems Lab (TUC ReSEL)
RESPONSIBLE PARTNER	Srebrenik Municipality
DELIVERABLE 3.20.	RES for Municipality development
PROJECT MANAGEMENT	Adnan Bjelić, Project manager Esad Dedić, Team member Alisa Mustafagić, Team member





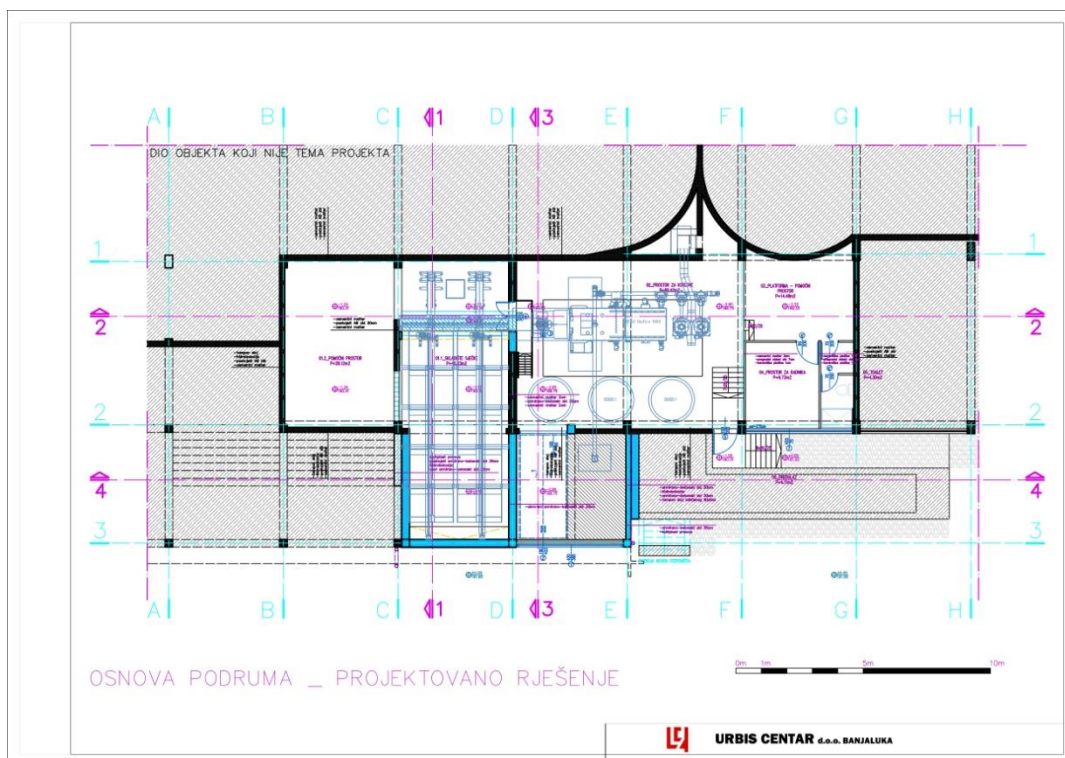
<b>Protokol No: 1350-P/18</b>	Director of URBIS d.o.o. company Snežana Mrđa-Badža Engineer of architecture	Date: June 2018.
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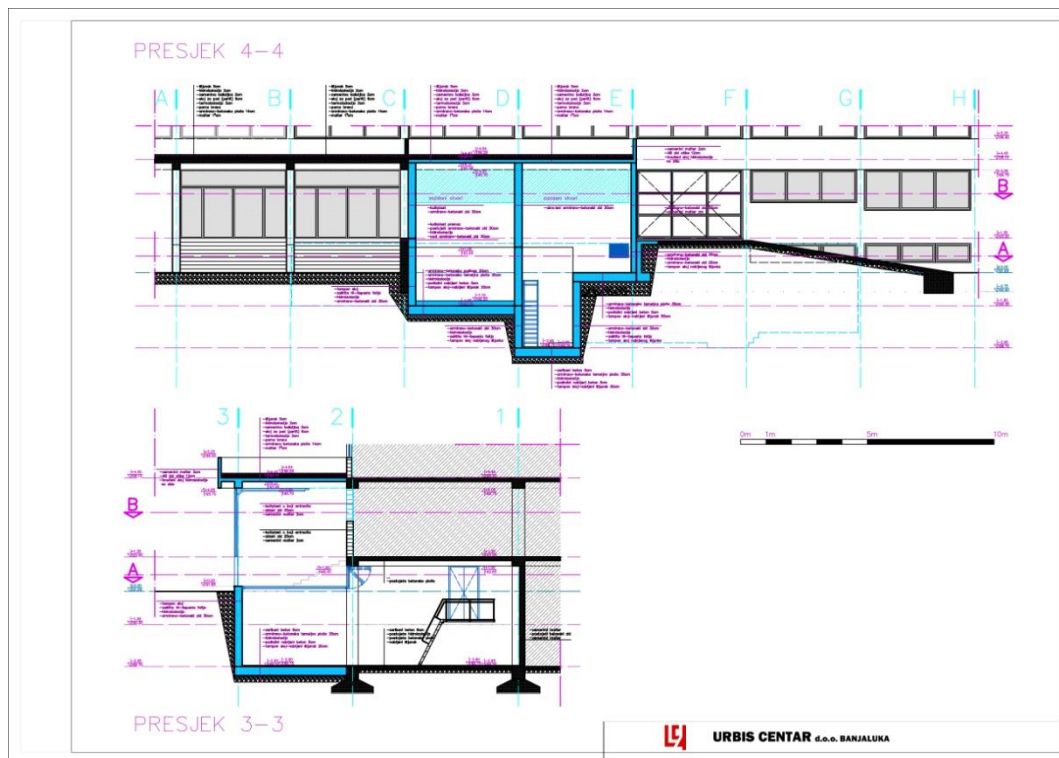
The current state of the building in which is going to be installed new biomass heating plant.



