

Příloha 6. Evaluační matice

Usage of renewable sources of energy for district heating system in the village of Nemila, B&H

Q	SQ	Question/sub-question	Indicator	Baseline	Type	Design	Data source(s)	Data collection instrument
1. Relevance								
1.1. What are the main priorities of BaH in the area of sustainable economic growth and sustainable management of natural resources?								
	1.1-1	What are the main BaH priorities in the area of sustainable economic growth related to the sector of energy production and supply?	Priorities from strategic documents related to sustainable economic growth	NO	Descriptive	Non-experimental, one-shot	Secondary data	DS, KII
	1.1-2	What are the main BaH priorities in the area of the sustainable management of natural resources related to the sector of energy production and supply?	Priorities from strategic documents related to sustainable management of national resources	NO	Descriptive	Non-experimental, one-shot	Secondary data	DS, KII
1.2. How were the project development activities linked with the strategic development cooperation documents of the CR and of BaH?								
	1.2-1	To what extent were the project activities in accordance with priorities and goals of Czech development cooperation (CZDC)?	Degree of compliance with the Development Cooperation Program BaH 2011 - 2017 in the sector of production and supply of energy in BaH Degree of compliance with the Development Cooperation Strategy of the CR 2010 - 2017	YES	Descriptive	Non-experimental, one-shot	Secondary data	DS, KII
	1.2-2	To what extent were the project activities in accordance with priorities of strategic documents of BaH?	Degree of compliance with the Strategic framework of BaH 2010 - 2014 (in the sector of production and supply of energy)	YES	Descriptive	Non-experimental, one-shot	Secondary data	DS

1.3. To what extent are the project outputs relevant in terms of BaH international legal obligations?						
1.3-1 To what extent are project outputs relevant to BaH obligations to EU?	Relevance rate with BaH obligations listed in the Program for approximation of EU environmental legislation BaH	YES	Descriptive	Non-experimental, one-shot	Secondary data	DS, KII
1.3-2 To what extent are project outputs relevant to BaH obligations in the field of green house gas emissions (GHG) reduction (except EU)?	Relevance rate with the UN Framework Convention on Climate Change, Relevance rate with Kyoto protocol	YES	Descriptive	Non-experimental, one-shot	Secondary data, MZPT	DS, KII
1.4. Are the project results relevant in terms of SDGs as to available and clean energies (SDG 7)?						
1.4-1 Are the project results relevant in terms of SDG 7?	Increase in % of population with primary reliance on renewable energy (SDG indicator) 7.2.1)	NO	Descriptive	Non-experimental, one-shot	Secondary data	DS
2. Efficiency						
2.1. Were the implementer's procedures cost-effective, namely in comparison with similar procedures of other donors' projects?						
2.1-1 Which are any alternative/cheaper procedures used by other donors for heating systems based on sustainable energy sources?	Comparison of cost of applied and alternative approaches	YES	Descriptive	Non-experimental, one-shot	Secondary data, GRIJANJE, BCZT, Donors, ENVIROS	DS, KII, EJ, comparison study
2.1-2 What is the energy efficiency of the implemented technology in comparison with other similar projects?	Energy efficiency of the implemented technology is same or higher in comparison with other similar projects	YES	Descriptive	Non-experimental, one-shot	Secondary data, GRIJANJE, EKO-CZT, BCZT, Donors	DS, KII, EJ, comparison study
2.2. How did the involvement of Czech and of local capacities in the project function?						
2.2-1 How did the cooperation function between Czech and local partners in BaH?	Scope of beneficial cooperation for the implementation and sustainability	NO	Descriptive	Non-experimental, one-shot	Secondary data, CZDA, ZU Sarajevo, EKO-CZT, MU Zenica, LA Nemila	DS, KII
2.2-2 How did the communication function between Czech and local partners in BaH?	Scope of beneficial communication for the implementation and sustainability	NO	Descriptive	Non-experimental, one-shot	Secondary data, CZDA, ZU Sarajevo, EKO-CZT, MU Zenica, LA Nemila	DS, KII
2.2-3 How did the coordination function between Czech and local partners in BaH?	Scope of beneficial coordination for the implementation and sustainability	NO	Descriptive	Non-experimental, one-shot	Secondary data, CZDA, ZU Sarajevo, EKO-CZT, MU Zenica, LA Nemila	DS, KII

