



Republic of Serbia Deputy Prime Minister Ministry of Mining and Energy

Project Document

Project Title: Preparatory Activities for the Programme "Energy Efficiency in Central Government Buildings"

Project Award Number: 00122808 Project Output Number: 00118272

Implementing Partner: UNDP Serbia

Start Date: 21st May 2021 End Date: 21st May 2023

PAC Meeting date: 7th April 2021

Brief Description

The United Nations Development Programme (UNDP), in partnership with the Ministry of Mining and Energy (MME) of the Republic of Serbia (RS) and Council of Europe Development Bank (CEB) and in close cooperation with the Administration for Joint Services of the Republic Bodies (UZZPRO) will implement the project intended for preparatory activities (PA) for the Programme: "Energy Efficiency in Central Government Buildings (EECGB)".

The proposed multiannual programme is aimed at energy efficiency renovation (EER) of central government buildings (CGB) as per Article 5 of the Energy Efficiency Directive (2012/27/EU) (EED). The EECGB Programme encompasses renovation of up to 28 central government buildings in Belgrade of total 208.000 m² out of which 50% are protected as heritage buildings. The Programme should result in minimum 30% of primary energy consumption reduction, some 20% of CO₂ reduction, improved working conditions, improved safety on work and app. 29% savings in operating cost for energy. In addition, the Programme should contribute to the protection and preservation of cultural heritage buildings.

For the EER of the said 28 buildings, an EUR 40 million loan from Council of Europe Development Bank has been negotiated and agreed by the Government of Serbia and the MME, approved by the CEB Board of Directors in November 2019, signed by the minister of finance of RS in March 2020 and ratified by the Serbian Parliament in November 2020. It is envisaged that the EECGB Programme will be implemented by MME and UNDP, in cooperation with UZZPRO throughout the period of 5 years. Programme is expected to start in in the fourth quarter of 2021. Preparatory activities will be financed from a grant provided by CEB Trust Fund donors, namely Kingdom of Spain and Republic of Slovakia, through CEB to the MME, i.e. UNDP.

The main preparatory activities envisaged by the project are: procurement of technical services, elaboration of baseline energy certificates for selected buildings (as required by the Law), elaboration of detailed energy audits (DEA) of buildings, elaboration of feasibility studies (FS) for the selected buildings and elaboration of design documents of different level of complexity as per results of DEA.

Contributing Outcome: CPD (2021-2025) COOPERATION FRAMEWORK (OR EQUIVALENT) OUTCOME INVOLVING UNDP #3: Serbia adopts and implements climate change and environmentally friendly strategies that increase community resilience, decrease carbon footprint and boost the benefits of national investments UNDP Strategic Plan 2018-2021 Outcome 2: Accelerate structural transformations for sustainable development Indicative Output(s) with gender marker: GEN1 Total EUR 900,000.00 resources (USD 1,055,099.65) required: EUR 900,000.00 (USD 1,055,099.65) Total Donor (Ministry of resources EUR 900,000.00 Mining and allocated: (USD 1,055,099.65)* Energy) In-Kind: Unfunded: **CEB** Loan EUR 40,000,000.00

*900,000.00 EUR calculated as per 1 April 21 UNORE

Agreed by (signatures):

Ministry of Mining and Energy	UNDP
37240 3 June gustur Professor Zorana Z. Mihajlović, PhD Deputy Prime Minister and Minister of Mining and Energy	Francine Pickup Resident Representative
Date: 18.5.2021.	Date: 21.5 1021

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List of Acronyms and Abbreviations

AC	Air-conditioning
ACP	Advisory Committee on Procurement
BAU	Business as Usual
BMU	Building Management System
Сар	Capita
САР	Contract, Asset and Procurement committee
CEB	Council of Europe Development Bank
CCIS	Chamber of Commerce and Industry of Serbia
CGB	Central Government Buildings
CEOP	Central Register of Integrated Procedures/Centralna evidencija objedinjenih
CLOP	procedura
CREP	Central Register of Energy Passports/Centralni registar energetskih pasoša
DEA	Detailed Energy Audit
DH	District Heating
DRR	Deputy Resident Representative
EE	Energy Efficiency
EED	Energy Efficiency Directive
EER	Energy Efficiency Renovation
EMIS	Energy Management Information System
EnC	Energy Community
EPBD	Energy Performance of Buildings Directive
EECGB	Energy Efficiency in Central Government Buildings
EU	European Unit
FE	Final Energy
FS	Feasibility Study
GA	Grant Agreement
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFEC	Gross Final Energy Consumption
GHG	Greenhouse Gases
GPEC	Gross Primary Energy Consumption
HFO	Heavy Fuel Oil
HVAC	Heating Ventilation and Air-conditioning
HQ	Head Quarters
IBRD	International Bank for Reconstruction and Development

IDA	International Development Association
IFI	International Financing Institution
ΙΡΑ	Instrument for pre-accession assistance
IT	Information Technologies
ITB	Invitation to Bid
LFO	Light Fuel Oil
LTA	Long Term Agreement
LoA	Letter of Agreement
KfW	Die Kreditanstalt für Wiederaufbau/German Development Bank
EIB	European Bank for Investments
M&E	Monitoring and Evaluation
ΜCTI	Ministry of Construction, Transport and Infrastructure
MEP	Ministry of Environmental Protection
MME	Ministry of Mining and Energy
МоМ	Minutes of Meeting
MRV	Monitoring, Reporting and Verification
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organization
NPD	National Project Director
NZEB	Nearly Zero Energy Buildings
ΟΑΙ	Office of Audit and Investigations
OG RS	Official Gazette of the Republic of Serbia
ΡΑ	Preparatory Activities
ΡΑΟ	Project Appraisal Committee
РВ	Project Board
PE	Primary Energy
PEF	Ratio Primary to Final Energy
PIU	Project Implementation Unit
DOC	Program for Implementation of Energy Sector Development Strategy of the
POS	Republic of Serbia
POPP	Programme and Operations Policies and Procedures
PSO	Procurement Support Office
PUC	Public Utility Company
RACP	Regional Advisory Committee on Procurement
R&D	Research and Development institutions
RfP	Request for Proposals
RfQ	Request for Quotations
RR	Resident Representative
RS	Republic of Serbia
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РРР	Purchasing Power Parity
PR	Public Relations
PUC	Public Utility Company
QA	Quality Assurance
	The Standard Basic Framework Agreement between the Republic of Serbia
SBFA	and the
	United Nations Development Programme
SCA	Spanish Social Cohesion Account
SDG	Sustainable Development Goal(s)
SFRJ	Socialist Federal Republic of Yugoslavia
SDG	Sustainable Development Goals
SEEP	Serbian Energy Efficiency Project
SES	Social and Environmental Standards
SESP	Social and Environmental Screening Procedure
SIGA	Slovak Inclusive Growth Account
ТА	Technical Assistance
ToR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UZZPRO	Administration for Joint Services of the Republic Bodies (Uprava za zajedničke
UZZF NU	poslove republičkih organa)
WBIF	Western Balkans Investment Framework

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Energy and Physical Units

Energy source	Physical unit	Label
Coal	Ton	t
Wood for heating	Cubic meter or meter	m ³ or m
Oil and oil derivatives	Ton or cubic meter	t or m ³
Natural gas	Standard cubic meter (at: 5°C, 1013,25 mbar, Hd=33338 kJ/m ³)	Sm ³

To: From:	τJ	Gcal	Mtoe	MBtu	GWh
Terajoule (TJ)	1	238.8	2.388 x 10 ⁻⁵	947.8	0.2778
Gigacalorie (Gcal)	4.1868 x 10 ⁻³	1	10 ⁻⁷	3.968	1.163 x 10 ⁻³
Mega tons of oil equivalent (Mtoe)	4.1868 x 10 ⁴	10 ⁷	1	3.968 x 10 ⁷	11,630
Million British thermal unit Btu (MBtu)	1.0551 x 10 ⁻³	0.252	2.52 x 10 ⁻⁸	1	2.931 x 10 ⁻⁴
Gigawatt hour (GWh)	3.6	860	8.6 x 10 ⁻⁵	3,412	1

I. DEVELOPMENT CHALLENGE

Situation Analysis

 Inefficient use of energy, originating predominantly from fossil fuels, represents a major development concern in Serbia, as well as a large source of GHG emissions. Although the energy consumption of primary energy per capita is not significant, energy consumption per every unit of GDP is significantly higher than that in the EU (4.5 times higher than in Germany, 4 times higher than in France, 3 times that of Slovenia and almost twice that of Romania in 2015)¹. Energy sector GHG emissions account for 80% of the national GHG emissions.

Table 1: Republic of Serbia - key energy indicators in 2015^{1,2}

2015		
Total primary energy (PE)	Mtoe	14,797
Total final energy (FE)	Mtoe	8,681
FE/PE	%	51
PE consumption per capita	ktoe/cap.	2,055.44
Electricity consumption per capita	kWh/cap	3,761
PE consumption per unit of GDP (2010)	toe/10 ³ USD	0.37
PE consumption per unit of GDP (2100) PPP	toe/10 ³ USD	0.17
Import dependency	%	27.7
Total capacity of the power sector	GW	7.34
Households share in electricity consumption	%	51
Total capacity of DH systems in 55 cities	GW	6.4
Total capacity of industrial energy plants	GW	6.3
CO ₂ Emission	Mt CO ₂	44.51
CO ₂ Emission per unit of PE	tCO ₂ /toe	3.02
CO ₂ Emission per capita	tCO ₂ /cap.	2.08
CO ₂ Emission per unit of GDP (2010)	tCO ₂ /10 ³ USD	1.11
CO ₂ Emission per unit of GDP (2010) PPP	tCO ₂ / 10 ³ USD	0.51

¹ International Energy Agency: <u>https://www.iea.org/countries/Serbia/</u>

² Energy Balance of the Republic of Serbia for 2017, OG RS110/16, <u>https://mre.gov.rs/doc/efikasnost-izvori/EN%20BILANS%20ZA%202017%2012.12.2016.pdf</u>

Gross final energy consumption (GFEC) reached 8.681 Mtoe in 2015² in the following consumption sectors: industry (26.5%), transport (25.2%) and "other" (buildings, agriculture, etc.) totalling 48.3%. The largest share in the consumption sector "other" accounts for buildings (residential, commercial, public) and is estimated at 38% of GFEC.



Figure 1: Structure of final energy consumption by sectors of consumption in 2015²

3. Prior to the economic and financial crisis, GFEC grew on average 3.5% annually, following GDP growth. In 2009, the economic contraction led to a decline of 8% in GFEC, but energy demand continued to pick up again as the country recovered. In 2014 the rise in consumption was briefly interrupted after the catastrophic floods but quickly reached the pre-floods pace. High growth in energy consumption has been fuelled by growth in the transport and industry sectors, although energy consumption also increased in the building sector, reflecting the rise in the living standard (including increased use of appliances and ACs).



Figure 2: Key macroeconomic indicator: GDP growth over the period 2003-2017³

³ Current macroeconomic developments, November 2016, Ministry of Finance of the Republic of Serbia



Figure 3: Gross final energy consumption over in the period 2000-2017⁴

- 4. The total building stock in Serbia is estimated to be 245 million m² of gross floor area⁵. The majority of buildings (app. 50%), are single-family houses in both urban and rural environments. It is also estimated that app. 90% of building stock is concentrated in cities and towns. The predominant building sector is residential, with almost 200 million m², followed by the public sector, with some 27 million m² in all categories, and commercial, with some 18 million m².
- 5. The public sector's building stock includes several sub-sectors out of which the most significant ones are health and social care facilities with some 4 million m², education facilities (including kindergartens and higher education) with some 4.31 million m² and administrative buildings (central and provincial government and municipal buildings) with some 12 million m².
- 6. Heating accounts for the largest share of energy consumptions in buildings. Therefore, the most energy-saving potential is associated with the reduction of heat demand. Many studies have pointed out that Serbia has a large potential for energy efficiency improvements and GHG emission reduction in its ageing building stock, primarily resulting from the fact that major part of its building stock is buildings built during the '70s and the '80s of the last century, characterized by the reinforced concrete frame building structure, brick walls without

⁴ Progress Report on the Implementation of the National Renewable Energy Action Plan of the Republic of Serbia for 2016 and 2017, Ministry of Mining and Energy of the Republic of Serbia

https://mre.gov.rs/doc/efikasnost-izvori/efikasnost/Progress-Report-on-Implementation-of-the-National-Renewable-Energy-Action-Plan-of-the-Republic-of-Serbia2018.pdf

⁵ National Building Energy Efficiency Study for Serbia: Market Assessment Report, The World Bank, October 2012

any thermal insulation, deteriorated wood/metal fenestration and worn-out thermal and other installations. This applies both to residential and public buildings.

- 7. When it comes to public buildings, significant potential for energy savings is related to heat supply systems, AC and ventilation systems. Most of the large public buildings have a central heating system which is either connected to the local DH system or local individual boilers. In the case of individual boilers (fired by different fuels incl. gas, LFO, HFO, and coal), heating installations are often in a rather poor condition, without properly insulated distribution lines and with poor controlling systems. In buildings connected to the local DH system frequent problem is lack of temperature control systems at the level of DH substation. Regardless of the heat source, the persisting problem related to indoor heating installation is a lack of temperature control and hydraulic balancing of the system. As a result, the efficiency of the heating systems is low, which coupled with poor building envelope thermal properties causes valuable energy to be wasted. The centralised AC and ventilation systems exist only in the largest buildings. Typically, such systems are obsolete and poorly maintained, therefore inefficient with significant electricity consumption. Given the predominant use of fossil fuel mix in public buildings, there is a large potential to decarbonize the fuel mix in the building sector by producing heat from renewable energy sources.
- 8. In regard to energy management, very few large public buildings have an operational automatic building management system (BMU). In addition, although mandatory for large buildings only some have introduced energy management system and appointed building energy manager who takes care of the energy consumption on a daily basis and performs other duties as required by the Law.
- 9. Although several building EER programmes have been implemented in the building sector in the last decade the large energy-saving potential remained untapped, mainly because such programmes, financed from the sovereign loans, were focused on the most urgent interventions in health, social care and educational facilities. For this reason, some categories of public buildings such as government administrative buildings or the whole residential sector were not included in EER programmes. Among the first and most noticeable programmes of this kind were SEEP1 (USD 25 mil) and SEEP2 (USD 30 mil), carried out in the period 2004-2013 and financed from the IDA-IBRD loan. The project objective was to improve energy efficiency in public buildings across Serbia including two large clinical centers and 90 public buildings (school, health-care and social-care institutions). After successful implementation of these projects, a similar approach has been used for financing EER of schools and social care institutions from KfW and EIB loans.
- 10. So far, the government has taken the most important steps in setting the legal and institutional framework for improving EE in the building sector, but despite these efforts, implementation of large-scale EE programs in the building sector is still missing and interventions have been sparse and of a small-scale nature. Persisting barriers prevent the realization of the vast savings potential, such as: a) price and tariff policies, as well as billing

method (in particular for district heating) resulting in no/low motivation of building owners/users to invest in EE improvements, b) disparity of energy prices, c) lack of investment capacity on the side of building owners/users (both private and public), d) lack of state incentives (financing and fiscal) for investments in EE in buildings, e) lack of dedicated financing facility such as energy efficiency fund, f) lack of technical capacities for conducting energy audits, elaboration of technical documentation and development of bankable projects, and g) low energy management activities in public buildings. In addition, insufficient information on building stock (including the information on energy and water consumption and the cost thereof) makes it difficult for the government to plan large-scale EER programmes.

Strategic Framework

National Strategic Framework

- 11. The Law on Energy (OG RS 145/2014) was adopted on 29th December 2014⁶. Starting from January 1, 2015, under the new Law on Energy, Serbia has been fully implementing all measures of the EU relevant to the sectors of gas, electric power and renewable energy sources, which made Serbia the first country in the region to transpose the Third Energy Package being the country's principal commitment under the Energy Community Treaty. During 2020, the Draft Law on Energy Efficiency and Rational Use of Energy was prepared. The law is currently in the parliamentary procedure and its adoption is expected in the first half of 2021.
- 12. The Law on Energy regulates energy policy objectives and the method of its implementation, conditions for reliable, secure and quality supply of energy and energy sources, conditions for safe supply to the customers, conditions for the protection of energy and energy sources customers, conditions and manner of performing energy-related activities, conditions for the construction of new energy facilities, the status and scope of activities of the Energy Agency of the Republic of Serbia (market regulator), the use of renewable energy sources, incentive measures and guarantee of origin, the manner of organizing and functioning of the electricity, natural gas, oil and oil derivatives market, rights and obligations of market participants, establishment of ownership over system operator networks as well as monitoring the Law implementation. In addition, the Law regulates the generation, distribution and supply of heat as an energy-related activity. Furthermore, the Law stipulates the improvement of energy

⁶ <u>https://mre.gov.rs/doc/efikasnost-izvori/EnergyLaw.doc</u>

efficiency in performing energy-related activities and in energy consumption sectors as one of the long-term energy policy objectives.