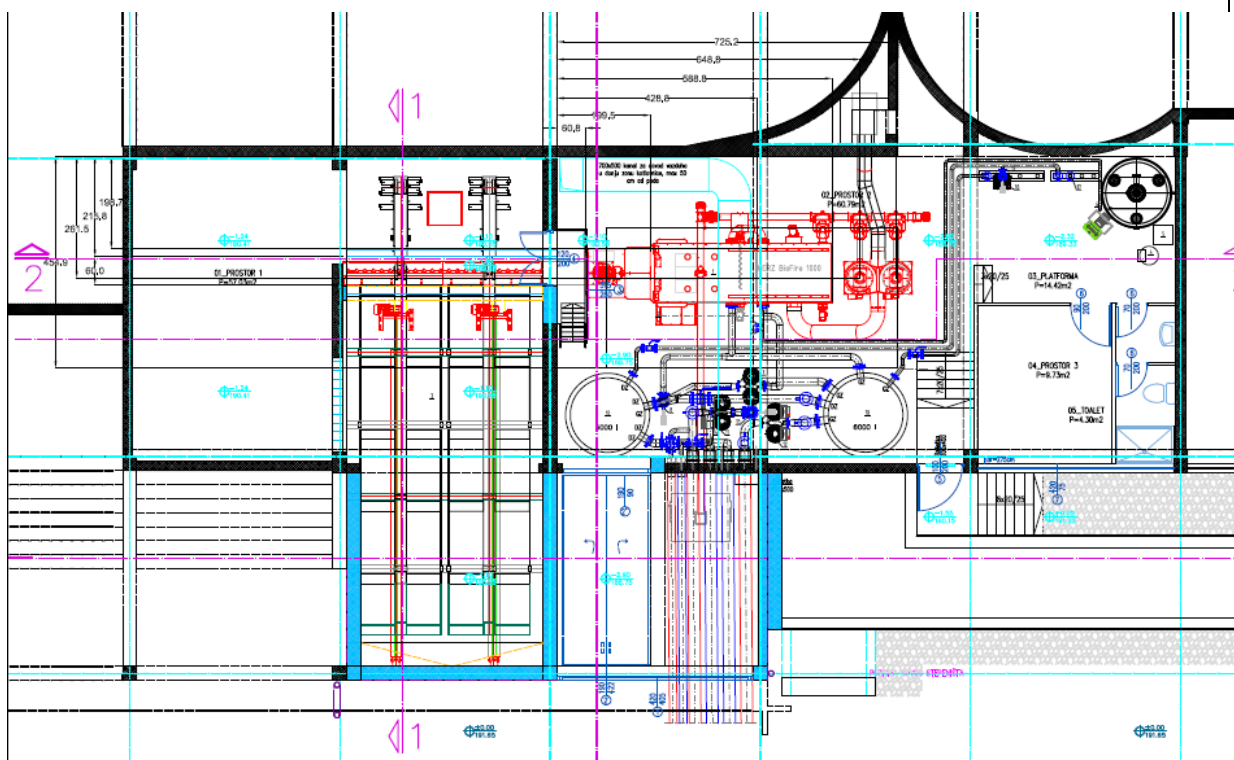
The future state of the building in which is going to be installed new biomass heating plant.  
(Project design)



Disposition of equipment in the future biomass heating plant.  
(Ground plan)