2.2-4 What were the main problems in cooperation?	Extent to which problems affected implementation and sustainability	NO	Descriptive	Non-experimental, one-shot	CZDA, Secondary data, ZU Sarajevo, ECO-CZT, GRIJANJE, MU Zenica, ENVIROS	KII, DS, GD
2.3. Is there any effective and functional link between the project and other donors' projects?						
2.3-1 What was the added value of the interconnection of the project with activities of other donors?	Extent to which results enhanced	NO	Descriptive	Non-experimental, one-shot	Secondary data, CZDA, ZU Sarajevo, GRIJANJE, EKO-CZT, MU Zenica	DS, KII
2.4. Did the project reports provide sufficient information about the project's realization?						
2.4-1 Did the project reports provide information about outcomes?	Comparison with Logframe, annual and final reports	YES	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, ENVIROS	DS, KII, GD
2.4-2 Did the project reports provide information about fulfilling the project schedule?	Comparison with project schedule	YES	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, ENVIROS	DS, KII
2.4-3 Did the project reports provide transparent information about budget and expenditure?	Comparison with itemized project budget based on unit cost	YES	Descriptive	Non-experimental, one-shot	Secondary data, EKO-CZT, ENVIROS	DS, KII
2.4-4 Did the project reports provide information about occurred problems and their solutions?	Identification and monitoring of assumptions and risks and mitigation measures reflected in project reports	YES	Descriptive	Non-experimental, one-shot	Secondary data, EKO-CZT, ENVIROS	DS, KII
2.5. Is it possible to identify any good practice examples (e.g. in comparison with other donors' projects)?						
2.5-1 To what extent is the project approach replicable?	Feasible conditions of replicability	NO	Descriptive	Non-experimental, one shot	Secondary data, ZU Sarajevo, EKO-CZT, MU Zenica, Donors, RAZ, ENVIROS, MTI	DS, KII, EJ
2.6. How was the project monitored? (progress and financial monitoring)						
2.6-1 How was the project monitored by Czech partners	Description of monitoring procedures by CZDA and ZU	NO	Descriptive	Non-experimental, one shot	CZDA, ZU Sarajevo, Secondary data, ENVIROS	DS, KII
2.6-2 How was the project monitored by partners BaH	Description of monitoring procedures by MU Zenica	NO	Descriptive	Non-experimental, one shot	Secondary data, MU Zenica	DS, KII

3. Effectiveness

3.1. Had the evaluated project been sufficiently well elaborated and logically sequenced including well-identified objectives and impacts and realistic assumptions?

3.1-1 Was the logical structure well formulated?	Logical links, SMART indicators and assumptions/risks are contained in project documents	YES	Descriptive	Non-experimental, one-shot	Secondary data, EKO-CZT, CZDA	DS, KII
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3.2. In which way have been the objectives and results of the project achieved?

3.2-1 To what extent was central heating introduced in Nemila?	3 heat transfer stations supplying selected public buildings in operation 90 private buildings connected to the central heating system	YES	Descriptive	Non-experimental, one-shot	Secondary data, MU Zenica, EKO-CZT, GRIJANJE, RAZ, ENVIROS	DS, KII, GD, TW
3.2-2 What were the selection criteria for connections to the central heating system?	Compliance rate with tender documentation and consecutive approved changes to the project, feasibility of connections	NO	Descriptive	Non-experimental, one shot	Secondary data, MU Zenica, EKO-CZT, ENVIROS	DS, KII, GD
3.2-3 Were the outputs as specified in the tender documentation generated? (outputs 1 - 4)	Feasibility study, boiler output, scope and parameters of hot water pipes, number of transmission stations, sources and transmission station control, total installed power input of all objects	YES	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, GRIJANJE, ENVIROS	DS, KII, GD, V&O
3.2-4 Is the boiler house operated in optimal regime (capacity vs. reality)?	Number of days operated per year, operated boiler output according to needs of connected buildings and outside temperatures. Possibilities for heat consumption regulation	NO	Descriptive	Non-experimental, one shot	Secondary data, GRIJANJE	DS, KII, V&O, TW, comparison study

3.3. What particular features have the local partners adopted from the project's practice (newly created capacities or competences, etc.)?