- 13. According to the Law on Energy (Chapter II, Article 3), the energy policy of the Republic of Serbia is pursued through the implementation of three strategic documents:
 - The Energy Sector Development Strategy of the Republic of Serbia for the period 2015 2025, with the projections by 2030 (OG RS 101/2015)⁷;
 - 2. The Program for Implementation of Energy Sector Development Strategy of the Republic of Serbia (POS), for the period 2017-2023 (OG RS 104/201)⁸ and
 - 3. The Energy Balance of the Republic of Serbia (Energy Balance) which is elaborated for each year.

The Energy Sector Development Strategy

- 14. In December 2015 the Parliament of the Republic of Serbia adopted Energy Sector Development Strategy for the period 2015 2025, with the projection by 2030⁸.
- 15. Key priorities of the new Strategy are the provision of energy security, development of energy market and overall transition towards a sustainable energy sector. Provision of energy security implies a reliable, safe, efficient and quality supply of energy and setting up conditions for reliable and safe operation and sustainable development of energy systems and sector in general. Development of energy market implies competitiveness on electricity and gas market based on non-discrimination, publicity and transparency, protection of energy consumers, further opening of the electricity and gas markets and their connection with the single EU energy market, as well as improved connection of the Serbian energy system with the systems of neighbouring and other countries. Regarding the third key priority, the most relevant steps towards sustainable energy sector are the improvement of energy efficiency in all sectors of energy production, transmission and distribution, as well as in energy end-use; creating favourable conditions for the increase the share of energy generated from RES and by using CHP; improvement of environmental protection in all fields of energy-related activities and

⁷ <u>https://mre.gov.rs/doc/efikasnost-</u>

⁸ <u>https://mre.gov.rs/doc/efikasnost-</u>

izvori/23.06.02016%20ENERGY%20SECTOR%20DEVELOPMENT%20STRATEGY%20OF%20THE%20REPUBLIC%20OF%20S ERBIA.pdf

izvori/PROGRAM%20FOR%20THE%20IMPLEMENTATION%20ENERGY%20STRATEGY%20for%20the%20period%20from %202017%20until%202023.pdf

establishing of favourable legal, institutional and logistic prerequisites for investments in the energy sector.

- *16.* Improving energy efficiency in all energy-related sectors is perceived as an overarching objective of the new Strategy.
- 17. The Strategy particularly emphasizes the following strategic actions:
 - 1. <u>Strong support to the implementation of the Law on Rational Use of Energy (OG RS</u> <u>25/2013)</u>⁹;
 - 2. Elaboration and implementation of National Energy Efficiency Action Plans, along with monitoring and verification of achieved energy savings;
 - 3. Extensive use of CHP, especially in industry;
 - 4. Introduction of the Energy Management System in industry and commercial sectors, as well as in public entities and municipalities;
 - 5. Improvement of energy statistics;
 - 6. Informing and educating the public about the need to improve energy efficiency.
- 18. The Strategy envisages two immediate priority actions:
 - 1. Energy efficiency renovation (EER) of buildings and
 - 2. Introduction of the energy management system in the public sector.
- *19.* The Strategy is fully aligned with the EU accession process in the energy sector which takes place within the Energy Community framework.

The Program for Implementation of Energy Sector Development Strategy

20. Measures and activities necessary to reach the goals of the Strategy are elaborated in detail in the Programme for Implementation of Energy Sector Development Strategy for the period between 2017-2023, which was adopted by the Serbian Government in form of a decree in 2017. The POS defines the conditions, method and time schedule of the Strategy implementation, energy facilities to be constructed, concessions for the construction of energy facilities taking into consideration the projected consumption of energy and energy sources, energy efficiency aspects in production, transmission and distribution systems, energy efficiency in final energy use, use of renewable energy sources, considerations regarding the use of efficient technologies for energy generation and energy sources production, considerations regarding stimulating mechanisms in the energy sector, environmental

⁹ <u>https://mre.gov.rs/doc/efikasnost-izvori/efikasnost/A_01_Zakon_o_efikasnom_koriscenju_energije.pdf</u>

protection measures, as well as other elements relevant to the implementation of the Strategy. The POS comprises a number of modules, and each module will define necessary measures and activities to be implemented in relevant sub-sectors.

The Energy Balance of the Republic of Serbia

- 21. The Energy Balance for the following year shall be adopted by the Government of the Republic of Serbia, at the proposal of the Ministry in charge of the energy sector (currently the Ministry of Mining and Energy), by late October of the current year, at the latest.
- 22. The Energy Balance defines the following: annual energy, i.e. needs for energy sources to be provided for the orderly and continuous supply of consumers, taking into account the rational consumption of energy and sustainable development; sources for the provision of the required energy, supply method for specific types of energy and energy sources, required level of stocks and reserve capacities of energy facilities for the reliable supply of consumers with energy and energy sources. Since 2004 the Energy Balance of the Republic of Serbia has been prepared regularly in the format of EUROSTAT Summary Energy Balance Sheet. According to the Law, the Ministry of Mining and Energy is responsible for the preparation of the Energy Balance (The Law on Energy, Articles 13 and 14). The Energy Balance is, adopted annually by the Government of the Republic of Serbia in the form of a Government Decree.
- 23. During 2020, the Draft Law on Energy Efficiency and Rational Use of Energy was prepared. The aim of the law is to harmonize with the currently valid EU regulations in the field of energy efficiency and to improve the implementation of the provisions introduced by the Law on Efficient Use of Energy in 2013. The law is currently in the parliamentary procedure and its adoption is expected in the first half of 2021. The new law stipulates the obligation to improve energy efficiency in central government buildings. In addition, the new law envisages the establishment of the Directorate for Financing and Encouraging Energy Efficiency within the Ministry of Mining and Energy instead of the existing Budget Fund for Energy Efficiency Improvement. The Directorate will have the status of a legal entity and adequate human capacities that will enable incentive funds to be allocated to other beneficiaries in addition to local self-government units. Significant innovations are also represented by the introduction of eco-design requirements, the application of information systems for monitoring consumption and energy savings with the obligation of suppliers to automatically enter data into ISEM, new conditions for licensing energy managers, incentives for highly efficient cogeneration, etc. Since 2010, the Government of the Republic of Serbia has adopted three action plans for energy efficiency. The draft of the fourth action plan for energy efficiency for the period ending in 2021 was prepared during 2020. At the beginning of 2021, the draft action plan was sent to the Secretariat of the Energy Community for comments, and its finalization is expected during April 2021. The adoption of the action plan is expected in the first half of 2021. The draft law on energy efficiency and rational use of energy envisages that in the future energy efficiency action plans will not be adopted, but that energy efficiency policy goals will be measured, in addition to the Energy Development Strategy and the implementation program,

through the Integrated National Energy and Climate Plans, in synergy with the targets for renewable energy and reduction of CO2 emissions. The development of the first Integrated Plan for Climate and Energy is planned for the end of 2021.

EU Accession Process

24. In October 2005 the European Community and Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, the Former Yugoslav Republic of Macedonia, Romania, Serbia and UNMIK on behalf of Kosovo signed the Treaty establishing the Energy Community. Whilst Moldova became a full-fledged member as of 1 May 2010, Ukraine officially acceded to the Energy Community¹⁰ on 1 Feb 2011. The Energy Community Treaty was ratified by the Serbian Parliament in 2006¹¹. The Treaty requires the Contracting Parties to implement important parts of the Acquis Communautaire (Chapter 15, including Acquis on Renewable Energy and Energy Efficiency) and provides for the creation of a single energy market and the mechanism for the operation of network markets. It also establishes the institutions of the Energy Community (EnC), as well as the decision-making process. It thereby provides a stable investment environment based on the rule of law and ties the Contracting Parties together with the European Union. The principal decision-making institution of the EnC is the Ministerial Council. It makes the key policy decisions and adopts the EnC rules and procedures. The Ministerial Council is composed of one representative from each Contracting Party and of two representatives from the European Community (European Commissioner for Energy and a high-level representative of the Presidency of the Council of the European Union). The Presidency of the Ministerial Council rotates among each Contracting Party every twelve months. The Presidency can convene the Ministerial Council in a place of its choice. Generally, this has been the capital of the country holding the Presidency. The Presidency chairs the Ministerial Council and prepares its agenda. In this role, it is assisted by the European Union and the incoming Presidency as Vice-Presidents. For the period from 1 January to 31 December 2021, Serbia holds the Presidency in Office of the Energy Community. The Ministry of Mining and Energy represents Serbia in EnC. The same Ministry is a member of the EnC -Ministerial Council. This Ministry is in charge of the implementation of decisions of the Ministerial Council on behalf of the Serbian Government.

¹⁰ Treaty Establishing Energy Community, 2005, <u>http://www.energy-</u> <u>community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/Treaty</u>

¹¹ The Law on Ratification of Treaty on Establishing Energy Community Between the EU and Al, Bg, B&H, Cro, FYRM, MN, Rom, Republic of Serbia and UNMIK in accordance with UN Resolution No. 1244, OG RS 62/06.

- 25. The Treaty outlines the internal decision-making process. The EnC may take measures in the form of recommendations, decisions or procedural acts. <u>This gives rise to the EnC secondary</u> <u>legislation. According to Article 76 of the Treaty, a Decision is legally binding in its entirety</u> <u>upon those to whom it is addressed.</u>
- 26. In December 2007 the Ministerial Council established a Task Force which, among other tasks, was requested to identify parts of EnC legislation in the field of energy efficiency suitable and appropriate to be implemented by the Member States of the EnC. Since the Treaty entered into force, a number of decisions related to the implementation of EU legislation in the field of energy efficiency in the building sector in the Member States have been enacted:
 - D/2009/05/MC-EnC of 18 December 2009 on the implementation of certain Directives on energy efficiency¹², namely:
 - Directive 2006/32/EC (ESD) on energy end-use efficiency and energy services¹³;
 - Directive 2002/91/EC (EPBD) on the energy performance of buildings¹⁴ and
 - Directive 92/75/EEC implementing Directives on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances¹⁵.
 - D/2010/02/MC-EnC of 24 September 2010 amending D/2009/05/MC-EnC of 18 December 2009 on the implementation of certain Directives on energy efficiency¹²:
 - Directive 2010/31/EU of the European Parliament and of the Council on energy performance of buildings¹⁶ (EPBD), recasting and repealing Directive 2002/91/EC and
 - Directive 2010/30/EU¹⁷ on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products, recasting and repealing Directive 92/75/EEC

¹² <u>https://www.energy-community.org/legal/decisions.html</u>

¹³ <u>https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32006L0032</u>

¹⁴ <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32002L0091</u>

¹⁵ <u>https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A31992L0075</u>

¹⁶ <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32010L0031</u>

¹⁷ <u>https://eur-lex.europa.eu/eli/dir/2010/30/oj</u>

- D/2015/08/MC-EnC of 16 October 2016 on adopting Directive 2012/72/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC¹². Among other things Decision stipulates the following:
 - Each Contracting Party shall transpose and implement Directive 2012/27/EU amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC by 15 October 2017;
 - This Directive establishes a common framework of measures for the promotion of energy efficiency within the Energy Community, to set a 20% headline target on energy efficiency in the Energy Community in 2020 and to pave the way for further energy efficiency improvements beyond that date in order to ensure the achievement of the Union's 2020 20% headline target on energy efficiency and to pave the way for further energy efficiency improvements beyond that date. It lays down rules designed to remove barriers in the energy market and overcome market failures that impede efficiency in the supply and use of energy, and provides for the establishment of indicative national energy efficiency targets for 2020;
 - Each Member State shall set an indicative national energy efficiency target, based on either primary or final energy consumption, primary or final energy savings, or energy intensity. When doing so, they shall also express those targets in terms of an absolute level of primary energy consumption and final energy consumption in 2020 and shall explain how, and on the basis of which data, this has been calculated;

When setting those targets, Member States shall take into account that the Energy Community's 2020 energy consumption has to be no more than 187 Mtoe of primary energy or no more than 133 Mtoe of final energy;

- By 30 June 2018, the Energy Community Secretariat shall assess progress achieved and whether the Energy Community is likely to achieve energy consumption of no more than 186 Mtoe of primary energy and/or no more than 133 Mtoe of final energy in 2020;
- The Member States shall establish a long-term strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private. A first version of the strategy shall be published by 30 March 2017 and updated every three years thereafter and submitted to the Energy Community Secretariat as part of the National Energy Efficiency Action Plans. This strategy shall encompass:
 - (a) an overview of the national building stock-based, as appropriate, on statistical sampling;
 - (b) identification of cost-effective approaches to renovations relevant to the building type and climatic zone;

- (c) policies and measures to stimulate cost-effective deep renovations of buildings, including staged deep renovations;
- (d) a forward-looking perspective to guide investment decisions of individuals, the construction industry and financial institutions;
- (e) an evidence-based estimate of expected energy savings and wider benefits.
- Without prejudice to Article 7 of Directive 2010/31/EU, each Member State shall ensure that as from 1 December 2017, 1 % of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year to meet at least the minimum energy performance requirements that it has set in application of Article 4 of Directive 2010/31/EU. The 1 % rate shall be calculated on the total floor area of buildings with a total useful floor area over 500 m² owned and occupied by the central government of the Member State concerned that, on 1 January of each year, do not meet the national minimum energy performance requirements set in Article 4 of Directive 2010/31/EU. That threshold shall be lowered to 250 m² as of 1 January 2019;
- By 1 January 2017, Member States shall establish and make publicly available an inventory of heated and/or cooled central government buildings with a total useful floor area over 500 m² and, as of 1 January 2019, over 250 m². The inventory shall contain the following data:
 - (a) the floor area in m² and
 - (b) the energy performance of each building or relevant energy data.

The Current Status of Implementation of Article 5 of EED in Serbia

27. As per Decision of the Ministerial Council of Energy Community no D/2015/08/MC-EnC dated 16th October 2016 Serbia is required to implement Article 5 of the Energy Efficiency Directive (2012/27/EU) (EED), which concerns the EER of central government buildings (CGB). The deadlines for implementation and scale of energy savings to be delivered in Serbia differ from the text of the EED, but the scope remains the same in terms of renovating a certain percentage of specific government buildings each year to meet at least the minimum energy performance requirements. Starting from 1 December 2017, the Republic of Serbia has to ensure that 1% of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year to meet at least the minimum energy performance requirements. In addition, by 1 January 2017, Serbia had to establish and publish an inventory of heated and/or cooled CGBs with a total useful floor area over 500 m² and expand it to the buildings with over 250 m² as of 1 January 2019. The EER shall be done in a way that each renovated building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements building meets at least the minimum energy performance requirements that it has set in the application of Article 4 of Directive 2010/31/EU (EPBD).

- 28. The MME established in July 2016 a working group on the implementation of Article 5 of EED (MME Decision 5 No 119-01-60/2016 dated July 5th 2016). The working group was tasked to analyse and perceive the possible modalities of implementation of Article 5 of EED, suggest the optimal method for its implementation given the country specifics and prepare draft legal documents necessary for its implementation. As per the same decision, the MME was tasked to prepare the plan for the EER of identified buildings in cooperation with relevant state institutions.
- 29. The work of the working group was supported by the GIZ Project "Energy Efficiency in Public Buildings" which tasked the Buildings Performance Institute Europe to elaborate the detailed guidelines on how to implement the Article 5 of EED in Serbia.
- 30. Serbia was late in creation and publishing of inventory of buildings owned and occupied by the central government with a total useful floor area over 500 m² which was set by 1 January 2017 but managed to catch up with the plan by publishing the inventory in August 2018, which immediately encompassed buildings above 250 m².
- *31.* Elaboration of inventory was a complex task since Serbia had neither a universal inventory of public buildings nor the inventory of buildings owned and occupied by the central government. The GIZ supported the elaboration of preliminary inventory of such buildings. This inventory was aimed at identifying public buildings and their locations and did not contain detailed information, either about building structure or about energy consumption. The number of identified public buildings to which the Article 5 applies is 56. Out of 56 buildings, 28 are in the competence of Administration for Joint Services of the Republic Bodies (Uprava za zajednicke poslove republickih organa UZZPRO). Therefore, for practical reasons, those 28 CGB have been selected to first undergo EER¹⁸ in accordance with the requirements of Article 5.
- 32. In this regard, the MME has requested the UNDP to provide technical support for estimating the current average level of energy performance, propose energy efficiency measures and estimate the overall value of investment necessary for EER according to current legislation (business as usual (BAU) scenario) of said buildings to meet the requirement of Article 5.
- *33.* For this purpose, UNDP has developed a methodology for conducting walk-through energy audits of buildings and categorization of buildings. Proposed CGBs fall into four categories according to selected characteristics. The Palace of Serbia building (SIV 1) extending to over 54,000 m², which is by far the biggest and most complex building of CGB, is classified as the

¹⁸ In context of this document the term energy efficiency renovation (EER) encompass the following documents as defined by the Law on Planning and Construction and the Rulebook Defining Conditions for Issuing and Content of Energy Performance Certificates of Buildings: rehabilitation, energy rehabilitation, adaptation, extension, construction, investment and current maintenance.

fifth category. The basic criteria used for categorization of buildings and the selection of representative buildings by categories are the measures necessary to implement in order to improve energy efficiency (EE), the floor area, and the indicator for primary energy consumption.