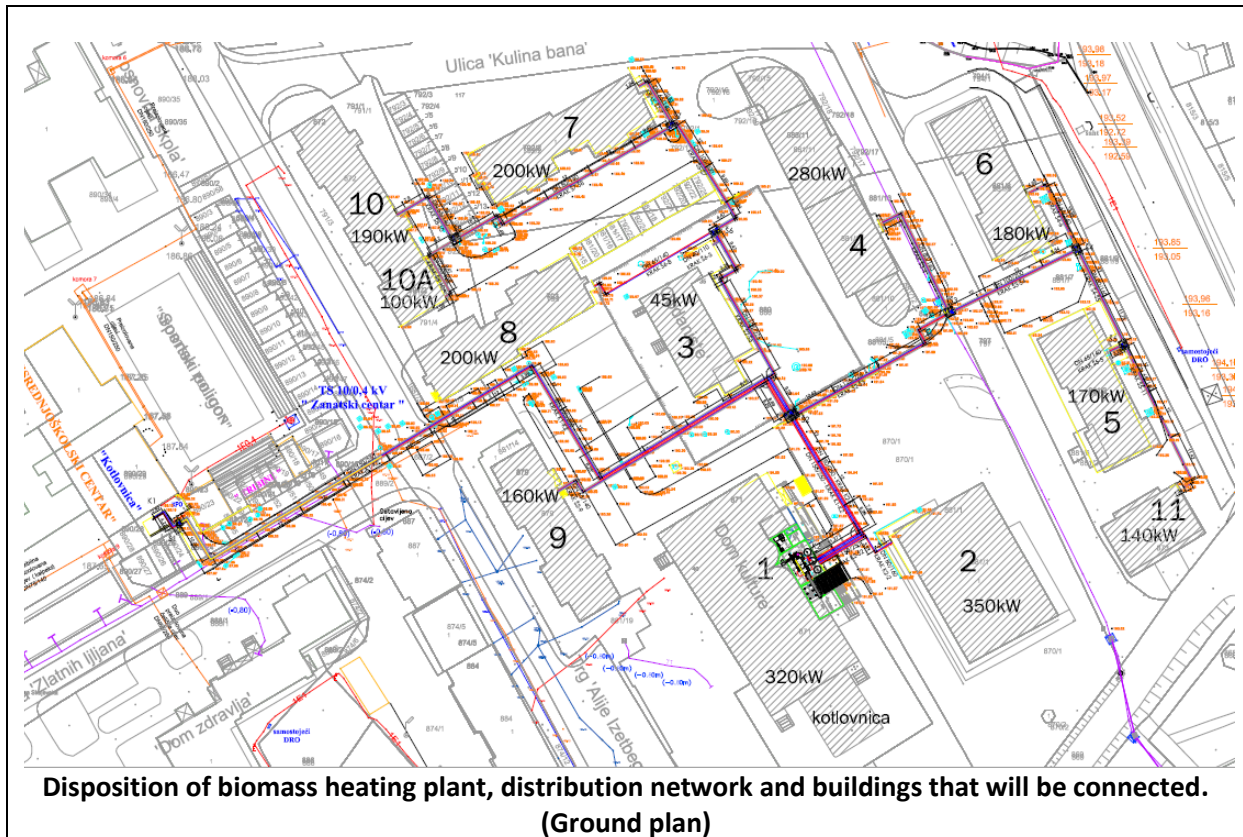


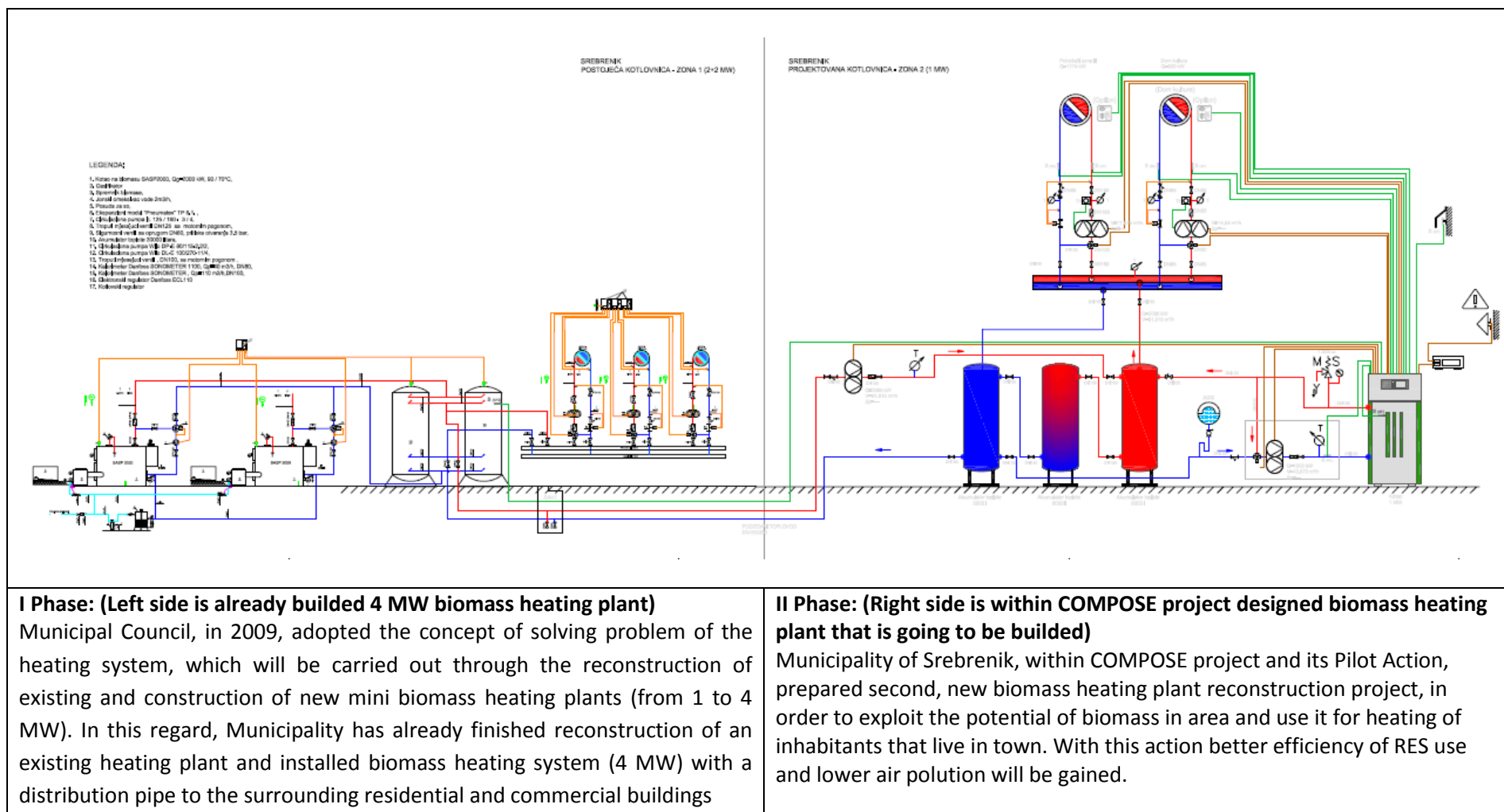
Future biomass heating plant.  
(Cross section side view)