3.3-1 What specific knowledge did you gain during the project implementation?	The operator's staff of the boiler house is familiar with the operating and maintenance requirements. The operating rules in the local language are available to the operator and the boiler house manager.	NO	Descriptive	Non-experimental, one shot	Secondary data, GRIJANJE	DS, KII
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3.3-2 To what extent are the 4 employees (participants of the thematic excursion) involved in the boiler operation?	The 4 participants are working in the operation or management of boiler house.	NO	Descriptive	Non-experimental, one shot	GRIJANJE	KII, GD
4. Actual and anticipated impacts						
4.1. What are the final objectively verifiable impacts of the project in relation to the intended impacts?						
4.1-1 To what extent have connections to the central heating system replaced traditional sources?	Number and % of objects with removed/replaced/partially replaced individual heating sources	NO	Normative	Non-experimental, one-shot	MU Zenica, connected HH, connected ORG	KII, V&O, QS
4.1-2 Why do people and organizations still use their traditional heating?	Stated reasons indicate complementarity rather than substitutions	NO	Descriptive	Non-experimental, one-shot	MU Zenica, LA Nemila, GRIJANJE	GD, KII,
4.2. To what extent did the project help to reduce environmental pollution in the area of Zenica?						
4.2-1 To what extent has air quality improved in Nemila and its surroundings?	Decrease of air pollution in emissions of dust, SO ₂ , NO _x , CO, CO ₂ , organic substances	YES	Normative	Non-experimental, before and after	Secondary data, MUP-ZD, GRIJANJE, LA Nemila	DS, KII, EJ
4.2-2 Do the inhabitants in Nemila and its surroundings register any decrease in odour?	Share of positive responses higher than 90 %	NO	Descriptive	Non-experimental, before and after	MU Zenica, GRIJANJE, connected HH, MUP-ZD	KII, QS
4.3. Which external factors affected the results and impacts of the project in positive/negative ways? Were those effects anticipated in the risk analysis of the project?						
4.3-1 Which external factors helped to achieve objective and results of the project?	Overview of factors that facilitated achievements	NO	Descriptive	Non-experimental, one shot	MU Zenica, EKO-CZT, GRIJANJE, RAZ, CZDA, ZU Sarajevo	KII, GD
4.3-2 Which external factors obstructed achieving project objectives and results?	Overview of barriers/ problematic factors	NO	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, GRIJANJE, CDZA, ZU Sarajevo	DS, KII, GD
4.3-3 How have the obstructing factors described under 4.2-3 been overcome?	Description of how the barriers have been overcome/ what efforts were made to overcome them	NO	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, GRIJANJE, CZDA, ZU Sarajevo	DS, KII, GD
4.3-4 Have these factors been identified?	Degree of consistency between identified risks and actual impediments	NO	Descriptive	Non-experimental, one shot	Secondary data	DS

4.4. Did any other unintended positive or negative impacts occurred? (e.g. as to inhabitants' quality of life, employment improvement, economic growth of the region)						
4.4-1 To what extent has the project contributed to increased employment?	Employment created by project. Evidence of community members participation in project activities (GGO6)	YES	Cause and effect	Non-experimental, before and after	Secondary data, MU Zenica, GRIJANJE, RAZ, Suppliers, LA Nemila	DS, KII
4.4-2 How did the project contribute to economic development?	Specific examples mentioned by respondents	NO	Descriptive	Non-experimental, one shot	MU Zenica, RAZ, LA Nemila	KII
4.4-3 Did the activities or impact of the project reached the target group beyond the original intention?	Specific examples mentioned by respondents	NO	Descriptive	Non-experimental, one shot	RAZ, Suppliers, ZU Sarajevo	KII, GD
4.4-4 Did the project results has some other impacts on Nemila inhabitants' quality of life?	Specific examples mentioned by respondents (e.g. change in comfort, change in heating cost)	NO	Descriptive	Non-experimental, before and after	Secondary data, Nemila population, LA Nemila	DS, KII, TW
4.5. What follow-up project's initiatives have the local governments or any other target groups implemented?						
4.5-1 What follow-up project's initiatives have been implemented by the local organisations?	Specific examples mentioned by respondents	NO	Descriptive	Non-experimental, one-shot	Secondary data, MU Zenica, GRIJANJE, RAZ, LA Nemila	DS, KII, V&O
4.5-2 What follow-up project's initiatives have been implemented by Nemila polulation?	Specific examples mentioned by respondents (e.g. installing insulation, recommending connection to CZT to nonconnected neighbours)	NO	Descriptive	Non-experimental, one-shot	Secondary data, MU Zenica, connected HH, LA Nemila	DS, KII, V&O, QS
5. Sustainability						
5.1. Did the project have an elaborated phase-out strategy?						
5.1-1 Has a sustainability plan/phase-out strategy including time frame been agreed with partners and reflected in the project?	Degree of reflection in project documentation, degree of utilisation during phase-out of the project, agreed clear sustainability plan/phase out strategy included in the MOU	NO	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, GRIJANJE, MU Zenica, RAZ	DS, KII