- 34. On the basis of the identified methodology, the walk-through energy audits have been conducted for the representative buildings of each category. Estimated energy performances of selected representative buildings have been used as starting point for assessing the average energy performance of each category of buildings and thereby for identification of possible EE measures for each category based on which the total investment has been estimated for all 28 buildings.
- 35. The measures to be undertaken on the envelope of the buildings are a significant factor influencing the total investments in energy EER of such buildings. The basic package of measures for the improvement of thermal systems in buildings includes practically identical measures, while the enhanced measures for improvement of thermal systems include a number of similar options, which can be grouped more or less under one uniform reconstruction of HVAC systems. Thus, thermal properties of building envelope and options for improvement thereof have been a key factor for the classification of the first nine buildings.
- 36. Additionally, on the basis of the analysis of actual energy consumption and the review of the existing regulations, EE indicators have been considered which will encompass the energy efficiency of the building envelope, heating, ventilation and air-conditioning systems, and other systems in the buildings. On top of that, the considered energy efficiency indicators have been harmonised with the indicators used for EE certification of buildings under the Rulebook on energy efficiency of buildings¹⁹ (OG RS 61/11) and the Rulebook Defining Conditions for Issuing and Content of Energy Performance Certificates of Buildings²⁰ (OG RS 62/12), taking into account the parameters applicable to technical systems and primary energy conversion factors.
- 37. Energy efficiency indicators have been proposed, according to which the energy performance of buildings has been assessed and the minimum requirements of energy performances for each of the above categories of buildings, specifically:
 - The selected energy efficiency indicator is the total specific annual primary energy consumption;

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¹⁹ <u>https://www.mgsi.gov.rs/sites/default/files/PRAVILNIK%200%20ENERGETSKOJ%20EFIKASNOSTI%20ZGRADA.pdf</u>

https://www.mgsi.gov.rs/sites/default/files/Pravilnik%20o%20uslovima%20sadrzini%20i%20nacinu%20izdavanja%20s ertifikata%20o%20energetskim%20svojstvima%20zgrada_0.pdf

- The minimum criteria have been set for energy efficiency indicators and the proposed energy efficiency indicators have been harmonised with the indicators used for energy certification of buildings as per the Rulebook on energy efficiency of buildings and the Rulebook on EE certification of buildings, taking into consideration the parameters applicable to technical systems and primary energy conversion factors;
- After the EER, energy class of the building will be increased by at least one level in respect to the proposed indicator relative to the pre EER baseline.
- *38.* The total value of investments for EER of CGBs in the competence of UZZPRO along with the accompanying works in BAU scenario amounts to **EUR 46,760,000.**
- *39.* On the basis of collected data and conducted analyses for 28 buildings, cost estimates have been made for investments for EER of remaining CGBs. Due to availability of preliminary data cost estimation for investments have been made for 52 CGBs.
- The total cost estimate of the overall investment into EER of all 52 CGBs amounts to EUR 80,625,000.00 in BAU scenario (the estimated unit price for the investment is about 215 EUR/m²).
- 41. To this investment value, it is necessary to add the total value of technical assistance including project management, elaboration of technical design documents, acquiring of the necessary permits and consents of utility companies, services related to the procurement of works/services/materials/equipment, performing technical supervision, reporting and monitoring the deadlines for the project implementation, taking-over of works, technical inspection and acquiring of the necessary use permits after the technical inspection, commissioning, etc. (additional investments value is estimated at about 10 % of the total investment for the EER of CGB), which amounts to **EUR 8,062,500**.
- 42. The total cost of the EER of 52 CGBs including the accompanying consulting is EUR 88,687,500.
 The final list approved by the Government decision No. 337-6889/2018 dated August 9th, 2018 included 56 buildings.

CGB Stock Characteristics in View of Energy Efficiency Renovation

- 43. The CGB stock comprises of very diverse buildings, in terms of their size and occupancy, responsibilities for maintenance and use, the year of construction, the physical properties of building envelope, HVAC systems, energy consumption and cost thereof and their historical/cultural significance. For this reason, it is not possible to apply a single EER approach which could fit for all CGB. Consequently, the unit price of EER (both expressed relatively per m², or percentage of energy saved) will vary significantly from building to building. Similarly, the duration, complexity and the unit price of planning and designing of EER will be very much different for each building. The same could be expected for the implementation of EER measures (construction works and other related activities).
- 44. The initial steps in selecting the buildings for the first round of EER were to determine the CGB use and maintenance competences. Out of 56 buildings on the final list, 28 were immediately

excluded since they are used and maintained by the single ministries/government institutions, which could pose additional risks for large scale reconstruction due to a large number of institutions involved. The remaining 28 buildings, totalling 208,000 m² are maintained centrally, by the Administration for Joint Services of the Republic Bodies (UZZPRO).

- 45. UZZPRO keeps the relevant technical documents and maintenance records for these CGB, including, updated records on energy and water consumption, and cost thereof. Also, UZZPRO has in house technical expertise and capacity (team of maintenance technicians and engineers), as well as logistic means to support large scale EER programme (EECGB). Furthermore, UZZPRO can support the PA for EECGB Programme such as EE certification of buildings, DEA, elaboration of FS and designing documents, etc.
- 46. The special challenge for EECGB Programme is the fact that 49.5% of buildings are categorised as cultural heritage and are subject to some degree of protection envisaged by the law. The most significant building of this kind is a Palace of Serbia (SIV1), whose both exterior and interior are subject to the highest degree of protection. In addition, this is the largest single building (54,700 m²) that falls into the selected group of CGB. Pursuant to the Law on Cultural Property²¹ for such buildings planning, designing and construction works must comply with the special conditions issued by the Institute for the Protection of Cultural Monuments of Serbia and/or Institute for the Protection of Cultural Monuments of Belgrade.
- 47. Besides, the technical complexity, the EER of selected CGBs is very challenging in terms of maintaining the continuity of the operating process in buildings during the execution of construction works. Given a large number of employees in many of these buildings the dislocation of employees and/or maintaining the regular operating process during the construction works must be organized with utmost care. Having the overarching responsibility for the maintenance of CGB, UZZPRO is expected to propose the most feasible dislocation/operating plan for each CGB during the reconstruction. These plans will be elaborated further with MME and other institutions involved in the project.

CGB as per article 5 of EED (operation and operational cost)								
Competence TOTAL UZZPRO Other ministries Ministry of								
Number of CGB	58	28	28	2				
Area (m²)		208,000*	206,000*	No data				
Total for renovation	56		414,000*	No				

Table 2: Structure of CGB stock

²¹ The Law on Cultural Property (OG RS 71/94, 52/2011, 99/2011) https://www.paragraf.rs/propisi/zakon_o_kulturnim_dobrima.html

Financing of renovation of CGB as per article 5 of EED: Competence/financing source							
Competence	TOTAL	UZZPRO	Other ministries	Ministry of Interior			
CEB Loan	28	28		No			
TBD	24		24	No			

CEB Loan: Heritage and non-heritage CGB							
CEB Loan	TOTAL	Cultural heritage	Non-heritage buildings				
Number of CGB	28	8	20				
Total area (m2)	208,000*	103,000 (49.5)%*	105,000 (50.5%)*				



Figure 4: Share of UZZPRO buildings in total CGBs surface area

- 48. As explained in the previous section, for the purpose of estimating the overall investment value of EECGB Programme, 28 CGBs have been categorised in five groups on the basis of their structural characteristics, total floor area and share of façade glazing. For each group the representative building has been selected which was subject to a walk-through energy audit, on the basis of which the typical EE investment packages have been proposed and unit prices have been estimated. The assumptions have been made in line with the current legislation which prescribes the upgrade of the existing energy efficiency class for one level in regard to the specific annual consumption of final energy for heating.
- 49. Having in mind that the Republic of Serbia is in process of preparation of the new legislation which will take into account the building-specific annual consumption of primary energy, which is the state-of-the-art approach in EU countries, this criterion has also been considered.

Table 3: Categorization of CGBs

CEB	CEB Loan – categorization of buildings										
Cat.	Total no.	Average floor area* per building (m²)	Glazing	Cultural heritage	Total floor area (m²)*	% of total area	DH (GAS)	Other heating	Total annual consumption of <u>final</u> energy for heating (kWh/m ^{2**} a)	Total annual consumption of <u>primary</u> energy (kWh/m ^{2*} a)	Total CO2 emission (kg/m²**a)
1	4	> 5000	>40%	0	47,800	22.7	3	1 (LFO)	121	409	131
2	12	~ 5000	<30%	6	57,000	27.1	11	1 (EL)	94	379	122
3	6	< 5000	20%-40%	0	10,000	5.0	5	1 (LFO)	108	474	162
4	5	> 5000	15%-35%	1	38,500	18.9	4	1(GAS)	94	477	169
5	1	> 5000	>44%	1	54,700	26.3	0	1 (LFO)	153	408	143





Figure 5: Categorization of CGBs

- *50.* Most of the energy used in CGBs is used for heating. However, in the last decade, the trend of excessive use of electricity for cooling has been noticeable due to the ever-higher average summer temperatures. Given the fact that in most CGBs the air-conditioning is provided by individual AC units (so-called, split systems), planning of EER shall consider the implementation of centralised AC system in each of the selected CGB.
- 51. Most of CGBs are connected to Belgrade DH system, which uses natural gas as a primary energy source. Having in mind that, although it is a fossil fuel, natural gas is not a CO₂ intensive fuel. Most of the GHG savings will be achieved by saving electricity and in buildings that use other fuels for heating (like LFO). For this reason, a new methodology for building certification to be adopted in a timely manner by the MCTI is of the utmost importance.



Figure 6: Heating of CGBs

- 52. In regard to Nearly-zero energy buildings (NZEB), as the signatory of EnC Treaty, Republic of Serbia is obliged to implement specific articles of the Directive 2010/31/EU (EPBD). In particular, Serbia has to draw up a national plan for increasing the number of NZEB. These national plans may include targets differentiated according to the category of building. Serbia shall furthermore, following the leading example of the public sector, develop policies and take measures such as the setting of targets in order to stimulate the transformation of buildings that are refurbished into nearly zero-energy buildings and inform the EnC Secretariat thereof in their national plans.
- 53. The national plan shall include, inter alia, the national definition of NZEB, reflecting Serbia's national, regional or local conditions, and including a numerical indicator of primary energy use expressed in kWh/m² per year. Primary energy factors used for the determination of the primary energy use may be based on national or regional yearly average values and may take into account relevant European standards.
- 54. By 30 June 2021, all new buildings in Serbia shall be NZEB, as per Article 9(1)(a) of EPBD.
- 55. By 30 June 2019, all new buildings occupied and owned by public authorities shall be NZEB, as per Article 9(1)(a) of EPBD
- 56. Since December 2013 and every three years thereafter Serbia shall publish a report on the progress in increasing the number of NZEB. On the basis of that report the EnC shall develop an action plan and, if necessary, propose measures to increase the number of those buildings and encourage best practices as regards the cost-effective transformation of existing buildings into NZEB, as per Article 9(5) of EPBD.
- 57. The proposed project in conjunction with the implementation of EECGB Programme, as well as planned GEF and GCF projects, pave the way for a deep renovation of CGBs and fulfilment of obligations arising from the EU integration process.

II. PROJECT STRATEGY

- 58. The project is aimed at setting the technical preconditions for the implementation of large scale EECGB Programme, and thereby timely and efficient use of EUR 40 mil loan approved by Government and CEB. Therefore, the project will be focussed on 1) establishing Project Implementation Unit (PIU) within the UNDP Energy Portfolio to implement PA, 2) elaboration of technical documents of different level of complexity as required by the Law and 3) communication and visibility of activities foreseen by the Project and following EECGB Programme.
- 59. The key activities of the project are related to the elaboration of technical documents of different levels of complexity which are necessary for conducting construction works foreseen under EER of CGB. In this regard, the key project activities and deliverables will comply with relevant Serbian legislation, namely
 - 1) The Law on Planning and Construction and accompanying bylaws,
 - 2) The Law on Efficient Use of Energy and accompanying bylaws,
 - 3) The Law on Energy and accompanying bylaws,
 - 4) The Law on Environmental Protection and accompanying bylaws,
 - 5) The Law on Cultural Property, and accompanying bylaws etc.
- 60. Serbia has to great extent harmonized its legislation with EU Acquis in field of energy efficiency mainly through the Law on Efficient Use of Energy and some 30 accompanying bylaws, as well as through the Law on Planning and Construction and two accompanying bylaws.
- 61. As presented in the Chapter Strategic Framework, all of the above-listed Laws are aligned with national strategic documents, as well as with international agreements/treaties to which Serbia is obliged, such as Energy Community Treaty and UNFCCC.
- 62. Furthermore, as required by the Law, project results will comply with the conditions for construction works set by public and public utility companies such as "EPS Distribution" electricity distribution system operator, "Beogradske elektrane" DH company, "Belgrade Waterworks and Sewerage" water supplying company, etc.

Beneficiaries

63. Main benefits of the Project and the proceeding EECGB Programme are energy savings in CGB, reduction of GHG from electricity/fossil fuels used in the CGBs and reduction of operating costs of CGB. In addition, EER of CGBs will have a significant positive social impact by improving working conditions and safety at work for government employees and visitors/clients of CGB. Furthermore, the Project and the Programme will contribute to quality protection and preservation of cultural heritage buildings, since 49.5% of selected buildings are protected as a cultural heritage.

- 64. In a broad sense, the main beneficiaries of the Project are the citizens of the Republic of Serbia, since the Project and the coming EECGB Programme will contribute to the achievement of national energy efficiency targets and NDCs.
- 65. Immediate beneficiaries are institutions of the Republic of Serbia, represented by the MME and UZZPRO. UZZPRO is the government institution tasked to provide technical and maintenance services for CGB. UZZPRO will directly benefit from the Project as it is expected that the maintenance work after EER will be less intensive and costly.
- 66. Direct beneficiaries are some 6,800 employees in government institutions (ministries, government agencies, etc) which use the CGB, out of which 65% are women and citizens that use these buildings (up to 15,000 daily visitors/clients). EER will improve comfort in CGB. Having in mind that EER of CGBs implies implementation of the most recent building standards (other than those which are directly related to EE improvements), the fire protection and other aspects of safety at work, as well as building accessibility, will be significantly improved.

Cooperation

67. Throughout the implementation timeframe, the Project will seek synergies with other projects and activities within the area of energy efficiency, as described below. Proposed actions that could be implemented through the Project will be agreed with the MME and UZZPRO. As it will be financed by CEB Trust Fund donors namely, Slovakia and Spain, through CEB, the Project will specifically look for direct links and complementarity with other related Slovak and Spanish funded development projects. Moreover, the Project will also provide opportunities for enhancing broader relations with Slovak and Spanish expertise, including promotion related activities and business development, within the energy efficiency sector. An important role of the Project is to improve the awareness on energy efficiency in buildings, how it links to climate change, and show concrete examples of how to take the lead in addressing it. More importantly, the Project should seek to prepare and create readiness for larger systematic reform within this particular field.

III. RESULTS AND PARTNERSHIPS

Expected Results

- 68. The purpose of this project is to provide technical assistance to the Ministry of Mining and Energy to implement preparatory activities (PA) for the implementation of EUR 40 mil loan from CEB for EER of 28 CGB.
- 69. The expected result of the Project is prepared technical documents²² (building energy certificates, DEA reports, FS and other technical documents) which are necessary for EER of selected CGB.

Project Objective, Outcomes and Outputs

- 70. The Project is a first phase of a broader Programme titled "Energy Efficiency of Central Government Buildings" (EECGB). The financing sources of EECGB Programme are as follows: CEB (EUR 40 mil), CEB Trust Fund donors Kingdom of Spain through the Spanish Social Cohesion Account SCA (EUR 0.2 mil), Republic of Slovakia through the Slovak Inclusive Growth Account- SIGA (EUR 0.4 mil) and EU Western Balkans Investment Framework Facility (EUR 0.3 mil). The remaining funds will be provided by the Republic of Serbia and/or from other sources. The second phase of EECGB Programme will encompass the loan implementation and will be implemented by MME and UNDP, in cooperation with UZZPRO throughout the period of 5 years. It is expected to start in in the fourth quarter of 2021. The respective project results framework and multi-year work plan will be further elaborated in annex to this project document.
- 71. The EECGB Programme objective is to increase the EE investments in large public buildings in Serbia, thereby enabling their more energy and cost-efficient operation.
- 72. While the minimum EECGB Programme target by the end of the Programme is to have at least 28 CGBs renovated, the EECGB Programme also seeks to facilitate its replication on other CGBs and large public buildings in competence of other state entities and public services, also by taking into account the prospects for leveraging additional funding for this effort.