Disposition of equipment in the future biomass heating plant.  
(Ground plan)











Project co-financed by the European  
Regional Development Fund



## ANNEX 2

### PUBLIC PRIVATE PARTNERSHIP MODEL

#### ACTION PLAN & BUSINESS MODEL FOR OPERATING BIOMASS HEATING PLANT

Deliverable title	
RES investment plan for Biomass heating plant	
Description	<p>Our pilot action has a transferability potential in the areas that have biomass potential.</p> <p>In the scope of COMPOSE project, and designed project for reconstruction of biomass heating plant and heat distribution network, we as a project partner discussed potential business models which can be used for investing in our biomass heating plant and in distribution network.</p> <p>We had good opportunity because last year our State Parliament adopted Law on public private partnership. This was the model that was unknown in Bosnia and Hercegovina and also in our Municipality.</p> <p>After adoption of the Law we started to choose projects that can be implemented as a public private partnership projects. Biomass heating plant and distribution network for district heating in Srebrenik was one among other projects.</p> <p>With this plan we also gained transferability to our operations, because public private partnership as a model for operating biomass heating plant can be used also in the other countries.</p> <p>We developed annual and mid term plan of potential public private partnership projects. This plan was adopted by our Municipal Council, then by the Tuzla Canton Ministry it was published in local bosnian language and also english and german languages.</p> <p>Our project is promoted as one of 44 projects in Tuzla Canton.</p> <p>We are going to develop some more models till the end of COMPOSE project.</p> <p>Public private partnership Business Model for investing and operating biomass heating plant includes following parts:</p> <ul style="list-style-type: none"> <li>• Timing for development of project</li> <li>• Dynamic and financial plans for reconstruction of heating plant,</li> <li>• Possible sources of finances,</li> <li>• Cost and benefit analyses,</li> <li>• Public and private partnership analysis</li> </ul>



- Project proposal (ToR) development or Feasibility Study for possible future investors.

Public private partnership as a model for operating biomass heating plant can be used in the other countries also.

For the clarifying of everything that is written above we are sharing excerpt from Mid-term plans for public private partnership projects in Srebrenik Municipality (bellow is an excerpt from this Plan).

Ministry of economy of Tuzla Canton also prepared catalogues of potential public private partnership projects in our area. We are also sharing catalogues written in three different languages that are made to promote PPP projects in our area. Our project is positioned on the 20th row of documents that you can reach by clicking language listed bellow.

**English:**

SUMMARY OVERVIEW OF POTENTIAL PROJECTS PUBLIC-PRIVATE PARTNERSHIP IN TUZLA CANTON (2018-2020)

[http://www.tk.gov.ba/Ministarstva/MP/2018/JPP/SUMMARY\\_OVERVIEW\\_of\\_potential Public-Private Partnership Projects in Tuzla Canton 2018-2020.pdf](http://www.tk.gov.ba/Ministarstva/MP/2018/JPP/SUMMARY_OVERVIEW_of_potential_Public-Private_Partnership_Projects_in_Tuzla_Canton_2018-2020.pdf)

**German:**

GESAMTÜBERSICHT POTENZIELLER PROJEKTE DER ÖFFENTLICH-PRIVATEN PARTNERSCHAFT DES KANTONS TUZLA (für den Zeitraum 2018 – 2020)

[http://www.tk.gov.ba/Ministarstva/MP/2018/JPP/GESAMTUBERSICHT\\_potenzieller Projekte der offentlig-privaten Partnerschaft des Kantons Tuzla fur den Zeitraum 2018 - 2020.pdf](http://www.tk.gov.ba/Ministarstva/MP/2018/JPP/GESAMTUBERSICHT_potenzieller_Projekte_der_oeffentlich-privaten_Partnerschaft_des_Kantons_Tuzla_fur_den_Zeitraum_2018_-_2020.pdf)

**Bosnian:**

ZBIRNI PREGLED POTENCIJALNIH PROJEKATA JAVNO-PRIVATNOG PARTNERSTVA TUZLANSKOG KANTONA (2018. - 2020.)