5.2. To what extent were local partners (or responsible state institutions) involved in the project preparation? What is the sustainability of the project from the perspective of its recipients' ownership?						
5.2-1 How did you participate in the project preparation?	Degree of involvement in the decision making during project preparation. Evidence of woman or community members participation in project consultations (GGO6)	NO	Descriptive	Non-experimental, one shot	GRIJANJE, MU Zenica, RAZ, MUP-ZP, women, connected HH, LA Nemila	KII, GD, QS
5.2-2 How has been ensured the ownerships of the supplied technology, operational procedures, and gained knowledge of how to operate the boiler house?	Description of the ownerships aspects	NO	Descriptive	Non-experimental, one-shot	Secondary data, MU Zenica. RAZ, GRIJANJE	DS, KII
5.2-3 What is the readiness of local partners to continue operation of the heating system?	Plans at all levels include adequate support to operation, management and maintenance. Evidence of interest/follow up from project stakeholders (particularly beneficiaries) on project results and their sustainability (GGRL3).	NO	Descriptive	Non-experimental, one-shot	Secondary data, MU Zenica. GRIJANJE	DS, KII
5.3. Are the project outputs in accordance with the legislative and normative framework of Bosnia and Herzegovina?						
5.3-1 Did the boiler house operator obtained all relevant permits and approvals from authorities?	List of relevant permits (land use, construction, environmental, put in operation) (GGO26)	NO	Descriptive	Non-experimental, one shot	Secondary data, GRIJANJE	DS, KII
5.3-2 Does the boiler house operator operate the combustion technology and related operations in accordance with permitted conditions and norms?	Statements listed in inspection reports, conclusion of the protocol on emissions measurements, statement of relevant inspection authority	NO	Descriptive	Non-experimental, one shot	Secondary data, MUP-ZP, GRIJANJE	DS, KII
5.4. Were the chosen technological solutions appropriate in terms of sustainability?						
5.4-1 To what extent is the technological solution sustainable?	Degree of sustainability in local conditions: Expected lifetime of the boiler, distribution network, heating bodies in the objects. Number and extent of technology break downs	NO	Descriptive	Non-experimental, one shot	GRIJANJE, EKO-CZT	KII, V&O

5.5. To what extent did the project succeed as to the risk reduction on market development of fuel (biomass/wood chips)? To what extent has the boiler house operator managed to ensure sufficient amount of suitable fuel considering the biomass market development?

5.5-1 Has there been sufficient amount of the required biomass fuel during the heating season?	Availability of the necessary amount of fuel during heating season, price of the fuel in comparison with common price in BaH	NO	Descriptive	Non-experimental, one shot	GRIJANJE, Suppliers	KII
5.5-2 Does the quality of supplied biomass fuel comply with technological requirements of the boiler house?	Availability of the biomass fuel in the required quality. Period how long can boiler function without break with less quality biomass. List of operational problems related to low quality biomass	NO	Descriptive	Non-experimental, one shot	GRIJANJE, Suppliers	KII
5.5-3 Is there a systematic management mechanism for reforestation in place to sustain the resource?	Effective mechanism in place	NO	Descriptive	Non-experimental, one-shot	ME-ZD, RAZ, Secondary data	DS, KII, GD

5.6. How did the additional reconstruction after 2014 floods strengthen the overall project sustainability?

5.6-1 What aspects of the reconstruction contributed to increased sustainability of the project?	List of aspects contributing to increased sustainability	NO	Descriptive	Non-experimental, one shot	Secondary data, EKO-CZT, GRIJANJE	DS, KII, V&O
5.6-2 What flood protection measures were introduced to ensure operation of the boiler house and heat distribution network?	Flood protection measures ensures safety of operation in case of 50 years flood. The heating plant has insurance for the natural disaster.	NO	Descriptive	Non-experimental, one shot	Secondary data, MU Zenica, GRIJANJE, ENVIROS	DS, KII, V&O

5.7. Does the recipient/beneficiary have the financial, human and organizational capacity to further operate and maintain the project facilities?