²² In context of this project the term "technical documents" encompass the following documents as defined by the Law on Planning and Construction, Law on Efficient Use of Energy and the Rulebook Defining Conditions for Issuing and Content of Energy Performance Certificates of Buildings: a set of document aimed at determining the concept of the building, elaborating of conditions, determining the manner of construction of the building and maintenance of the building, as well as detailed energy audits and energy passport of building. (certificate of energy performance of the building).

- 73. The project objective is to set technical preconditions for the implementation of EECGB Programme, by preparing necessary technical documentation for EER of CGB.
- 74. The Project is financed by WBIF (EUR 0.3 mil) and CEB Trust Fund donors Kingdom of Spain (EUR 0.2 mil) and Republic of Slovakia (EUR 0.4 mil).
- 75. For actual energy efficiency investments, energy-saving and related GHG reduction, the EECGB Programme has set targets by the end of the Programme:
 - To leverage at least EUR 48 mil for EER of CGB.
 - Related direct GHG emission reduction of 5 kilotons CO₂eq per year or of 60 kilotons CO₂eq over the default lifetime of 15 years of the investments and other undertaken measures.
 - Energy savings of at least 28.5 GWh annually or of 427.5 GWh over the default lifetime of 15 years from the investments and other measures facilitated by the Programme.
 - 29% of savings in the energy cost of selected 28 CGB.
 - At least 5,000 Government employees and at least 100,000 of visitors/clients annually benefiting from renovated CGB.
- 76. The project strategy is presented by a logical framework approach which is discussed briefly below, with further details in Section 5, "Project Results Framework".
- 77. The overall project objective and targets at the output level should remain the same as those defined in Section 5. The relevance of specific activities will be subject to constant monitoring and evaluation and to adaptive management during project implementation, when and as needed.
- 78. Planned activities of the Project under respective outputs are the follows:

Output 1: Technical assistance and professional services to the MME provided

79. UNDP will assist the MME in implementing the PA. The assistance will be provided in line with the current Standard Basic Framework Agreement between the Government of the Republic of Serbia and the UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects (hereinafter the SBFA²³). UNDP and the Government agreed that the UNDP country office will provide such support services at the request of the institution (in this case MME) designated in the relevant Project Document. The SBFA Agreement allows UNDP to provide technical assistance and other professional services to Ministries in order to speed up and increase the effectiveness of the project.

²³ The Law on Ratification of Standard Basic Assistance Agreement between the SFRJ and the United Nations Development Programme (OG RS 11/1988)

- *80.* To provide technical assistance and other professional services to the MME for the implementation of this Project UNDP will establish a PIU within the existing Energy portfolio.
- 81. The PIU will be headed by the professional full-time PIU Manager (Energy Portfolio Manager), who will be delegated the authority for the project management i.e. day to day implementation of the project, including supervision, management and coordination of all project activities and financial matters, and to provide advice on the technical, legal and financial aspects of the project.
- 82. The members of the PIU are recruited by UNDP and include up to three Project Coordinators and two Project Assistants.
- 83. The personnel assigned by the UNDP to the project, and under the contract with the UNDP shall work under the supervision of the National Project Director (NPD). The supervisory arrangements shall be determined in mutual consultations. These personnel shall remain accountable to the UNDP for the manner in which assigned functions are discharged.
- 84. UNDP will provide an in-kind contribution to the Project in the form of office equipment and computers for PIU.
- 85. The PIU Manager and staff shall be approved by MME, prior to the commencement of their duties.
- *86.* If needed the PIU shall be supported by short-term consultants. Selection of short-term consultants shall pe performed by UNDP in close cooperation with MME.
- 87. The PIU's responsibilities and activities include: 1) Preparing and implementing the procurement process as per UNDP rules and procedures; 2) Monitoring and supervising the work of consultants; 3) Monitoring and reporting on EECGB Programme implementation; 4) Financial reporting to MME; 5) Organizing and implementing communication and awareness-raising activities; 6) Organizing and participating in the meetings of the PB, preparing relevant documents and MoMs; 7) Coordinating with other institutions, etc. 8) Supporting technical and other consultants.
- 88. The supporting consultants/companies will be engaged to perform tasks which require specific expertise and licenses such as: 1) Energy certification of buildings; 2) Elaboration of detailed energy audits; 3) Elaboration of design documents; 4) Technical control of design documents; 5) Geodetical exploration works; 6) Engineering calculations; 7) Communications, etc.

Output 2: Technical preconditions for energy efficiency renovation of 28 CGBs set

- *89.* Setting the technical preconditions for EER of 28 CGBs includes the following:
 - 2.1 Detailed planning of PA once the Project Document is signed. The planning shall be done in close cooperation with the MME and UZZPRO, taking into account the already existing technical documentation for each of the selected CGB, availability of the UZZPRO staff and working hour of institutions which use CGB.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.
2.2 Public procurement related to PA (incl. elaboration of ToRs for services and bills of quantities for supply of goods, elaboration of tender documents for services (energy certificates, DEA, FS, design documents, technical control, geological exploration works, expert supervision of works, etc.), guiding public procurement process, evaluating proposals, contracting consultants and suppliers, etc.). The procurement process encompasses planning, requisitions, sourcing of suppliers, solicitation and evaluation of offers, contract review, contract award, and the management of contracts and assets. The following general principles must be applied to all phases and types of the procurement: a) Best value for money, b) Fairness, integrity and transparency, c) Effective competition.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.

2.3 Energy certification of up to 25CGBs before the EER (three CGBs already have EE passports), as per the Rulebook on Energy Efficiency in Buildings¹⁹ and Rulebook Defining Conditions for Issuing and Content of Energy Performance Certificates of Buildings²⁰.

This activity will be implemented by the national licensed engineering consulting company, as required by the Law.

2.4 Elaboration of detailed energy audits (DEA) for up to 6. The audits shall pinpoint sets of financially and technically viable energy efficiency measures for each particular building along with relatively precise investment cost estimate, savings in energy, CO₂ and costs, simple payback period and financial viability parameters.

This activity will be implemented by the national licensed engineering consulting company, as required by the law.

2.5 Geological explorations of groundwaters in the vicinity of the Palace of Serbia building for the purpose of estimating the possibility of using heat pumps for heating and air-conditioning in the Palace of Serbia.

This activity will be implemented by the national licensed engineering consulting company, as required by the Law.

2.6 Elaboration of FS for 2 largest buildings (the Palace of Serbia and SIV III). The DEA shall indicate which buildings need a more detailed analysis in terms of applicable and viable EE measures and their matching with other requirements (for instance, protection of exterior/interior in heritage buildings). In particular, the FS shall take in consideration all aspects of discontinuation of the working process in some big buildings (for instance, the need to temporary dislocate the staff (where, how, how long, the cost of dislocation, etc.). The FS shall provide the basis for decision making on modalities of big CGBs EER.

This activity will be implemented by the national engineering consulting company, as required by the Law.

- 2.7 Designing documents to the level of detail as required by the Law²⁴ and accompanying bylaws:
 - Conceptual design (if required) to obtain location conditions (necessary for some construction works defined by the Law).
 - Preliminary designs for EER of CGB as required by the law. Preliminary design is necessary for obtaining the notification of construction works by the competent authority (as per Article 145 of the Law on Planning and Construction) and elaboration of FS (as per Article 114 of the Law on Planning and Construction). Depending on the complexity of foreseen EER the preliminary design contains several volumes (such as: main volume, architectural design, structural design, design of hydro-technical installations, design electrical installations, HVAC design, etc.).

All the above-listed design volumes shall include the bill of quantities (BQ) with estimated unit prices.

Preliminary designs shall also include fire protection and energy efficiency studies.

Design for execution EER of CGB as required by the law. Depending on the complexity of foreseen EER, it comprises of several volumes (such as: main volume, architectural design, structural design, design of hydro-technical installations, design electrical installations, HVAC design, etc.). Besides, it shall also include the plan of prevention measures and main fire protection design, both of which must be approved by the competent department of the Ministry of Interior. The Design for execution is necessary for construction works for which the notification of construction works is issued by the competent authority (as per Article 145 of the Law on Planning and Construction).

All the above-listed design volumes shall include BQ with estimated unit prices.

Elaboration of the detailed design of EER, especially in case of complex EER of heritage buildings, is costly and time-consuming.

- As build design (if required).
- Design for Building Permit (if required).

This activity will be implemented by the national engineering consulting companies which employ licensed engineers of various specialization, as required by the Law.

²⁴ <u>https://www.paragraf.rs/propisi/zakon_o_planiranju_i_izgradnji.html</u>

2.8 Technical control of design documents when required by the Law.

This activity will be implemented by the national licensed engineering consulting company, as required by the Law.

2.9 Obtaining relevant permits and conditions of public utility companies, fire protection authority and institution in charge of the protection of cultural heritage as required by the relevant laws.

This activity will be implemented by the PIU and selected engineering companies on behalf of UZZPRO.

2.10 Day to day management of PA.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.

2.11 Monitoring and reporting on PA to MME and CEB, etc. Information on the implementation of the grant for PA will be provided quarterly to CEB to ensure their appropriate utilisation. In addition, MME/PIU will provide updated relevant data to the WBIF/CEB.

Further, MME will monitor the project implementation with the support from UNDP staff engaged in PIU. The guiding framework of UNDP for planning, monitoring and evaluation is provided in the 'Programme and Operations Policies and Procedures' (POPP) the evaluation policy, and the UNEG²⁵ 'Standards for Evaluation in the UN System Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform. Based on the initial risk analysis submitted, the risk log shall be regularly updated. Risks become critical when the impact and probability are high. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard. Besides the periodical reporting in UNDP format, the PIU in cooperation with MME will also produce a report in the required WBIF/CEB format.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.

Following the completion of the project activities, UNDP Serbia shall transfer ownership, title, and industrial and intellectual property rights of the results of the Technical Assistance including the reports and other documents relating to it to the Beneficiary Country.

Output 3: Communication and visibility related to EECGB Programme secured

²⁵ <u>http://www.uneval.org/</u>

- 90. Adequate communication is a precondition for proper identification of interests and needs of programme stakeholders (MME, UZZPRO and employees in CGB) and identification of gaps in the programme planning. A timely and appropriate communication plan will avoid misunderstandings, enable the involvement of all relevant groups of stakeholders and encourage their support to the implementation of EER measures.
- *91.* Communication and visibility activities will comply with the WBIF related requirements set out in Guidelines for WBIF Technical Assistance Grants (Annex 6)²⁶ as well as SIGA guidelines,²⁷ including communication activities, complementarity and coordinated actions of relevant stakeholders, setting up relevant contacts Communication and Visibility plan etc.
- *92.* Communication will be addressed primarily to the employees working in the buildings that will be renovated, which will be the main beneficiaries of the project but also may be affected by EER works (negatively). The objective of these communications would be to engage employees in the project, to inform the employees of new energy efficiency behaviours to sustain the programme objective and inform them of the works clearly so as to minimize the negative impacts of the works on employees.
- *93.* Furthermore, the communication shall aim to highlight the role of the EU Community (national and EU citizens) and ensure that EU/bilateral donor assistance is used in a proper and transparent manner. Besides stakeholders, this Communication plan will also facilitate communication with the general public.
- 94. Communication and visibility measures such as project's workshops and media coverage of the project implementation, aimed for the publicity of the EU Community assistance and the project implementation will also be undertaken in cooperation with MME, UZZPRO, CEB and EU. The communication and visibility measures will be closely monitored and coordinated by the PIU, under the supervision of MME.
 - 3. Foreseen communication and visibility activities are as follows: Organizing inception workshop for representatives of employees in government institutions which use

²⁶ <u>https://www.wbif.eu/storage/app/media/Library/11.Funding/WBIF%20TA%20GAF%20Guidelines_Jan%202021.pdf</u>

²⁷ In particular, and where appropriate, TA Project was carried out "*with funding from the Slovak Inclusive Growth Account (SIGA) and from the Spanish Social Cohesion Account (SCA) received through the Council of Europe Development Bank*". The acknowledgement of CEB, SIGA and SCA, including the CEB logo, the Slovak Republic flag and the Spanish flag, shall be given clear visibility in terms of size and prominence. In addition, when the logo of the Beneficiary Country is displayed in publications, the CEB logo, the Slovak Republic flag and the Spanish flag shall be displayed at least as prominently. Also, the appropriate wording for WBIF financing "This document has been produced with the financial assistance of the European Western Balkans Joint Fund, under the Western Balkans Investment Framework, received through the Council of Europe Development Bank. The views expressed herein are those of (name of author) and can therefore in no way be taken to reflect the official opinion of the Council of European Western Balkans Joint Fund, the EBRD, as co-manager of the European Western Balkans Joint Fund, or the Council of Europe Development Bank, as Lead Financial Institution with respect to the project."

CGB, other interested parties and media. The purpose of the workshop is to inform the stakeholders and media about the EECGB Programme and envisaged programme/project activities and expected results. The workshop will be organized by PIU in close cooperation with MME and UZZPRO.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.

3.2 Regularly informing employees on the status of project activities. The information will be provided by PIU in close cooperation with MME and UZZPRO.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.

- 3.3 Providing additional information which is of immediate concern to employees in buildings, especially when the project activities interfere normal working process. The information will be provided by PIU in close cooperation with MME and UZZPRO.
- 3.4 Final workshop for representatives of employees in government institutions which use CGB, other interested parties and media for the purpose of presenting project results and plans for execution of forthcoming EER works. The workshop will be organized in close cooperation with MME and UZZPRO.

This activity will be implemented by PIU in close cooperation with MME and UZZPRO.

Resources Required to Achieve the Expected Results

- *95.* The project forms part of a wider UNDP Energy Portfolio and shall benefit from wellestablished lines of communication with all necessary stakeholders and routine management practice building on the ongoing project "Removing Barriers to Promote and Support Energy Management Systems in Municipalities throughout Serbia".
- 96. The proposed Project implementation team includes an energy portfolio manager in its capacity of PIU Manager (Project Manager), three Project Coordinators and two Project Assistants. The educational background of Project Manager and Project Coordinators is engineering. The Project Manager will be responsible for the overall implementation of the project including operational and financial responsibility and will report to the responsible UNDP Programme Officer. The two Project Coordinators will deal with technical preparation of ToRs, bill of quantities and monitoring the execution of contracted engineering tasks. One Project Coordinator and two Project Assistants will deal with day to day administrative activities related to procurement, project administration, payments and financial monitoring. Project Coordinators and Project Assistants will work under the supervision of the Project Manager to ensure that all aspects of project coordination are in place. Project management and quality assurance will be cost-shared with other portfolio initiatives. If necessary, the project will subcontract additional expert(s) to facilitate execution of the foreseen tasks.

Broader Relations and Communication

- *97.* The project has been designed through the consultative process with the MME and UZZPRO (the Beneficiary) and it will be implemented in close cooperation with the Beneficiary and other stakeholders involved. UNDP will assume full responsibility and accountability for the overall management of the project, including monitoring and evaluation of interventions, achieving of the objectives and specified results, and the efficient and effective use of resources. UNDP will apply the principles of Quality Management, by streamlining all internal working procedures, organizational structures and establishing standardized feedback and improvement mechanisms.
- *98.* Throughout the implementation timeframe, the project will seek synergies with other projects and activities in the field of energy efficiency, as further described below. Proposed actions that could be implemented through the project will be agreed with the MME. As it is financed by WBIF and CEB bilateral donors, the project will specifically look for direct links and complementarity with other related CEB/bilateral donors funded development projects.
- *99.* Particular attention will be given to building synergy between this project and other complementary initiatives, business development and development projects. The Project aims at contributing to enhanced dialogue and cooperation among stakeholders, as to strengthen a shared understanding of the status of policy and activities, as well as needs for further reform, and the potential and importance for public entities to take the exemplary role in the implementation of EE measures as required by the EED.

Ministry of Construction, Transport and Infrastructure (MCTI)

- 100. MCTI is the ministry in charge of construction, which carries out public administration activities related to: spatial and urban planning; definition of conditions for the construction of facilities; arrangement of housing relations and housing activities; construction; building land; municipal infrastructure and municipal services; geodetic engineering works; inspection in the areas of urban planning, construction and municipal infrastructure as well as other activities defined by the law. On the basis of Article 201 of the Law on Planning and Construction, it is in charge of energy-related properties of buildings, energy requirements for buildings and energy certification of buildings.
- 101. MCTI is responsible for setting the national minimum energy performance requirements as per Article 4 of Directive 2010/31/EU which will be applied in the whole EECGB Programme. In this regard the close cooperation btw. MME, MCTI, UZZPRO and PIU will be secured.
- 102. In line with its competences, the MCTI will be actively involved in all relevant project activities. Moreover, such activities will be coordinated with MCTI. MCTI is also expected to support coordination with other EU projects related to this field and with other relevant donors' projects in order to exploit synergies and enable the integration of results. MME as a national

institution with the leading role in EECGB Programme, and PIU will ensure communication and coordination with the MCTI.