[http://www.tk.gov.ba/Ministarstva/MP/2018/JPP/KATALOG\\_potencijalnih\\_projekata javno-privatnog partnerstva Tuzlanskog kantona 2018-2020.pdf](http://www.tk.gov.ba/Ministarstva/MP/2018/JPP/KATALOG_potencijalnih_projekata_javno-privatnog_partnerstva_Tuzlanskog_kantona_2018-2020.pdf)



## EXCERPT FROM MIDTERM PLAN FOR PUBLIC POTENTIAL PRIVATE PARTNERSHIP PROJECTS IN SREBRENİK MUNICIPALITY

### SREDNJOROČNI PLAN POTENCIJALNIH JPP PROJEKATA ZA PERIOD OD 2018. DO 2020. GODINE

Br.	Naziv projekta	Svrha i cilj projekta (navesti očekivano unapređenje javne usluge)	Referentni strateško-planski dokument (navesti naziv jednog ili više strateško-planskog dokumenta iz kojeg proizilazi predloženi JPP projekat, i pripadajući cilj/mjera/aktivnost)	Stepen razvijenosti projekta (Odaberi jedno iz padajućeg izbornika*)	Očekivani model JPP (Odaberi jedno iz padajućeg izbornika**)	Procijenjena ukupna vrijednost projekta (investicijski troškovi + troškovi održavanja + troškovi prenesenih rizika)	Kontakt osoba
1.	II Faza toplifikacije općine Srebrenik - Proizvodnja i distribucija toplotne energije za potrošače u zoni II u Srebreniku	Moderan, održiv i fleksibilan toplifikacioni sistem koji će korisnicima omogućiti kvalitet, pouzdanost i priuštivost, koji će smanjiti i spriječiti dalje ugrožavanje zdravlja stanovnika, poštujući pri tome principe ekološke prihvatljivosti i ekonomske opravdanosti, te smanjen stepen zagađenja zraka u gradskoj zoni u sezoni grijanja	Revidirana strategija integrisanog razvoja općine Srebrenik za period 2016-2020, Program 3.3.1. Kvalitet zraka, projekat 3.3.1.1. Rekonstrukcija i proširenje sistema toplifikacije u centru grada	4. Postoji adekvatna studija izvodljivosti	osnovni model JPP	cca 2.000.000,00 KM	Služba za poduzetništvo, lokalni razvoj i investicije, poduzetnistvo@srebrenik.ba, opc.sreb@bih.net.ba, +387 35 366 432
2.	Uspostavljanje poslovne zone/bescarinske zone	1.1. Stvoreni povoljniji poslovni ambijent u općini Srebrenik, povećan broj privrednih subjekata, povećan ROI (povrat na investicije u poslovnom sektoru, te obezbijeđeni uslovi za otvaranje najmanje 200 novih radnih mjesta kao direktan rezultat uspostavljanja nove poslovne zone	Revidirana strategija integrisanog razvoja općine Srebrenik za period 2016-2020, Program 1.1.2. Formiranje poslovnih zona, projekat 1.1.2.1. Uspostavljanje poslovnih zona	3. Postoji adekvatan idejni projekat	osnovni model JPP	cca 1.000.000,00KM	Služba za poduzetništvo, lokalni razvoj i investicije, poduzetnistvo@srebrenik.ba, opc.sreb@bih.net.ba, +387 35 366 432
3.	Izgradnja ljetne pozornice sa pripadajućim sadržajima (Caffe bar, ljetna terasa, wc i sl.) u sklopu šireg kompleksa Starog grada Srebrenika	Unaprijeđeno upravljanje javnim dobrima, prirodnim i kulturno-historijskim naslijeđem, povećan broj posjeta Starom gradu Srebreniku, te shodno tome povećan broj zaposlenih u oblasti turizma kao i prihod u pomenutoj oblasti.	Revidirana strategija integrisanog razvoja općine Srebrenik za period 2016-2020, Program 1.3.1. Revitalizacija kompleksa „Stari grad Srebrenik“ (faze I, II, III i IV), projekat 1.3.1.5. Izgradnja ljetne pozornice	4. Postoji adekvatna studija izvodljivosti	osnovni model JPP	cca 400.000,00KM (vrijednost investicije prema urađenom glavnom projektu)	Služba za poduzetništvo, lokalni razvoj i investicije, poduzetnistvo@srebrenik.ba, opc.sreb@bih.net.ba, +387 35 366 432
4.	Izgradnja anaerobnih prečišćaća otpadnih voda na području općine Srebrenik	Svrha projekta je uspostavljanje sistema za prečišćavanje otpadnih voda koje se trenutno iz kanalizacionog sistema na širem području općine Srebrenik direktno ispuštaju u vodotok rijeke Tinja	Revidirana strategija integrisanog razvoja općine Srebrenik za period 2016-2020, Program 3.1.1. Vodosnadbijevanje i kanalizacija, projekat 3.1.1.2. Izgradnja kanalizacionog sistema i prečišćaća otpadnih voda za sva naselja u skladu sa dugoročnim programom	2. Postoji adekvatno idejno rješenje	osnovni model JPP	od 300.000 - 1.000.000,00 KM	Služba za poduzetništvo, lokalni razvoj i investicije, poduzetnistvo@srebrenik.ba, opc.sreb@bih.net.ba, +387 35 366 432
5.	Izgradnja veterinarske stanice i stočne pijace	Povećan broj poljoprivrednih obrta u oblasti proizvodnje povrća, voća i uzgoja stoke, Povećan promet poljoprivrednih proizvoda animalnog porijekla na području općine Srebrenik kao i proizvoda u oblasti proizvodnje povrća	Revidirana strategija integrisanog razvoja općine Srebrenik za period 2016-2020, Program 1.2.2. Unapređenje infrastrukture za poljoprivredu, projekat 1.2.2.1. Izgradnja veterinarske stanice i stočne pijace	1. Postoji adekvatna analiza javne usluge	osnovni model JPP	cca 300.000 KM	Služba za poduzetništvo, lokalni razvoj i investicije, poduzetnistvo@srebrenik.ba, opc.sreb@bih.net.ba, +387 35 366 432