5.7-1 Does the staff trained under the project continue to work in boiler house operation?	All trained staff in place and working	NO	Descriptive	Non-experimental, one shot	Secondary data, GRIJANJE	DS, KII
5.7-2 To what extent does the income cover the cost for operation, maintenance, repairs, depreciation, and other related cost?	Full cost recovery from fees and subsidies	NO	Normative	Non-experimental, one shot	Secondary data, MU Zenica, GRIJANJE	DS, KII
5.7-3 How does the division of responsibilities and rights cover the needs for further operation and maintenance?	Organisational scheme of boiler house operation with description of responsibilities and rights	NO	Descriptive	Non-experimental, one shot	Secondary data, GRIJANJE	DS, KII

6. Follow-up cooperation

6.1. Are there any project's follow-up activities of the implementers (including those of subcontractors) beyond the Czech bilateral cooperation (e. g. involvement of Czech subjects into other donors' projects, into investment cooperation)?

6.1-1 How has the implementation of this project influenced the opportunities of the Czech suppliers on the foreign (Balkan) market?	Number of contracts from foreign contractors, initiated by the project	NO	Descriptive	Non-experimental, one shot	EKO-CZT, ENVIROS	KII
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6.2. Have any other municipalities or any other public institutions shown their interest in implementation of the same technology, e.g. interest based on the direct experience of the Zenica town with this project?

6.2-1 What is the potential of implementation of the same technology in other municipalities/towns in BaH?	Documented demands and/or orders/contracts	NO	Descriptive	Non-experimental, one shot	EKO-CZT, RAZ	KII
6.2-2 Have any parties shown interest in replicating the technology on a commercial basis?	List of interested parties and evidence of their interest	NO	Descriptive	Non-experimental, one shot	EKO-CZT, RAZ	KII

7. System knowledge findings

7.1. Will the topics of the project still be relevant from the perspective of medium-term and long-term needs of Bosnia and Herzegovina (3 – 5 years)?

7.1-1 What are the mid-term and long-term plans in BaH in the energy production and supply sector, sub-sector heat production from renewable sources?	Degree of relevance in relation to mid-term plans, Degree of relevance in relation to long-term plans	NO	Descriptive	Non-experimental, one-shot	Secondary data, ME-ZD, MZPT, ZU Sarajevo	DS, KII
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7.2. Are there any system recommendations as to the focus adjustment or as to the effectiveness increase of the further development projects in Bosnia and Herzegovina (or in any other countries or sectors respectively)?

7.2-1 How can the effectiveness of CZDC projects be increased?	Evaluation findings, respondents' replies	NO	Descriptive	Non-experimental, one-shot	RAZ, ZU Sarajevo, ENVIROS, EKO-CZT	KII
7.2-2 What can be options to the current "CZDC Concept for 2010 - 2017" for further CZDC prioritization?	Evaluation findings, respondents' replies	NO	Descriptive	Non-experimental, one-shot	RAZ, MZPT, MUP-ZD, ME-ZD	KII