German Development Bank (KfW)

103. Acting on behalf of the Federal Republic of Germany, the German Development Bank (KfW) implements financial cooperation with Serbia. Since 2001, KfW has been the leading financial institution engaged in providing loans along with technical assistance for the energy sector, including energy efficiency. The most notable programme of this kind is DH Rehabilitation Programme, which has been implemented since 2001 in 6 consecutive components. The forthcoming implementation of the recently agreed loan for EER of Military Medical Academy totalling EUR 110 mill is a similar programme to the EECGB Programme. Responsible entity for both programmes on behalf of Serbian Government is MME, who is expected to coordinate both programmes, ensure communication between the two programmes and provide ground for exploiting their synergies.

Risks and Assumptions

104. The risks or uncertain events or set of circumstances may occur and influence the achievement of project results. Main risks for the project are categorised in the following groups:

Political Risks

- 105. The political risk of the Republic of Serbia stopping its negotiations to join the European Union and therefore making energy-efficiency less of a priority. Even in the unlikely event that negotiations were stopped or even cancelled, energy-efficiency is likely to remain as a priority for the government, because of its significant cost-savings potential across the economy. This risk is considered low and is mitigated by the fact that the Government has already decided to apply for EUR 40 mil sovereign guarantee loan to finance the EER of the first 28 CGB.
- 106. Forthcoming elections (April 2022) could affect the pace of project implementation due to possible reshuffling of the Government and substantial staff change in beneficiary institutions. This risk is considered high and is mitigated by the detailed planning of project activities immediately after the signing of the Project Document in a way that most of the activities foreseen in the transition period won't be affected by the possible changes in beneficiary institutions.

Legislative Risks

107. Legislative risk of MCTI failing to adopt the new regulations concerning energy efficiency in buildings which shall prescribe the national minimum energy performance requirements for buildings in line with Article 4 of Directive 2010/31/EU. The very essence of the EECGB Programme is to upgrade CGBs to meet these requirements, so failing in its setting could jeopardize the Programme. This risk is considered moderate and is mitigated by the fact that the MCTI has already been working on the preparation of new regulations. MME, UZZPRO and PIU will closely monitor the progress of work and coordinate future steps with MCTI.

Financial Risks

108. Financial risk that the Government does not have the financial resources to provide necessary additional funding to support the proposed EER under CEB loan. This risk considered low and is mitigated by the fact that the Parliament of Serbia has already ratified the EUR 40 mil sovereign guarantee loan to finance EER of the first 28 CGB, and that donors (the Kingdom of Spain, Republic of Slovakia) have already expressed their interest in contributing to Government efforts.

Technology Risks

109. Due to technical problems with the planned EE r investments and technologies used, the trust of the key stakeholders on the proposed measures is lost. This risk is definitely present, but will be mitigated by adequate due diligence and, when applicable, pre-testing of the proposed EE and RE solutions.

Environmental Risks

110. The energy efficiency investments supported by the project (such as building and lighting retrofits) may generate waste, which, if not properly managed, may be disposed in an environmentally not sound manner. The risk is considered high. The project will mitigate this risk by having a requirement for each project included in EECGB Programme to propose an adequate waste management plan incorporated into the project design. Environmentally sound waste management, as it relates to the implementation of different EER works and disposal of related materials and appliances, will be an issue to be addressed through the project and EECGB Programme.

Organizational Risks

- 111. Lack of adequate co-ordination and co-operation between the institutions of the central government MME, UZZPRO and MCTI which implement the project on behalf of the Government. This risk is considered from medium to high due to some overlaps in competences of these institutions. The project seeks to mitigate this risk by providing a platform for such co-operation through its concrete activities.
- 112. Lack of adequate co-ordination and co-operation institutions of the central government, namely MME, UZZPRO and MCTI as project implementing institutions on one side, and institutions that use CGBs on the other side, to effectively reach the stated goals. This risk is considered from medium to high due to a large number of institutions involved. The project

seeks to mitigate this risk by intensive communication and information exchange activities through the project.

Operational Risks

113. Inadequate local capacity of employees of CGBs to fully understand the need for EER of CGBs and envisaged measures. This risk is considered from medium to high due to a large number of employees in CGB. The strong focus of the project on communication with employees in institutions that use CGBs is expected to mitigate this risk.

Knowledge and Communication

- 114. Communication and visibility issues will be addressed by a Communication plan which will be developed at the beginning of the project as described in the previous section (Outcome III). The communication plan will include two project workshops (at the beginning and at the end of the project), regular information dissemination activities to Govt. institutions and employees included in the Project as well as to other stakeholders and the general public.
- 115. Special attention will be given to communication with the expert community. Given the technical complexity of the project, the project results will be presented on expert conferences and workshop organized by different professional organizations. The participation of the Serbian Chamber of Commerce, as well as the Chamber of Engineers, will also ensure that project-related information and outcomes are widely disseminated among the business community.
- 116. Information, presentations and outreach material will be collected and uploaded on the UNDP website, as well as on the web sites of project partners (MME, UZZPRO). Considerable attention will be paid to other electronic media such as TV and radio for which regular statements and video coverages of project activities will be provided.

Sustainability and Scaling Up

- 117. The expected impact of the project will be manifold. At the outcome level, the Republic of Serbia will fulfil its obligations deriving from Article 5 of EED. At the output level, technical preconditions for the implementation of EUR 40 mil loan will be set. Furthermore, improvement of institutional mechanisms on policy, as well as on operational level will remain in place after the closure of the project.
- 118. This project is the precursor of a large scale EECGB Programme for which the loan of EUR 40 mil has already been approved by the Government and CEB Board of Directors. This means that project results are very likely to be sustained through the implementation of EECGB Programme.
- 119. The EECGB Programme is envisaged to be further scaled up through the complementary projects:

- UNDP/GEF (app. USD 1.5 mil) through the future project: "Enhancing the Energy Management System to Scale-up Energy Efficiency Investments in Public Buildings in Serbia". This project will contribute to the EECGR Programme technical assistance and investment support to the introduction of smart metering and billing in CGBs.
- 2) UNDP/GCF Project (app. USD 15 mil) through the future project: "Near Zero-Energy Buildings (NZEB) Renovation Project for Public and Cultural Heritage Buildings in Serbia". This project will provide investment grant to CEB loan (of app. 150 USD/m²) for additional deep renovation of app. 50,000 m² of selected government buildings in line with NZEB approach for demonstrating the feasibility of NZEB approach for the renovation of public and cultural buildings.
- 120. The above-listed projects are currently being prepared in conjunction with EECGB Programme and are subject to the approval of the Global Environmental Facility and Green Climate Fund.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

121. Project management and quality assurance will be cost-shared with other portfolio activities, thus ensuring smooth implementation, while decreasing operational costs in comparison to stand-alone activities of this size. In addition, no inception phase is necessary, since the project will benefit from well-established and ongoing cooperation with all relevant stakeholders.

Project Management

- 122. UNDP will be responsible for the provision of substantive and operational inputs for the efficient and effective implementation of project activities. The operational base of PIU will be a project office in the proximity of MME and UZZPRO. Provision of office space for PIU is the responsibility of the UNDP. Provision of the office equipment and computers will be the in-kind contribution of UNDP.
- 123. The project shall be subject exclusively to the internal and external auditing procedure provided for in the financial regulation, rules, policies and procedures of UNDP. Should the Audit Report of the Board of Auditors of UNDP to its governing body contain observation relevant to the contributions, such information shall be available to the MME.
- 124. PIU will closely liaise and collaborate with the partners mentioned above, with the aim to create synergies among project interventions. All projects are implementing complementary activities that are jointly contributing to better energy management. Also, some partners and beneficiaries are the same for all the mentioned projects.

V. RESULTS FRAMEWORK²⁸

Table 4: Project results framework

- Contribut	ing Outcome (UNDAF/CPD, RPD	, GPD): Serbia a	dopts an	d implem	ents climate ch	ange and enviro	onmentally frie	endly strategies that increase							
community resilie	ence, decrease carbon footprint a	nd boost the bei	nefits of n	ational in	vestments										
- Priority A	rea: Strategic Plan Outcome "Stre	ngthen resilienc	e to shoc	ks and cris	ses"										
- CPD Outp	out 3.2: Energy efficiency and shar	e of renewables	increased	b											
Outcome indicato	ors as stated in the Country Progra	amme Results ar	nd Resour	ces Frame	work, including	baseline and tar	rgets:								
Indicator: Saving	s in final inland energy consumpti	on; Baseline: 0%	5 in 2008;	Target: 16	5% in 2025										
Applicable Outpu	Applicable Output(s) from the UNDP Strategic Plan: 2.5.1 Solutions developed, financed and applied at scale for energy efficiency and transformation to clean														
energy and zero-carbon development, for poverty eradication and structural transformation. Project title and Atlas project number:															
EXPECTED	OUTPUT INDICATORS ²⁹	DATA	BASELIN	IE	TARGETS (by fr	requency of data	a collection)	DATA COLLECTION							
OUTPUTS		SOURCE	Value	Year	Year 1	Year 2	FINAL	METHODS & RISKS							
Output 1:	1.1 PIU capacitated and	Project	No	2019	Yes	Yes	Yes	Collection method:							
Technical	operational until the end of	reports						Review of project reports.							
assistance and	the project (Yes/No).							Review of project reports.							
professional								Frequency: every month.							
services to the								Responsibility: UNDP.							
MME provided								Risks: Lack of qualified staff.							

²⁸ UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

²⁹ It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant

Output 2: Technical preconditions for EER of 28 CGBs (Central Government Buildings) set	2.1 Energy passports for selected CGBs elaborated.	Central Registry of Energy Passports for Buildings (CREP ³⁰)	3	2019	25	0	Up to 25	Collection method: Information on the web site. Frequency: once, upon deadline for submission of building energy passports. Responsibility: UNDP/PIU. Risks: Low quality of deliverables.
	2.2 DEA (Detailed Energy Audit) for selected CGBs conducted	DEA reports	0	2019	15	10	Up to 25	Collection method: Review/analysis of DEA reports. Frequency: once, upon deadline for submission of DEA reports. Responsibility: UNDP/PIU. Risks: Low quality of deliverables.

³⁰ <u>http://crep.gov.rs/EnergetskiPasosi.aspx</u>

2.3 FS (Feasibility Studies) for selected CGBs elaborated	FS	0	2019	0	2	At least 2 FS elaborated	Collection method: Review/analysis of FS. Frequency: once, upon deadline for submission of FS reports. Responsibility: UNDP/PIU. Risks: Low quality of deliverables.
2.4 Number of required full sets of technical documents for selected CGBs elaborated as required by the law. Note: The content and complexity of each set is to be determined by DEA/FS	Central Register of Integrated Procedures (CEOP ³¹)	0	2019	5	1	At least 5 sets of technical documents	Collection method: Review/analysis of relevant design documents. Frequency: once, upon deadline for submission of relevant design documents. Responsibility: UNDP/PIU. Risks: Low quality of deliverables.

³¹ <u>https://ceop.apr.gov.rs/eregistrationportal/public/home</u>

	2.5 Geological explorations of groundwaters in the vicinity of Palace of Serbia building for the purpose of estimating the possibility of using the heat	Geological survey report	0	2019	0	1	1	Collection method: Review/analysis of geological exploration report.
	pumps for heating and air- conditioning in Palace of Serbia performed (yes/no).							Frequency: once, upon deadline for submission of the geological survey report.
								Responsibility: UNDP/PIU. Risks: Low quality of geological explorations works.
Output 3: Communication and visibility related to EECGB Programme secured.	3.1 Number of workshops for the EECGB Programme beneficiaries, other stakeholders and media organized	Project reports	0	2019	1	1	Up to 2 workshops	Collection method: Review/analysis of relevant reports. Frequency: monthly, within deadline envisaged for final selection.
								Responsibility: UNDP/PIU. Risks: Lack of stakeholders' interest in EECGB Programme.

3.2 Number of media outlets (newspaper, local and national TV, radio and other electronic media) informing the public about the EECGB Programme.	Project reports	0	2019	12	12	24	Collection method: Review of relevant sources. Frequency: quarterly. Responsibility: UNDP/PIU. Risks: Lack of stakeholders' interest in EECGB Programme.
3.3. Number of forums (domestic and international conferences, technical journals) to inform the expert community about the EECGB Programme.	Project reports	0	2019	6	6	12	Collection method: Review of relevant sources. Frequency: quarterly Responsibility: UNDP/PIU. Risks: Lack of stakeholders' interest in EECGB Programme.

Project Outputs and Related Activities

Table 5: Project outputs and related activities

<u>Output 1</u> : Technical assistance and professional services to the MME provided.	<u>Output 2</u> : Technical preconditions for EER 28 CGBs set.	<u>Output 3</u> : Communication and visibility related to EECGB Programme secured.
Activity 1.1 Project Implementation Unit (PIU) established and operational until the end of the project.	Activity 2.1: Detailed planning of PA once the grant is approved. The planning shall be done in close cooperation with the MME and UZZPRO, taking into account the already existing technical documentation for each of the selected CGB, availability of the UZZPRO staff and working hour of institutions which use CGB.	Activity 3.1: Elaboration of the communication plan. Elaboration of a communication plan with a detailed description of communication activities.
	Activity 2.2: Implementing public procurement related to PA. Implementing public procurement related to PA (incl. elaboration of ToRs for services and bills of quantities for the supply of goods, elaboration of tender documents for services (energy certificates, DEA, FS, design documents, technical control, geological exploration works, expert supervision of works, etc.), guiding public procurement process, evaluating proposals, contracting consultants and suppliers, etc.).	Activity 3.2: Organizing inception workshop. Organizing inception workshop for representatives of employees in government institutions which use CGB, other interested parties and media. The purpose of the workshop is to inform the stakeholders and media about the EECGB Programme and envisaged programme/project activities and expected results. The workshop will be organized by PIU in close cooperation with MME and UZZPRO.
	Activity 2.3: Energy certification of CGBs before the EER. Performing energy certification of CGBs before the EER, as per the Rulebook on Energy Efficiency in Buildings ¹⁸ and Rulebook Defining Conditions for Issuing and Content of Energy Performance Certificates of Buildings.	Activity 3.3: Performing information and communication activities. Regularly performing information and communication activities for the CGB employees, media, and expert community.

Activity 2.4: Conducting DEA.	Activity 3.4: Organizing the final workshop.
Conducting DEA for up to 25 CGB. Audits shall pinpoint sets of financially and technically viable energy efficiency measures for each particular building along with relatively precise investment cost estimate, savings in energy, CO ₂ and costs, simple payback period and financial viability parameters.	Final workshop for representatives of employees in government institutions which use CGB, other interested parties and media for the purpose of presenting the project results and plans for the execution of EER works. The workshop will be organized in close cooperation with MME and UZZPRO.
Activity 2.5: Elaborating FS.	
Elaborating FS for app. 2 largest buildings. The DEA shall indicate which buildings need a more detailed analysis in terms of applicable and viable EE measures and their matching with other requirements (for instance, protection of exterior/interior in heritage buildings). In particular, the FS shall take in consideration all aspects of discontinuation of the working process in some big buildings (for instance, the need to temporary dislocate the staff (where, how, how long, the cost of dislocation, etc.). The FS shall provide the basis for decision making on modalities of EER of big CGB.	
Activity 2.6: Geological explorations of groundwaters in the vicinity of the Palace of Serbia building for the purpose of estimating the possibility of using heat pumps for heating and air-conditioning in the Palace of Serbia performed.	
Activity 2.7: Elaborating sets of design documents to the level of detail as required by the law.	
Activity 2.8: Obtaining permits and conditions.	
Obtaining relevant permits and conditions of public	

utility companies, fire protection authority and institution in charge of the protection of cultural heritage as required by the relevant laws.	
Activity 2.9: Performing technical control of design documents when required by the law.	
Activity 2.10: Day to day management of PA.	
Activity 2.11: Monitoring and reporting on PA to MME and CEB, etc.	