## FRONT PAGE AND EXCERPT FROM SUMMARY OVERVIEW OF POTENTIAL PROJECTS PUBLIC-PRIVATE PARTNERSHIP IN TUZLA CANTON (2018-2020)

### FRONT PAGE







## EXCERPT FROM SUMMARY OVERVIEW

### PPP PROJECT PIPELINE 2018 MEDIUM-TERM PLAN OF POTENTIAL PPP PROJECTS

FOR THE PERIOD 2018 -2020

No.	Proponent (name and seat of public partner)	Project title	Overall and specific objectives of the project	Reference strategy paper	Level of project development	Expected PPP model	Estimated total value of the project (Costs of investment + maintenance + risk transfer)	Contact person	Short project description
1	Tuzla Canton Ministry of Education and Science, Muhameda Hevajje Uskufija 1, 75000 Tuzla	Improving the premises of the Tuzla University Campus (Unapređenje prostornih kapaciteta Kampusa Univerziteta u Tuzli)	Improving the premises and teaching conditions at the Tuzla University with aim to meet student accommodation needs and the standards set forth by the Decision on high education norms and standards in the Federation of Bosnia and Herzegovina.	Tuzla Canton Development Strategy 2016 - 2020	2. Appropriate conceptual project design	Basic PPP model	10.000.000,00	Mr Asim Bojić, + 387 35 36 93 45, asim_bojic@yahoo.com	
2	Tuzla Canton Ministry of Education and Science, Muhameda Hevajje Uskufija 1, 75000 Tuzla	Providing teaching conditions in the Public Institution (PI) Elementary School of Music "Tuzla" and PI Secondary School of Music "Čestimir Mirko Dusek" in Tuzla (Obezbeđenje uslova za izvođenje nastave u JU "Osnovna muzička škola Tuzla" i JU "Srednja muzička škola Čestimir Mirko Dušek" u Tuzli)	Providing premises and improving teaching conditions in the PI Elementary School of Music "Tuzla" and PI Secondary School of Music "Čestimir Mirko Dusek" in Tuzla.	Tuzla Canton Spatial Plan 2005 - 2025 ("Tuzla Canton Official Gazette," No. 9/06)	0. Project idea only	Basic PPP model	8.000.000,00	Mr Asim Bojić, + 387 35 36 93 45, asim_bojic@yahoo.com	
3	Tuzla Canton Ministry of Education and Science, Muhameda Hevajje Uskufija 1, 75000 Tuzla	Improving teaching conditions in the Tuzla Canton area (Unapređenje uslova za izvođenje nastave na području Tuzlanskog kantona)	Providing premises and improving teaching conditions for physical education in PI Elementary School "Kalesija," PI "Grammar and technical school Srebrenik," PI "Mixed secondary school of electrical engineering Tuzla," PI Elementary School "Hasan Kikić" in Gradacac, PI Elementary School "Soko" in Gracanica.	Tuzla Canton Development Strategy 2016 - 2020 and draft Tuzla Canton Programme of Public Investments 2019 - 2021	0. Project idea only	Basic PPP model	14.000.000,00	Mr Asim Bojić, + 387 35 36 93 45, asim_bojic@yahoo.com	
4	Public Health Institution (PHI) "Univerzitetski-klinički centar Tuzla" (Tuzla Teaching Hospital), Trnovac bb, 75000 Tuzla	Emergency room and multi-storey car park (Urgentni centar i višespratna garaža)	Organising administration of first aid to patients with life- or health-threatening conditions by providing premises to tend to urgent cases at a single location. This will significantly improve the quality and efficiency of providing this type of services. Additionally, building a multi-storey car park would tackle the lack of parking space and significantly relieve both stationary and mobile traffic within the "Tuzla Teaching Hospital" area.	Tuzla Canton Development Strategy 2016 - 2020	2. Appropriate conceptual project design	Basic PPP model	15.000.000,00	Mrs Fahrrija Skokić, + 387 35 30 33 00 fahrrija.skokic@ ukctuzla.ba	