8. Cross-cutting principles of Czech development cooperation

8.1. To which extent the project contributed to improvement of environment in Nemila village, Zenica municipality?						
8.1-1 To what extent the project contributed to improvement of environmental components in Nemila village and Zenica municipality?	Impact on air - Indicators listed under subquestion 4.2-1 (EERL20, EERL21, EEO23, EERN20, EER25, EERL22); Impact on water efficient used of water consumption (EEO40, EERN42); Production of waste (EER53, EER54, EER65); Renewable energy (EEO70, EEO71, EER73, EER71); Project used local resources (EEO13); Environmental enforcement (EGR6)	YES	Descriptive	Non-experiemntal, one-shot	Secondary data, MUP-ZD, MU Zenica, GRIJANJE, LA Nemila	DS, KII
8.2. Have there been recorded any negative impact on the environment in relation to the projects realisation and its impacts?						
8.2-1 Have there been recorded any negative impact on the environment in relation to project implementation and its impacts?	Land converted to other uses as consequence of the project (EEO3, EERN2). Indicators under subquestion 8.1-1 if there is evidence of any negative impact.	YES	Descriptive	Non-experiemntal, one-shot	Secondary data, MUP-ZD, RAZ, MU Zenica, GRIJANCE, LA Nemila	DS, KII
8.3. To what extent was in the project reflected the principle of good (democratic) governance?						
8.3-1 To what extent were key actors involved in decision making during the project preparation and implementation?	Overview of key actors involved in decision making during project preparation and implementation. Degree of involvement of individual actors (indicator under subquestion 5.2-1).	NO	Descriptive	Non-experiemntal, one-shot	Secondary data, MUP-ZD, MU Zenica, GRIJANJE, EKO-CZT, RAZ, LA Nemila, CZDA, ZU Sarajevo	DS, KII
8.3-2 Have you been consulted during selection of private houses and municipal buildings for connection to central heating?	Transparent selection criteria for connection to central heating. Evidence of consultations carried out by project recipient with other project key stakeholders (GGO4).	NO	Descriptive	Non-experiemntal, one-shot	Secondary data, RAZ, connected HH, connected ORG, LA Nemila	DS, KII, QS

8.4. To what extent was in the project reflected the principle of the respect for the human rights of beneficiaries, including equality between men and women?						
8.4-1 How was the principle of equality between men and women reflected in the project cycle?	Indicator under subquestion 5.2-1. Statements of involved parties - woman had equal benefits from project generated services (GEO2, GERL1). Evidence of gender consideration in project documentation	NO	Descriptive	Non-experiemntal, one-shot	RAZ, MU Zenica, Nemila popul, woman, man, GRIJANJE	DS, KII, GD
8.4-2 How was the gender equality principle considered during selection of private houses for connection to central heating?	Degree of consideration of gender equality in monitoring and yearly project reports, statements of respondents.	NO	Descriptive	Non-experiemntal, one-shot	Reply to Q 8.3-2, Women, men	DS, KII, GD
8.4-3 How is poverty orientation mainstreamed in the project?	Consideration of socio-economic aspects in prioritizing connections and defining tariffs. Equal benefits from projects supported infrastructure to all Nemila population (HRO28, HRR20).	NO	Descriptive	Non-experiemntal, one-shot	Secondary data, EKO-CZT, CZDA, MU Zenica	DS, KII

9. External presentation (visibility)

9.1. Were the requirements for the project visibility in BaH fulfilled?						
9.1-1 How was ensured the external presentation of the project?	List of implemented visibility activities	NO	Descriptive	Non-experiemntal, one-shot	Secondary data, EKO-CZT, RAZ, MU Zenica	DS, KII, TW, V&O
9.1-2 How did you get to know about the project (central heating system)?	Number of respondents, which heard about the project (CZT) from newspapers, meetings	NO	Descriptive	Non-experiemntal, one-shot	Secondary data, RAZ, connected HH, LA Nemila	DS, KII, QS



Abbreviations in the evaluation matrix

BCZT	Other biomass fired central heating plant
connected HH connected	connected households to central heating
ORG	connected organisations to central heating
CZDA	Czech Development Agency
Donors	Other donors funding project in the sector of heat production and distribution
EKO-CZT	Consortium of implementing companies „EKO-CZT Nemila“(firmy MEVOS spol. s r.o., EVECOCO Brno, s.r.o., VHS Brno, a.s.)
ENVIROS	expert support of CZDA
FMoEMI	Federal Ministry of Energy, Mining and Industry
GRIJANJE	GRIJANJE d.o.o. Zenica – operator of heating plant
LA Nemila	Local authority Nemila
ME-ZD	Ministry of economy kanton Zenica Dobož
MFA	Ministry of foreign affairs CR
MTI	Ministry of Trade and Industry
MU Zenica	Municipal authority Zenica
MUP-ZD	Ministry of spacial planning, transport, communication and environment kanton Zenica Dobož
MZPT	Federal Ministry of Environment and Turism in BaH
Nemila popul	Nemila population
RAZ	Zenica development agency
SMART	Specific, Measurable, Achievable, Relevant, Time-bound
Suppliers	Suppliers of biomass
ZÚ Sarajevo	Czech Embassy in Sarajevo

Data collection instruments

DS	Data search
EJ	Expert Judgement
GD	Group discussison
KII	Key informant interview
QS	Questionnaire
TW	Transect walk
V&O	Visits and observation