Draft Project Implementation Plan

Table 6: Draft project time implementation plan

Funds available through CEB grant Funding to be determined (CEB loan funds or other) Project: Preparatory Activities for the Programme "Energy Efficiency in Central Government Buildings" Project component 03 04 04 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 8 9 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 10 11 12 PIU Output 1: Technical assistance and professional services to the MME provided. Activity 1.1: Project Implementation Unit (PIU) established and operational until the end of the project. UNDP Activity 2.10: Day to day management of PA (procurement, payments, issuing contracts) UNDP Activity 2.11: Monitoring and reporting on PA to MME and CEB, etc. UNDP Output 2: Technical preconditions for EER of 28 CGBs set. Inception phase Activity 2.1: Detailed planning of PA once the grant is approved. MM. UZZPRO UNDP Establishing the Project Board MME Reviewing, updating, revising and compiling the existing data on CGBs UZZPRO UNDP Defining the priority list of CGBs for EER UZZPRO Approving the priority list of CGBs for EER PB Defining the Stakeholder Engagement Plan UZZPRO UNDP Approving the Stakeholder Engagement Plan PB Elaborating the PA plan UZZPRO UNDP Approving the PA plan PB Deliverables: Inception pha PB establis Priority list of CGB for EER along with relevant data on CGBs approved by the F The Stakeholder Engagement Plan approved by the PB The detailed plan for PA, as per Article 1, 1.5 (a), (iii) of CEB GA SIGA-SCA, approved by the PB Inception Report - Summary Report approved by the PB Phase 1: Initial energy certification of 25 CGBs and DEA for 26 CGBs including 4-6 priority buildings (5 LOTs) Activity 2.2/1: Implementing the public procurement related to energy certification and DEA UNDP Reviewing and adjusting the existing Procurement Plan on the basis of 2.1 Approving the revised Procurement Plan PB Elaborating the ToR and RfP for energy certification and DEA of CGBs reflecting the priority list UNDP Accepting the ToRs and RFPs PB Conducting the public procurement process and contracting the consulting companies to perform energy certification and DEA UNDP Activity 2.3: Energy certification of 25 CGBs before the EER. UNDF Securing the access to CGB and providing the consultants with data and documents UZZPRO Coordinating and monitoring the energy certification process including the site visits UNDP Quality review of the energy certificates against the ToR UNDP Accepting the energy certificates for 4-6 priority buildings Accepting the energy certificates for remaining buildings (as per delivery of certificates) PB Activity 2.4: Conducting DEA of 26 CGBs UNDP Securing the access to CGB and providing the consultants with data and documents UZZPRO Coordinating and monitoring the process of conducting DEA including the site visit UNDP Regular consultations with selected consultants UZZPRO, MME UNDP Quality review of the DEA Reports against the ToR UNDP Accepting the DEA Reports for 4-6 priority buildings Accepting the DEA Reports for remaining buildings (as per delivery of DEA reports) PB Deliverables in phase 1 Revised Procurement Plan, as per Article 1, 1.5 (a), (iv) of CEB GA SIGA-SCA, approved by the PB The procurement process for energy certification and DEA finalised and approved by the BP Energy certificates and DEA for 4-6 priority CGBs accepted by the PB Energy certificates and DEA reports for remaining 20-22 CGBs accepted by the PB

Phase 2: Geological explorations of groundwaters in the vicinity of the Palace of Serbia building	,																-										
		-				-						1 1															—
Activity 2.2/2: Implementing the public procurement related to geological explorations of groundwaters in the vicinity of the Palace of Serbia building																											
Elaborating the ToR and RfP for geological explorations of groundwaters in the vicinity of the Palace of Serbia building		UNDP																						\square		TT	Г
Accepting the ToR and RFF	PB																										
Conducting the public procurement process and contracting the consulting company to perform geological explorations of		UNDP																								TT	
groundwaters in the vicinity of the Palace of Serbia building		UNDP																									
Activity 2.6: Geological explorations of groundwaters in the vicinity of the Palace of Serbia building.																										П	
Securing the access to Palace of Serbia and providing the consultants with data and documents	UZZPRO																										T
Coordinating and monitoring the process of geological explorations		UNDP		1																							Г
Regular consultations with selected consultants	UZZPRO, MME	UNDP		1																							Г
Quality review of Report on Geological Explorations against the ToR		UNDP		1																							Г
Accepting the Report on Geological Explorations	PB																									TT	
Activity 2.8/2: Obtaining permits and conditions.	UZZPRO, MME																									TT	Г
	Deliverable																										
The procurement process for Geological explorations of groundwaters in the vicinity of Palace of Sert						\mathbf{v}																					
Report on Geolog	ical Explorations accepte	ted by the PB	8																								
Phase 3: Elaborating FS for the Palace of Serbia and SIV III (2 LOTs)																											
Activity 2.2/3: Implementing the public procurement related to FS for the Palace of Serbia and SIV III														П		11								ПТ			Γ
Elaborating the ToR and RfP for FS for the Palace of Serbia and SIV III including initial energy certification and DEA	<u> </u>	UNDP								1 1		1 1		+ +	+ + +		1		H	++	++	+ +	+ +	+++	++	++	t
Elaborating the fox and kir for P3 for the Parace of Serbia and siv in including mittal energy certification and Day Accepting the ToRs and RFP3	PB	July						-+-+	+	1 1		1 1		+ +					H	++	++	+ +	+ +	+++	++	++	⊢
Conducting the public procurement process and contracting the the consulting companies to elaborate the FS for the Palace of		1	1 1		1 1			шiшi	-	1 1		1 1		11	+++		1	\vdash			+ +	+ +	+ +	+++	++	++	t
Conducting the public procurement process and contracting the the consulting companies to elaborate the rs for the Palace of Serbia and SIV II		UNDP																						Ш			
Activity 2.5: Elaborating the FS for the Palace of Serbia and SIV III																											
Securing the access toPalace of Serbia and SIV III and providing the consultants with data and documents	UZZPRO																									TT	
Coordinating and monitoring the process of elaboration of FSs		UNDP																									
Regular consultations with selected consultants	UZZPRO, MME	UNDP																									
Quality review of FS against the ToP		UNDP																									
Accepting the FS for SIV II	PB																										
Accepting the FS for Pallace of Serbia																											
	Deliverab																										
The procurement process for FSs for Pallace of Serbia and SIV		ed by the PB																									_
	FS for SIV III acc		3						_						+												
FS for	Palace of Serbia accepte	ted by the PB																					1.1				_
Phase 4: Elaborating the design documents for the selected CGBs (4-6 buildings, totalling appro	x. 12,000 m2)	-																									
Activity 2.2/4: Implementing the public procurement related to elaboration of design documents for the selected CGBs																											
Selecting the investment package among the packages proposed in DEA for each CGB	PB	UNDP																									Г
Approving the investment packages for CGB for which the design documents will be elaborated first																											Γ
Elaborating the ToR and RfP for elaboration of design documents for the selected CGBs	PB	UNDP																									L
Accepting the ToRs and RFPs	PB								T																		1
Conducting the public procurement process and contracting the consulting company (es) to elaborate the set of design documents for the selected CGBs		UNDP																								T	Γ
Activity 2.7/4: Elaborating the sets of design documents to the level of detail as required by the law.																										\square	
Securing the access to CGBS and providing the consultants with data and documents	UZZPRO	1	1 1			1	t t							1 1	111		1				-1-1-		11	H		++	t
Coordinating and monitoring the process of elaboration of design documents		UNDP			1		1								111							11		\mathbf{H}		11	t
Regular consultations with selected consultants	UZZPRO, MME	UNDP			1		1					11			111		1					11	11	\square		11	T
Quality review of deliverables against the respective ToR		UNDP										11									11						T
Accepting the elaborated design documents	PB																										Г
Elaborating the plan for dislocation of CGB users during the construction works	UZZPRO, GOVERNMENT													Π												Т	
Activity 2.8/4: Obtaining permits and conditions.	UZZPRO	+	<u> </u>		1 1	+		++				╞┼╴		++		++			\vdash	\square	++	++	++	HH	++	++	t
Activity 2.9/4: Performing technical control of design documents when required by the law.	UZZPRO	+	 		+ +	+		++				++-		++	┼┼┤	++			H		++	++	++	+++	++	++	┢
HELINING 2.374. PERTURNING LEMITICAL CONTROL OF DESIGN DOCUMENTS WHEN REQUIRED BY THE NAM.	Deliverable	es in phase 4			+	+		++	+	┥───┦		\vdash		++	+++				\square	_	++	++	++	+++	++	++	┝
Investment packages for CGB for the 4						-		_	+						+++		1					-	+ +	+++	-	++	t
The plan for dislocation of CGB users during the construction						-		-+-+	+															+++		++	t
The procurement process for elaboration of the design documents for the selected CGBs (4-6 buildings, totaling approx. 12,001					1	1	t t		-	V		t i		1 1	111		1					+ +	11	+++		++	t
		PE	3								_	LI		11									11				1
The set of design documents for each of t	he selected CGB accept	ed by the PB	8																								Г

Phase 5: Elaborating the design documents for remaining 20-22 CGBs (4 LOTs)																									-	 						
Activity 2.2/5: Implementing the public procurement related to elaboration of design documents for the selected CGBs																											Π			Τ	\square	
Selecting the investment package among the packages proposed in DEA for each of remaining CGBs	PB	UNDP										1																		_		_
Approving the investment packages for each of remaining CGB	PB																1 1						1 1									
Elaborating the ToR and RfP for elaboration of design documents for remaining selected CGBs	PB	UNDP															1 1						1 1									
Accepting the ToRs and RFPs	PB																						1	-						_	\vdash	
Conducting the public procurement process and contracting the consulting services related to elaboration of design documents									-			1					1 1				-	-	1 1	-			1 1				\vdash	
for the remaining CGBs		UNDP																													\square	
Activity 2.7/5: Elaborating the sets of design documents to the level of detail as required by the law.																																
Securing the access to CGBS and providing the consultants with data and documents	UZZPRO																															
Coordinating and monitoring the process of elaboration of design documents		UNDP																														
Regular consultations with selected consultants	UZZPRO, MME	UNDP																														
Quality review of deliverables against the respective ToR		UNDP																														
Accepting the elaborated design documents	PB																															
Elaborating the plan for dislocation of CGB users during the construction works	UZZPRO, GOVERNMENT																															
Activity 2.8/5: Obtaining permits and conditions.	UZZPRO																										t t		t t			
Activity 2.9/5: Performing technical control of design documents if required by the law.	UZZPRO																			+							+				H	
	Deliverables	in phase 5							_		_			_		_		_							_	_					┢─┼╴	++
Investment packages for CGB for the 20-22 priorit	y SGBs approved	d by the PB																														
The plan for dislocation of CGBS users during the construction works ap												1																		_	\vdash	
The procurement process for elaboration of the design documents for the selected 20-22 CGBs finalis												1												-						_	\vdash	
The set of design documents for each of the remaining									-					-	Y I	_		-			/	<u> </u>					+ +	_		—	+-+	++
Phase 6: Elaboration of design documents for SIV III Activity 2.2/6: Implementing the public procurement related to elaboration of design documents for SIV III		r			L L					пт									r r	-			T 1			-	 		гт		гт	
Selecting the investment package among the packages proposed in FS for SIV III	PB	UNDP		_		_			-		-	+ +	-					-		-		_	+ +	_	-	-		-			⊢	++
Approving the investment package among the packages proposed in 15 for SV in	PB	UNDF		_					-		_	+ +				_				-		_	+ +	_	-		+ +	_			┢──┾	-+-+-
		UNDP	 _				_		_			-				_				_							+ +				+	
Elaborating the ToR and RfP for elaboration of design documents for SIV III	PB	UNDP	 	_		_			_				_			_		_		_		_			_	-				<u> </u>	┢──┼─	\rightarrow
Accepting the ToR and RFP Conducting the public procurement process and contracting the consulting company to elaborate the set of design documents	РВ	UNDP																														
for SIV III Activity 2.7/6: Elaborating sets of design documents to the level of detail as required by the law.																																
Securing the access to SIV III and providing the consultants with data and documents	UZZPRO																															
Coordinating and monitoring the process of elaboration of design documents		UNDP																														
Regular consultations with selected consultants	UZZPRO, MME	UNDP																														
Quality review of deliverables against the respective ToR		UNDP																										1				
Accepting the elaborated design documents	PB	1					1					1																				
Elaborating the plan for dislocation of SIV III users during the construction works	UZZPRO, GOVERNMENT																															
Activity 2.8/6: Obtaining permits and conditions.	UZZPRO																															
Activity 2.9/6: Performing technical control of design documents if required by the law.	UZZPRO																													Т	\square	
	Deliverables	in phase 6																														
Investment packages fo	r SIV III approved	d by the PB																														
The plan for dislocation of SIV III users during the construction works ap	proved by the Go	overnment																														
The procurement process for elaboration of the design documents for SIV III finalis	ed and approved	d by the PB																														
The set of design documents for	or SIV III accepted	d by the PB						1		T Í			1		1 1				1	1								1				

Phase 7: Elaboration of design document for Palace of Serbia																									-									
Activity 2.2/7: Implementing the public procurement related to elaboration of design documents for Palace of Serbia																																\square		
Selecting the investment package among the packages proposed in FS for Palace of Serbia	PB	UNDP	_				-			_		-			_								_					_	_			+		+
																																+		-
							-					-			-				##		-	-		-		-	-	-	-			+	-+	+
		UNDF						-				-							##			-	-	-				-				+	_	+
· •	PD						_	-				_			_	-		-				+		_			_			-		+	-+	-
Conducting the public procurement process and contracting the consulting company to elaborate the set of design documents for the Palace of Serbia		UNDP																																
Activity 2.7/7: Elaborating sets of design documents to the level of detail as required by the law.																																		
Securing the access to Palace of Serbia and providing the consultants with data and documents	UZZPRO																															#		
Coordinating and monitoring the process of elaboration of design documents		UNDP																														ff (
	UZZPRO, MME	UNDP																														1		
Quality raview of deliverables against the respective ToP								+ +										+ +															-+	-
		UNDP						-		_		_						-											***			Here	_	
Accepting the elaborated design documents			_				_	_		_		_		_				_		-		-		_			_						_	_
Elaborating the plan for dislocation of SIV III users during the construction works	UZZPRO, GOVERNMENT																																	
ctivity 2.8/7: Obtaining permits and conditions.	UZZPRO																																	
ctivity 2.9/7: Performing technical control of design documents if required by the law.	UZZPRO																																	
The plan for dislocation of Palace of Serbia users during the construction works app	proved by the Go	overnment																																
The procurement process for elaboration of the design documents for Palace of Serbia finalis	ed and approved	by the PB																																
							_	-	-			-					-	-		1 1		Y				-			-	-				
upport to PA (engineering, interpretation,, etc.) and backstopping								-																										
		-																																
Progress-report on implementation of TA Project as per Article 7	, 7.1 (a)/(i) of CEI	B GA WBIF																																
Quaterly briefs on the implementation progress of the TA project as per Article 7, 7.1	(b)/(i) of CEB GA	SIGA-SCA															/																	
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Activity 3.1: Elaboration of the communication plan.		UNDP																																
Activity 3.2: Organizing inception workshop for stakeholders		UNDP																																
ctivity 3.3: Performing information and communication activities.		UNDP																																
cctivity 3.4: Organizing the final workshop.		UNDP																																
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Important Important																																		
Phase 1: 4-6 priority CGBs																																		
								-		_	<u> </u>	_	<u> </u>				_		_				-	-										_

Phase 2: Remaining 20-22 CGBs

Phase 2: SIV III Phase 4: Palace of Serbia

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Table 7: Draft project implementation plan as per list of CGBs

No	Building	Building	Address	Category of buildings	Protectio n level	Priority UZZPRO	Type of heating	Glassi ng area	Percent age of gross floor area AJSRB	Gross floor area	FS	Elaborat ion of EE Passport	Elaborat ion of DEA	Big license for designing façade required	Design document s to be elaborate d in PA phase	Start of constructio n works in Q4 2021 possible
					-		-	%	%	m²						
1	The Intellectual Property Office	Zavod za intelektualnu svojinu	Kneginje LJubice 5	2	CH PKIC 18	I	PUC BE	13.93	1.67%	3,472.00	Not needed	Needed	Needed	Needed	Yes	Yes
2	Republic Agency for Peaceful Settlement of Labour Disputes; The Ministry of Labour, Employment, Veteran and Social Policy	Republička agencija za mirno rešavanje radnih sporova; Ministarstvo za rad zapošljavanje boračka i socijalna pitanja	Makedo nska 4- 4a	2	/	I	PUC BE	29.85	1.37%	2,850.00	Not needed	Needed	Needed	Not needed	Yes	Yes
3	Directorate of Measures and Precious Metals	Direkcija za mere i dragocene metale	Mike Alasa 14	3	/	111	PUC BE	24.66	1.25%	2,596.00	Not needed	Not needed	Not needed	Not needed	Yes	Yes
4	Administration for Agricultural Land (MAFWM)	Uprava za poljoprivredno zemljište (MPZŽS)	Gračanič ka 8	3	/	I	PUC BE	24.63	0.66%	1,365.00	Not needed	Needed	Needed	Not needed	Yes	Yes
5	Ministry of Public Administration and Local Self- Government	Ministarstvo državne uprave i lokalne samouprave	Birčanin ova 6	3	/	III	PUC BE	30.18	0.79%	1,649.00	Not needed	Needed	Needed	Not needed	Yes	Yes
6	Ministry of Mining and Energy	Ministarstvo rudarstva i energetike	Kralja Milana 36	3	/	I	PUC BE	24.53	1.04%	2,171.00	Not needed	Not needed	Not needed	Not needed	No	No