No.	Proponent (name and seat of public partner)	Project title	Overall and specific objectives of the project	Reference strategy paper	Level of project development	Expected PPP model	Estimated total value of the project (Costs of investment + maintenance + risk transfer)	Contact person	Short project description
18	Kalesija Municipality, Patriotske lige 15, 75260 Kalesija	Improving and building sewage system in the Kalesija municipality area (Unapređenje i izgradnja kanalizacione mreže na području općine Kalesija)	Improving communal infrastructure by means of reducing environment pollution and flood and soil erosion risks. The project objective is to connect 5500 households in Kalesija, Prnjavor, Miljanovci, Dubnica-Mahmutovici and 2500 households in Vukovije Gornje, Tojsici, Kikaci, and Hrasno Donje to a waste water treatment plant by 2022.	Kalesija Municipality Local Development Strategy 2018 - 2025	3. Appropriate preliminary project design	Special PPP model	9.950.000,00	Mr Edin Glogić, + 387 61 28 10 14, agencija@kalesija.ba	
19	Sapna Municipality, 206. viteške brigade bb, 75411 Sapna	Improving street lights in the Sapna municipality area (Unapređenje ulične rasvjete u općini Sapna)	The specific project objective is to improve the quality of life through introduction of new services based on optimal technical, technological and economic solutions. The overall project objective is to reduce the costs of power supply and maintaining street lights, increase the quality of public services, achieve greater cost-effectiveness, etc.	Sapna Municipality Programme of Capital Investments 2016 - 2020	0. Project idea only	Basic PPP model	255.000,00	Ms Fatma Gušić, + 387 35 59 95 30, fata@opcinasapna.ba	
20	Srebrenik Municipality, Varoških polja, 75350 Srebrenik	Srebrenik Municipality heating system - Phase II (II faza toplifikacije općine Srebrenik)	Having a modern, sustainable and flexible heating system which would provide its users with quality, reliable and affordable services, reduce and prevent further risks to human health, be environmentally-friendly and economically justified, and reduce pollution of air in the city zone during winter months.	Revised Srebrenik Municipality Strategy of Integrated Development 2016 - 2020	4. Appropriate feasibility study	Basic PPP model	2.000.000,00	Service for Entrepreneurship, Local Development and Investments, + 387 35 36 64 32, poduzetnistvo@ srebrenik.ba, opc.sreb@bih.net.ba	
21	Srebrenik Municipality, Varoških polja, 75350 Srebrenik	Establishing industrial/ free-trade zone (Uspostavljanje poslovne zone/ bescarinske zone)	Creating a more favourable business environment in Srebrenik municipality, increasing the number of businesses and business sector ROI, as well as providing conditions to create at least 200 new jobs.	Revised Srebrenik Municipality Strategy of Integrated Development 2016 - 2020	3. Appropriate preliminary project design	Basic PPP model	1.000.000,00	Service for Entrepreneurship, Local Development and Investments, + 387 35 36 64 32, poduzetnistvo@ srebrenik.ba, opc.sreb@bih.net.ba	
22	Srebrenik Municipality, Varoških polja, 75350 Srebrenik	Reviving the complex "Srebrenik Old Town" - summer stage (Revitalizacija kompleksa „Stari grad Srebrenik“ - ljetna pozornica)	Improving the management of public goods, natural, cultural and historical heritage, increasing the number of visits to the Srebrenik Old Town and, with it, the number of persons employed in the tourism sector and the sector revenues.	Revised Srebrenik Municipality Strategy of Integrated Development 2016 - 2020	4. Appropriate feasibility study	Basic PPP model	400.000,00	Service for Entrepreneurship, Local Development and Investments, + 387 35 36 64 32, poduzetnistvo@ srebrenik.ba, opc.sreb@bih.net.ba	





## SHORT DESCRIPTION OF THE POTENTIAL PUBLIC PRIVATE PARTNERSHIP PROJECT

<b>PROJECT NAME</b>	<b>2nd phase of toplification of Srebrenik Municipality Biomass Heating plant and distribution network</b>
<b>PROJECT PROPOSER</b>	<b>Srebrenik Municipality</b>
<b>PROJECT COORDINATOR</b> (Name/Surname, address, contact/phone and email)	Adnan Bjelić, Service for Entrepreneurship, Local Development and Investments, Phone: + 387 35 36 64 32, Mobile phone: + 387 61 67 18 16 E-mail: <a href="mailto:poduzetnistvo@srebrenik.ba">poduzetnistvo@srebrenik.ba</a> , <a href="mailto:opc.sreb@bih.net.ba">opc.sreb@bih.net.ba</a>
<b>AIM OF THE PROJECT</b>	Having a modern, sustainable and flexible heating system which would provide its users with quality, reliable and affordable services, reduce and prevent further risks to human health, be environmentally-friendly and economically justified, and reduce pollution of air in the city zone during winter months.
<b>DESCRIPTION OF THE CURRENT STATE OF PUBLIC SERVICE</b>	<p>For the last 10 years Srebrenik has significant problem of air pollution during the heating season, because of the large number of individual heating units on fossil fuel, which is reflected in the low energy efficiency, expressed as air pollution and increased fire-threat. To address this problem, strategy of the integrated development of the Srebrenik Municipality foresees the project of finding adequate solutions and building an appropriate heating system.</p> <p>So far, we finished a Feasibility study for selection of an energy system for heating system. Municipal Council, in 2009 adopted the concept of solving problem of the heating system, which will be carried out through the reconstruction of existing and construction of new mini biomass heating plants (from 1 to 4 MW).</p> <p>Biomass heating projects are attractive from a public policy perspective for a number of reasons:</p> <p>At the first phase we have already finished reconstruction of heating plant and installed biomass heating system (4 MW) with a distribution</p>