7	The National Council for Coordination of Cooperation with the Russian Federation and the People's Republic of China	Kancelarija nacionalnog saveta za koordinaciju saradnje sa Ruskom Federacijom i Narodnom Republikom Kinom	Vasina 20	2	CH SK2125	111	PUC BE	22.5	0.68%	1,417.14	Not needed	Needed	Needed	Needed	No	No
8	The Ministry of Environmental Protection - Serbian Environmental Protection Agency	Ministarstvo zaštite životne sredine - Agencija za zaštitu životne sredine	Ruže Jovanovi ć 27a	3	/	I	local boiler plant- LFO	19.43	0.32%	663.00	Not needed	Needed	Needed	Not needed	No	No
9	Directorate for Commodity Reserves of the Republic, Office for Information technology and eGovernment, the Administrative Inspectorate	Republička direkcija za robne rezerve, Direkcija za elektronsku upravu, Upravni inspektorat	Dečansk a 8-8a	1	/	I	PUC BE	47.70	3.90%	8,100.00	Not needed	Needed	Needed	Not needed	No	No
10	Ministry and Judiciary building	Zgrada ministarstva i pravosudnih organa	Nemanji na 22-26	4	/	I	PUC BE	34.63	11.71%	24,332.00	Not needed	Needed	Needed	Not needed	No	No
11	Building of the Commissioner for the protection of equality and Directorate for Agrarian Payments, former building of the LOLA Institute	Zgrada poverenika za zaštitu ravnopravnosti i Uprava za plaćanja, bivša zgrada LOLA Instituta	Bulevar Kralja Aleksand ra 84	1	/	I	PUC BE	79.97	6.98%	14,500.00	Not needed	Needed	Needed	Not needed	No	No

12	The Palace of Serbia – SIV 1	Palata Srbije — SIV 1	Bulevar Mihajla Pupina 2	5	CH SK2144	II	local boiler plant- LFO	43.95	26.30%	54,660.00	Needed	To be revised	To be revised	Needed	No	No
13	Government building - SIV 3	Poslovna zgrada vlade RS – SIV 3	Omladin skih brigada 1	1	/	Ш	PUC BE	43.50	11.79%	24,500.00	Needed	Needed	Needed	Not needed	No	No
14	National Assembly Building, the Republic Property Directorate	Zgrada Narodne Skupštine, Republička direkcija za imovinu Republike Srbije	Kralja Milana 16 i Dobrinjs ka 11	2	/	111	PUC BE	15.12	5.00%	10,400.00	Not needed	Needed	Needed	Not needed	No	No
15	European Integration Office	Kancelarija za evropske integracije	Nemanji na 34	4	/	Ш	PUC BE	16.62	1.00%	2,083.00	Not needed	Not needed	Not needed	Not needed	No	No
16	Republic Commission for Protection of Rights in Public Procurement Procedures	Republička komisija za zaštitu prava u postupcima javnih nabavki	Birčanin ova 19a	2	/	111	PUC BE	7.9	0.89%	1,843.00	Not needed	Needed	Needed	Not needed	Yes	No
17	The Anti- Corruption Agency	Agencija za borbu protiv korupcije	Carice Milice 1	4	/	Ш	PUC BE	23.07	0.88%	1,820.35	Not needed	Needed	Needed	Not needed	No	No
18	MP's club	Klub narodnih poslanika	Tolstojev a 2	4	/	111	local boiler plant- gas	13.7	0.75%	1,550.00	Not needed	Needed	Needed	Not needed	No	No
19	Pupils and Students Standard Sector, Education Inspection Affairs (MESTD)	Sektor za učenički i studentski standard, sektor za inspekcijske poslove (MPNTR)	Zahumsk a 14	3	/	111	local boiler plant- LFO	32.53	0.72%	1,500.00	Not needed	Needed	Needed	Not needed	No	No
20	Ministry of Public Administration and Local Self- Government	Ministarstvo državne uprave i lokalne samouprave	Vlajković eva 10	2	/	111	PUC BE	19.25	0.65%	1,359.00	Not needed	Needed	Needed	Not needed	No	No

21	High Judicial Council, State Prosecutorial Council	Visoki savet sudstva, Državno veće tužilaca	Resavska 42	2	/	III	PUC BE	17.01	0.57%	1,182.00	Not needed	Needed	Needed	Not needed	No	No
22	Sectors and groups in the Ministry of Trade, Tourism and Telecommunica tions	Sektori i grupe Ministarstva trgovine, turizma i telekomunikacij a	Pariska 7	2	СН РКІС6	III	electric boiler 2x24 kW and heat pump	13.96	0.52%	1,082.00	Not needed	Needed	Needed	Needed	No	No
23	Institute for Nature Conservation of Serbia	Zavod za zaštitu prirode Srbije	Dr Ivana Ribara 91	1	/	111	PUC BE	42.46	0.34%	702.00	Not needed	Needed	Needed	Not needed	No	No
24	Institute for the improvement of education	Zavod za unapređivanje obrazovanja i vaspitanja	Draže Pavlovića 15	2	/	III	PUC BE	27.5	0.27%	570.00	Not needed	Needed	Needed	Not needed	No	No
25	State Council, Ministry of Finance and Ministry of Economy	Zgrada Državnog saveta, Ministarstvo finansija i Ministarstvo privrede	Kneza Miloša 20	2	СН	IV	PUC BE	19.62	7.26%	15,087.00	Not needed	Needed	Needed	Needed	No	No
26	Government building, former Ministry of Finance of the Kingdom of Yugoslavia Building	Zgrada Vlade, bivša Palata ministarstva finansija i Kraljevine Jugoslavije	Nemanji na 11	2	CH SK1648	IV	PUC BE	27.44	6.58%	13,670.00	Not needed	To be revised	To be revised	Needed	No	No
27	Building of Central Post Office in Belgrade – Commissioner for Information of Public Importance and Personal data	Palata glavne pošte u Beogradu – Poverenik za informacije odjavnog značaja i zaštitu podataka o ličnosti, Ustavni	Bulevar Kralja Aleksand ra 15	4	CH SK2121	IV	PUC BE	22.71	4.18%	8,677.00	Not needed	Needed	Needed	Needed	No	No

	Protection, the Constitutional Court	sud Republike Srbije														
28	Palace of the President of the Republic of Serbia	Palata Predsednika Republike	Andrićev venac 1	2	CH SK 434	IV	PUC BE	15.45	1.94%	4,030.00	Not needed	Needed	Needed	Needed	No	No
									100.00%	207,830.49						

VI. MONITORING AND EVALUATION

- 125. The project results as outlined in the project results framework will be monitored periodically during project implementation and evaluated at the project completion to ensure the project effectively achieves these results.
- 126. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high-quality standards.

Monitoring and Reporting Plan

 Table 8: Project monitoring plan

Monitoring Activity	Purpose	Frequency	Expected Action
Track results progress	Progress data against the results indicators in the RRF will be collected and analyzed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.
Monitor and Manage Risk	Identify specific risks that may threaten the achievement of intended results. Identify and monitor risk management actions using a risk log.	Twice a year	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the the project team and used to inform management decisions.
Annual Project Quality Assurance	The quality of the Project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.

Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make a course corrections.
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project	Annually, and at the end of the Project (final report)	
Project Review (Project Board)	The project's governance mechanism (Project Board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	Twice a year	Any quality concerns or slower than expected progress should be discussed by the Project Board and management actions agreed to address the issues identified.

Table 9: Reporting schedule

Report/deliverable	D	elivery (month)	No of copies (hard copy+soft copy)					
			PIU	MME	UZZPRO			
Inception Phase								
MoM kick-off meeting	<1 (Q1/1 st y)	One week after the meeting	1 (in Serbian and English)	1 (in Serbian and English)	1 (in Serbian and English)			
Priority list of CGB for EER along with relevant data	1 (Q1/1 st y)	One month after the meeting	1 (in Serbian and English)	1 (in Serbian and English)	1 (in Serbian and English)			
The Stakeholder Engagement Plan	2 (Q1/1 st y)	2 months after the kick-off meeting	1 (in Serbian and English)	1 (in Serbian and English)	1 (in Serbian and English)			
The detailed Plan for PA, as	2 (Q1/1 st y)	2 months after the kick-off	1 (English)	1 (English)	1 (English)			

per Article 1, 1.5 (a), (iii) of CEB GA SIGA-SCA		meeting			
Revised Procurement Plan, as per Article 1, 1.5 (a), (iv) of CEB GA SIGA-SCA	2 (Q1/1 st y)	2 months after the kick-off meeting	1 (English)	1 (English)	1 (English)
Inception Report - Summary Report	1 (Q1/1 st y)	One month after the meeting	1 (in Serbian and English)	1 (in Serbian and English)	1 (in Serbian and English)
Communication Plan	2 (Q1/1 st y)	2 months after the kick-off meeting	1 (in Serbian)	1 (in Serbian)	1 (in Serbian)
Phase 1: Initial energy certificat	tion of 25 CGBs and	DEA for 26 CGBs including th	e 4-6 priority SGBs approved	by the PB	
Energy certificates and DEA for 4-6 priority CGBs accepted by the PB	8 (Q3/1 st y)	8 months after the kick-off meeting	1 (Serb.)	1 (Serb.)	1 (Serb.)
Energy certificates and DEA reports for remaining 20-22 CGBs accepted by the PB	2 (Q2/2 nd y)	14 months after the kick- off meeting	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)
Phase 2: Geological exploration	ns of groundwaters	in the vicinity of the Palace of	f Serbia building		
Report on Geological Explorations accepted by the PB	8 (Q3/2 nd y)	20 months after the kick- off meeting	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)
Phase 3: Elaborating FS for the	Palace of Serbia an	d SIV III			
FS for SIV III accepted by PB	5 (Q2/2 nd y)	17 months after the kick- off meeting	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)
FS for Palace of Serbia accepted by the PB	12 (Q4/2 nd y)	24 months after the kick- off meeting	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)	1 (in Serbian with summary in English)
Phase 4: Elaborating the design	documents for the	selected CGBs (4-6 buildings,	, totalling approx. 12,000 m2		
The set of design documents for each CGB accepted by the PB	3 (Q1/2 nd y)	15 months after the kick- off meeting	1 (in Serbian)	1 (in Serbian)	1 (in Serbian)
Phase 5: Elaborating the design	documents for ren	naining 20-22 CGBs			
The set of design documents for each CGB accepted by the PB	8 (Q3/3 rd γ)	19 months after the kick- off meeting	1 (in Serbian)	1 (in Serbian)	1 (in Serbian)

Phase 6: Elaboration of design	document for SIV	III			
The set of design documents	2	38 months after the kick-	1 (in Serbian)	1 (in Serbian)	1 (in Serbian)
for SIV III accepted by the PB	(Q1/4 th y)	off meeting			
Phase 7: Elaboration of design	document for Pala	ace of Serbia			
The set of design documents	8	44 months after the kick-	1 (in Serbian)	1 (in Serbian)	1 (in Serbian)
for Palace of Serbia accepted	(Q3/4 th y)	off meeting			
by the PB					
Management of PA	r				
Progress-report on	5	1 (English)	1 (English)	1 (English)	1 (English)
implementation of TA Project	(Q2/1 st y)				
as per Article 7, 7.1 (a)/(i) of					
CEB GA WBIF					
Quarterly brief (Q1) on the	End of each	1 (English)	1 (English)	1 (English)	1 (English)
implementation progress of	quarter				
the TA project as per Article 7,					
7.1 (b)/(i) of CEB GA SIGA-SCA					
Six-monthly progress report	6	1 (English)	1 (English)	1 (English)	1 (English)
(H1) on implementation of TA	(Q2/1 st y)				
Project as per Article 7, 7.1	12				
(b)/(ii) of CEB GA SIGA-SCA	(Q2/1 st y)				
	6				
	(Q2/2 nd y)				
	12				
	(Q2/2 nd y)		4 (5	4 (5 ! . ! .)	
Completion Report as per	12	1 (English)	1 (English)	1 (English)	1 (English)
Article 7, 7.1 (b)/(iii) of CEB GA	(Q4/2 nd y)				
SIGA-SCA					
Visibility of the PA	4	4 meanth often the birt off	4 (in Carbian with	1 /in Carbian with	4 (in Carbian with sum of
Communication plan	$\frac{1}{(01/15t_{\rm c})}$	1 month after the kick-off	1 (in Serbian with	1 (in Serbian with	1 (in Serbian with summary
	$(Q1/1^{st}y)$	meeting	summary in English)	summary in English)	in English)
Summary of media outlets	12 (Q4/2 nd y)	24 months after the kick-	1 (in Serbian and English)	1 (in Serbian and English)	1 (in Serbian and English)
and final workshop		off meeting			

VII. MULTI-YEAR WORK PLAN

- 127. All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the Project need to be disclosed transparently in the Project Document.
- 128. Considering that UNDP implements projects accounted in USD, any gains or losses to the Project incurred as a result of exchange rate fluctuation shall be borne by the Project. In addition to regular UNDP financial report, (combined deliver report) the additional financial reports shall be produced in EUR. If payments are made in any other currency, those will be converted into the corresponding EUR amounts at the prevailing United Nations operational rate of exchange according to UNDP financial rules.
- 129. The PIU shall produce to MME the following reports:
 - (i) quarterly briefs on the implementation progress of the TA Project;
 - (ii) six-monthly progress reports on the implementation of TA Project ("Progress Reports"); and
 - (iii) a Completion Report which shall include an evaluation of the performance of the TA Project against objectives, as well as an assessment of the use and the impact of the Grants.
 - (iv) The six-monthly Progress Reports and the Completion Report should cover at least the information contained in the template provided by the MME from its Agreement with the CEB.
- The PIU shall also communicate in writing to the MME any comments it may have on the results of the consultancy services to be procured under the TA Project, and advise the MME of any fact or event known to the PIU that might prejudice or substantially affect the completion of the TA Project or the consultancy services to be procured therein. The PIU shall follow implementation of the consultancy services to be procured under the TA Project, propose approval of the outputs of the preparatory activities to the Project board, and keep all outputs available for MME for review if needed during project implementation;
- 131. The PIU shall use its reasonable endeavours to procure permission for any authorised representatives of MME to communicate with and if necessary to visit the consultants to be contracted under the TA Project in order to obtain all such information as MME may require with regard to the progress of the consultancy services.

132. Payment schedule will be as follows:

(a)	upon the date of signing of the agreement (tentatively, 21 May, 2021)	75,000.00 EUR
	and upon approval of Procurement plan by Ministry and CEB	
	(as such term as defined under the CEB procurement guidelines)	
	indicating the procurement methods for each contract that UNDP is going to make.	
(b)	upon approval of Quarterly report 1 (tentatively, 18th June 2021)	185,000.00 EUR
(c)	upon approval of Quarterly report 2 (tentatively 19th August y 2021)	185,000.00 EUR
(d)	upon approval of Quarterly report 3 (tentatively 16th September 2021)	166,600.00 EUR
(e)	upon approval of Quarterly report 4 (tentatively 17th February 2022)	84,150.00 EUR
(f)	upon approval of Quarterly report 5 and 6 (tentatively 15th August 2022)	122,550.00 EUR
(g)	final payment upon approval of Final Report (tentatively 3rd May 2023)	81,700.00 EUR

133.