	<p>network to the surrounding residential and commercial buildings.</p> <p>Now we are seeking for solutions to finish phase two of toplification.</p> <p>For the second phase, we prepared project design for biomass heating plant reconstruction project in order to exploit the potential of biomass in our area.</p> <ul style="list-style-type: none"> <li>• ReConstruction project for the second biomass heating plant prepared (2MW),</li> </ul>
DESCRIPTION OF THE EXPECTED STATE OF PUBLIC SERVICE	<p>Reconstructed Biomass heating plant and invested in heat distribution network.</p> <p>Over 5000 people gain heat from new biomass heating plant.</p> <p><b>Foreseen impact</b></p> <p>Produced 2.000 kWh/y energy from biomass</p> <p><b>Macro objectives</b></p> <ul style="list-style-type: none"> <li>• Increased air quality,</li> <li>• Improved quality of life,</li> <li>• Created new jobs</li> </ul> <p><b>Specific objectives</b></p> <ul style="list-style-type: none"> <li>• Improving local based energy supply chains,</li> <li>• Establishment of RES cooperative,</li> <li>• Rising awareness of the importance of biomass heating systems;</li> </ul> <p>Increased local based energy economy</p>
EXPECTED PP MODEL	<input type="checkbox"/> <b>Basic model</b> <input type="checkbox"/> Special model
EXPECTED PERIOD OF CONTRACT	<input type="checkbox"/> To 10 years <input type="checkbox"/> 10 to 15 years <input type="checkbox"/> <b>Over 15 years</b>
PROPOSED TOTAL VALUE OF THE PROJECT	<input type="checkbox"/> <b>To 15 milion of BAM</b> <input type="checkbox"/> Over 15 milion of BAM
STATUS OF PROJECT PROPOSAL	<input type="checkbox"/> Just idea <input type="checkbox"/> Partially prepared project proposal <input type="checkbox"/> <b>Prepared project proposal (conceptual design / feasibility study, feasibility study)</b> <input type="checkbox"/> <b>A Decision on Commitment to Establish JPP has ben made</b>
EXPECTED DATE OF ANNOUNCEMENT OF PUBLIC CALL FOR SELECTION OF PRIVATE PARTNERS	<p><b>JULY 2020.</b></p>



## ACTION PLAN AND IMPLEMENTATION TIMELINE FOR PUBLIC PRIVATE PARTNERSHIP MODEL

<b>Project Title: 2nd phase of toplification of Srebrenik Municipality, Biomass Heating plant and distribution network</b>								
<b>Project Goal:</b> Biomass heating plant reconstructed, heat distribution network builded and residential and public buildings connected to new biomass heating plant.								
<b>Long-term Impact or Outcome:</b> <ul style="list-style-type: none"><li>Produced 2.000 kWh/y energy from biomass, Increased air quality, Improved quality of life, Created new jobs.</li></ul>								
No	Activity	Implementer	2018	2019	2020	2021	2022	2023-30
1	Designing Main project of biomass heating plant for producing of energy from biomass and distribution to consumers in srebrenik zone II	COMPOSE Project team						
2	Preparation of documents (location permit, construction permit, feasibility study, procurement documents, public call, etc.)	Municipal service for planing and environmental protection						
3	Announcement of public call for selection of private partners	Municipal service for local economic development						
4	Consideration of received applications through a public call and negotiating with potential private partners	Municipal service for local economic development						
5	Signing contracts and starting the implementation of the investment in biomass heating plant and heat distribution network	Mayor						
6	Between 2023 – 2030 Biomass heating plant reconstructed and operated, and also heat distribution network builded: Private partner operate district heating sistem in Srebrenik Municipality. We estimate that by 2030 as a reference year we will use total capacizy of installed biomass heating plants that will save usage of 6000t coal as a fossil fuel.	Private parner and Srebrenik Municipality						







## INVESTMENT PLAN AND POSSIBLE FINANCIAL SOURCES FOR PUBLIC PRIVATE PARTNERSHIP MODEL

Project Title: 2nd phase of toplification of Srebrenik Municipality, Biomass Heating plant and distribution network								
No	Activity	TOTAL PRICE / €  (VAT not included)	FINANCIAL SOURCES					
			Municipal Budget	Tuzla Canton Budget	Country or entity level	Loans	Private capital	EU Funds
1	Designing Main project of biomass heating plant for producing of energy from biomass and distribution to consumers in srebrenik zone II	12.000,00						COMPOSE PROJECT
2	Preparation essential documents (location permit, construction permit, feasibility study, procurement documents, public call, etc.) and announcement of public call for selection of private partners	6.000,00						
3	Reconstruction of object and building new Biomass heating plant and equipment	327.479,62						
4	Wood chips special transport vehicle	48.572,73						
5	Heat distribution network	256.217,82						