134. UNDP will pay its vendors, design companies sub-designers and any external support only upon approval of the Ministry.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Bud	get by Year	RESPONSIBLE PARTY		PLANNED BUDG	ET
EXPECTED OUTPUTS	PLANNED ACTIVITIES	Y1	Y2		Funding Source	Budget Description	Amount
	Activity 1.1: Project Implementation Unit (PIU) established and operational until the end of the project.	EUR 68,556.84 USD 80,371.44	EUR 205,340.86 USD 240,727.85	UNDP	MME	71400 Contractual services – individual	EUR 273,897.70 USD 321,099.30
Output 1: Project Implementation Unit (PIU) established and operational		EUR 7,745.54 USD 9,080.35	EUR 11,700.81 USD 13,717.25	UNDP	MME	73100 - Rental and Maintenance Premises	EUR 19,446.35 USD 22,797.60
	the end of the project.	EUR 3,339.23 USD 3,914.69	EUR 3,316.72 USD 3,888.30	UNDP	MME	74500 Miscellaneous	EUR 6,655.95 USD 7,802.99
	Sub-Total for Output 1	EUR 79,641.61 USD 93,366.48	EUR 220,358.39 USD 258,333.40				EUR 300,000.00 USD 351,699.88
	Activity 2.1: Detailed planning of PA once the grant is approved. Activity 2.2: Implementing public procurement related to PA.	EUR 35,432.00 USD 41,538.10	EUR 35,432.00 USD 41,538.10	UNDP	MME	71400 Contractual services – individual	EUR 70,864.00 USD 83,076.20
Output 2: Technical preconditions for energy efficiency renovation of 28	Activity 2.3: Energy certification of CGBs before the EER. Activity 2.4: Conducting DEA.	EUR 170,721.69 USD 200,142.67	EUR 226,600.00 USD 265,650.6	UNDP	MME	72100 Contractual services – comp.	EUR 397,321.69 USD 465,793.31
CGBs set	Activity 2.5: Elaborating FS. Activity 2.6: Geological explorations of groundwaters in the vicinity of the Palace of Serbia	EUR 17,304.00 USD 20,286.05	EUR 17,304.00 USD 20,286.0	UNDP	MME	71300 Local Consultants	EUR 34,608.00 USD 40,572.10
	building for the purpose of estimating the possibility of using heat pumps for heating and air-	EUR 865.20 USD 1,014.30	EUR 865.20 USD 1,014.30	UNDP	MME	74220 Translation	EUR 1,730.40 USD 2,028.60

Table 10: Project multi-year budget plan

	conditioning in the Palace of Serbia performed. Activity 2.7: Elaborating sets of design documents to the level of detail as required by the law. Activity 2.8: Obtaining permits and conditions. Activity 2.9: Performing technical control of design documents when required by the law. Activity 2.10: Day to day management of PA. Activity 2.11: Monitoring and reporting on PA to MME and CEB, etc.	EUR 3,543.20 USD 4,153.81	EUR 3,543.20 USD 4,153.81	UNDP	MME	74500 Miscellaneous	EUR 7,086.40 USD 8,307.62
	Sub-Total for Output 2	EUR 227,866.09 USD 267,134.93	EUR 283,744.40 USD 332,642.91				EUR 511,610.49 USD 599,777.83
	Activity 2.1. Eleboration of the	EUR 2,554.40 USD 2,994.61	EUR 2,966.40 USD 3,477.61	UNDP	MME	71300 Local Consultants	EUR 5,520.80 USD 6,472.22
	Activity 3.1: Elaboration of the communication plan Activity 3.2: Organizing inception	EUR 3,460.80 USD 4,057.21	EUR 3,872.80 USD 4,540.21	UNDP	MME	71400 Contractual services – individual	EUR 7,333.60 USD 8,597.42
Output 3: Communication and visibility related to EECGB Programme secured	workshop Activity 3.3: Performing information and communication	EUR 1,730.40 USD 2,028.60	EUR 2,636.80 USD 3,091.21	UNDP	MME	74200 Printing and publication costs	EUR 4,367.20 USD 5,119.81
	activities Activity 3.4: Organizing the final	EUR 420.24 USD 492.66	EUR 329.60 USD 386.40	UNDP	MME	74200 Audio Visuals	EUR 749.84 USD 879.06
	workshop	EUR 1,730.40 USD 2,028.60	EUR 865.20 USD 1,014.31	UNDP	MME	74500 Miscellaneous	EUR 2,595.60 USD 3,042.91
	Sub-Total for Output 3	EUR 9,896.24 USD 11,601.68	EUR 10,670.80 USD 12,509.74				EUR 20,567.04 USD 24,111.42
Total programme:	Sub-Total	EUR 317,403.94 USD 372,103.09	EUR 514,773.59 USD 603,486.04				EUR 832,177.53 USD 975,589.13
Direct Project Cost (5%):							EUR 41,608.88 USD 48,779.46

GMS (3%):	EUR 26,213.59
	USD 30,731.06
TOTAL	EUR 900,000.00
	USD 1,055,099.65
Table 11: Budget vs activities

Funds available through CEB grant
Funding to be determined (CEB loan funds or other)

r				Marand				N 3		No. A	
Project: Preparatory Activities for the Programme "Energy Efficiency in Central Government	t Buildings"	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 Q2 Q3 Q4 Q1 Q2 Q3	Q4
	Disbursement	€ 47,362.98	€ 82,191.61	€ 97,020.23	€ 146,532.53	€ 189,356.49	€ 92,512.08	€ 107,362.98	€ 137,661.18	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 1	0 11 12 TOTAL GRANT MISSING
Project component											EUR EUR EUR
Output 1: Technical assistance and professional services to the MME provided.											800,000 300,000 500,0
Advance payment as per Project Document CEB GA	WBIF	€ 75,000.00									
Third payment as per Project Document CEB GA	WBIF			€ 166,600.00							
PIU											
	Disbursement: PIU	€ 37,500.00	€ 37,500.00	€ 37,500.00	€ 37,500.00	€ 37,500.00	€ 37,500.00	€ 37,500.00	€ 37,500.00		
Activity 1.1: Project implementation Unit (PIU) established and operational until the end of the project.											
Activity 1.2: Day to day management of PA (procurement, payments, issuing contracts) Activity 1.3: Monitoring and reporting on PA to MME and CEB, etc.											
Output 2: Technical preconditions for EER of 28 CGBs set.											3,906,544 521,096 3,385
First payment as per Project Document CEB GA	SIGA-SCA		€ 185,000.00								
Inception phase											
Disbu	rsement: Inception phase	€ 0.00	€ 0.00	€ 0.00	€ 0.00	€ 0.00	€ 0.00	€ 0.00	0.00		0 0
Activity 2.1: Detailed planning of PA once the grant is approved.											
Second payment as per Project Document CEB GA	SIGA-SCA			185,000.00							***
	SIGA-SCA			•	- (1	84,150.00					
	SIGA-SCA						€ 150,00	0.00			
	SIGA-SCA								€ 100,000.		
Phase 1: Initial energy certification of 25 CGBs and DEA for 26 CGBs including 4-6 priority bu											270,740 248,285 22
priority bu	Disbursement: Phase 1	€ 0.00	€24,828,62	€49.657.24	6.49.657.24	€124.143.11	60.00	60.00	€ 0.00		270,740 248,286 22
Activity 2.2/1: Implementing the public procurement related to energy certification and DEA	conserver and se 1			213,307.24							
Activity 2.3: Energy certification of 25 CGBs before the EER. Activity 2.4: Conducting DEA of 26 CGBs	-										++
Phase 2: Geological explorations of groundwaters in the vicinity of the Palace of Serbia build	ding										110,000 100,000 10
······································	Disbursement: Phase 2	€ 0.00	€ 10,000.00	€0.00	€ 30,000.00	€0.00	€0.00	€ 60,000.00	€ 0.00		110,000 100,000 10
			£ 10,000.00		C 20,000.00		0.00	600,000.00	0.00		
Activity 2.2/2: Implementing the public procurement related to geological explorations of groundwaters in the vicinity of the	e Palace of Serbia building										
Activity 2.6: Geological explorations of groundwaters in the vicinity of the Palace of Serbia building. Activity 2.8/2: Obtaining permits and conditions.											
Phase 3: Elaborating FS for the Palace of Serbia and SIV III (2 LOTs)											252,623 150,497 102
	Disbursement: Phase 3	€ 0.00	€ 0.00	€0.00	€ 15,049.70	€0.00	€45,149.10	€ 0.00	€ 90,298.20		
Activity 2.2/3: Implementing the public procurement related to FS for the Palace of Serbia and SN III Activity 2.5: Elaborating the FS for the Palace of Serbia and SN III											+++++++++++++++++++++++++++++++++++++++
Phase 4: Elaborating the design documents for the selected CGBs (4-6 buildings, totaling app	prox. 12,000 m2)										22,313 22,313
	Disbursement: Phase 4	€ 0.00	€0.00	€0.00	€ 4,462.60	€ 17,850.40	€0.00	€ 0.00	€ 0.00		22,313 22,313
Activity 2.2/4: Implementing the public procurement related to elaboration of design documents for the selected CGBs											
Activity 2.7/4: Elaborating the sets of design documents to the level of detail as required by the law. Activity 2.3/4: Ottaining primits and conditions. Activity 2.3/4: Performing tachnical costed of design documents when required by the law.											
Activity 2.5/4: Performing technical control of design documents when required by the law. Phase 5: Elaborating the design documents for remaining 20-22 CGBs (4 LOTs)											769,348 0 769
Activity 2.2/5: Implementing the public procurement related to elaboration of design documents for the selected CGBs											/69,548 0 /65
Activity 2.7/5: Elaborating the sets of design documents to the level of detail as required by the law.											+++++++++++++++++++++++++++++++++++++++
Activity 2.8/5: Obtaining permits and conditions. Activity 2.9/5: Performing technical control of design documents if required by the law.											
Phase 6: Elaboration of design documents for SIV III											539.000 0 539
Activity 2.2/6: Implementing the public procurement related to elaboration of design documents for SIV III											
Activity 2.7/6: Elaborating sets of design documents to the level of detail as required by the law.											+++
Activity 2.8/6: Obtaining permits and conditions. Activity 2.9/6: Performing technical control of design documents if required by the law.											
Phase 7: Elaboration of design document for Palace of Serbia											1 202 520 0 1 20
Activity 2.2/7: Implementing the public procurement related to elaboration of design documents for Palace of Serbia Artivity 2.2/7: Flahorating sets of design documents to the level of detail as remained by the law											+++
Activity 2.7/7: Elaborating sets of design documents to the level of detail as required by the law. Activity 2.8/7: Obtaining permits and conditions.											
Activity 2.9/7: Performing technical control of design documents if required by the law.											
Support to PA (engineering, interpretation, etc.) and backstopping											740,000 0 74
	bursement: Support to PA	€ 0.00	€ 0.00	€ 0.00	€ 0.00	€ 0.00	60.00	€ 0.00	€ 0.00		
Activity 2.10: Engineering support (procurement, payments, supervision of execution, etc.) Output 3: Communication and visibility related to EECGB Programme secured											12,190 11,081 1
Visibility of the PA											12,190 11,081 1
	ement: Visibility of the PA	€ 1,385.18	€ 1,385.18	€ 1,385.18	€ 1,385.18	€ 1,385.18	€1,385.18	€ 1,385.18	€ 1,385.18		
Artivity 3.1: Elaboration of the communication plan											
Activity 3.2: Organizing inception workshop for stakeholders Activity 3.3: Performing information and communication activities.											+++
Activity 3.4: Organizing the final workshop.											
											4,718,734 832,178 3,884
Co	ompliance Cost (DPC) (5%) GMS (3%)										235,937 41,609 194 148,640 26,214 122
	GIVI3 (376)										TOTAL 5,103,311 900,000 4,203

Table 12: Tentative payment schedule (CEB grant funds only)

		Source	TOTAL	TOTAL	UNORE, 1st April 2021
N	filestones		€ 900,000.00	\$1,055,099.65	0.853
Date of Contract Signature	TBD				
Milestone 1 – 3rd week of April. 2021	PIU established				
Milestone 1 – 3rd week of April. 2021	Project Board established				
Upon the date of signing of the agreement (tentatively, 21 May, 2021) and upon approval of Procurement plan by Ministry and CEB (as such term as defined under the CEB procurement guidelines)indicating the procurement methods for each contract that UNDP is going to make.	Advance payment as per Project Document	CEB GA WBIF	€ 75,000.00	€ 87,924.97	Friday, May 21, 2021
Deliverable 1 -mid May 2021	Priority list of CGB for EER along with relevant data on CGBs finalised				
Deliverable 2 -mid June 2021	The Stakeholder Engagement Plan finalised				
Deliverable 3 - mid June 2021	The detailed Plan for PA, as per Article 1, 1.5 (a), (iii) of CEB GA SIGA-SCA finalised				
Deliverable 4 - mid June 2021	Revised Procurement Plan, as per Article 1, 1.5 (a), (iv) of CEB GA SIGA-SCA finalised				
Deliverable 5 - mid June 2021	Inception Report - Summary Report finalised				
Deliverable 6 - mid May 2021	Communication Plan finalised				
Deliverable 7 - mid June 2021	Inception Workshop organised				

Milestone 1 - mid June 2021	Priority list of CGB for EER along with relevant data on CGBs approved by the PB				
Milestone 2 - mid June 2021	The Stakeholder Engagement Plan approved by the PB				
Milestone 3 - mid June 2021	The detailed plan for PA, as per Article 1, 1.5 (a), (iii) of CEB GA SIGA-SCA approved by the PB				
Milestone 4 - mid June 2021	Revised Procurement Plan, as per Article 1, 1.5 (a), (iv) of CEB GA SIGA-SCA approved by the PB				
Milestone 5 - mid June 2021	Inception Report - Summary Report approved by the PB				
Milestone 6 - mid June 2021	Communication Plan approved by the PB				
Upon approval of Quarterly report 1 (tentatively, 19 June 2021)	First payment as per Project Document	CEB GA SIGA-SCA	€ 185,000.00	€ 216,881.59	Friday, June 19, 2021
Deliverable 1 - end July 2021	The procurement process for energy certification and DEA finalised				
Deliverable 2 – mid September 2021	The procurement process for geological explorations of groundwaters in the vicinity of Palace of Serbia finalised				
Deliverable 4 – mid August 2021	Quarterly brief (Q1) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA finalised				
Deliverable 5 – mid August 2021	Three media outlets delivered				
Milestone 1 – mid August 2021	The procurement process for energy certification and DEA approved by the BP				

Milestone 2 – mid September 2021	The procurement process for geological explorations of groundwaters in the vicinity of Palace of Serbia approved by the PB				
Milestone 4 – mid August 2021	Quarterly brief (Q1) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA approved by the PB				
Upon approval of Quarterly report 2 , (tentatively 19 August 2021)	Second payment as per Project Document	CEB GA SIGA-SCA	€ 185,000.00	€ 216,881.59	Thursday, August 19, 2021
Deliverable 1 - end August 2021	Progress-report on implementation of TA Project as per Article 7, 7.1 (a)/(i) of CEB GA WBIF finalised				
Deliverable 2 – mid September 2021	Quarterly brief (Q2) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA finalised				
Deliverable 3 - mid September 2021	Six-monthly progress report (H1) on implementation of TA Project as per Article 7, 7.1 (b)/(ii) of CEB GA SIGA-SCA finalised				
Milestone 1 - mid September 2021	Progress-report on implementation of TA Project as per Article 7, 7.1 (a)/(i) of CEB GA WBIF approved by the PB				
Milestone 2 - mid September 2021	Quarterly briefs (Q2) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA approved by the PB				
Milestone 3 - mid September 2021	Six-monthly progress report (H1) on implementation of TA Project as per Article 7, 7.1 (b)/(ii) of CEB GA SIGA-SCA by the PB				
Milestone 4 - mid December 2021	Energy certificates and DEA for 4-6 priority CGBs accepted by the PB				

Milestone 5 - mid December 2021	Investment packages for CGB for the 4-6 priority SGBs approved by the PB				
Upon approval of Quarterly report 3 (tentatively 16 September 2021)	Third payment as per Project Document	CEB GA WBIF	€ 166,600.00	€ 195,310.67	Thursday, September 16, 2021
Deliverable 1 – end January 2022	Quarterly briefs (Q3) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA finalised				
Deliverable 2 - mid February 2022	The procurement process for FSs for Palace of Serbia and SIV III finalised				
Deliverable 3 - end February 2022	The public procurement process of elaboration of the design documents for the selected CGBs (4-6 buildings, totalling approx. 12,000 m2) finalised				
Deliverable 4 - end February 2022	Six media outlets delivered				
Milestone 1 - mid February 2022	Quarterly briefs (Q3) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA approved by the PB				
Milestone 2 - mid February 2022	The procurement process for FSs for Palace of Serbia and SIV III approved by the PB				
Milestone 3 - end February 2022	The public procurement process for elaboration of the design documents for the selected CGBs (4-6 buildings, totalling approx. 12,000 m2) approved by the PB				
Upon approval of Quarterly report 4 (tentatively 17 February 2022)	Fourth payment as per Project Document	CEB GA SIGA-SCA	€ 84,150.00	€ 98,651.82	Thursday, February 17, 2022

Deliverable 1 – mid April 2022	Quarterly brief (Q4) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA finalised		
Deliverable 2 - end March 2022	Six-monthly progress report (H2) on implementation of TA Project as per Article 7, 7.1 (b)/(ii) of CEB GA SIGA-SCA finalised		
Deliverable 3 – mid June 2022	Energy certificates and DEA for remaining CGBs delivered		
Deliverable 4 - end June 2022	Design documents for 4-6 priority CGBs delivered		
Deliverable 5 – mid July 2022	Quarterly brief (Q5) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA finalised		
Deliverable 6 - mid July 2022	Six media outlets delivered		
Milestone 1 - mid April 2022	Quarterly brief (Q4) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA approved by the PB		
Milestone 2 - end March 2022	Six-monthly progress report (H2) on implementation of TA Project as per Article 7, 7.1 (b)/(ii) of CEB GA SIGA-SCA approved by the PB		
Milestone 3 - mid June 2022	Energy certificates and DEA for remaining CGBs approved by the PB		
Milestone 4 – mid August 2022	Design documents for 4-6 priority CGBs approved by the PB		
Milestone 5 – mid August 2022	Quarterly brief (Q5) on the implementation progress of the TA project as per Article 7, 7.1 (b)/(i) of CEB GA SIGA-SCA approved by the PB		

Upon approval of Quarterly report 5 and 6 (tentatively 15 August 2022)	Fifth payment as per Project Document	CEB GA SIGA-SCA	€ 122,550.00	€ 143,669.40	Monday, August 15, 2022
Upon approval of Final Report (tentatively 3 May 2023)	Final payment as per Project Document	CEB GA SIGA-SCA	€ 81,700.00	€ 95,779.60	Wednesday, May 3, 2023

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

This project will be managed and implemented by UNDP's Country Office in the Republic of Serbia in its capacity as an Implementing Partner, in line with UNDP's Programme and Operations Policies and Procedures. UNDP will establish a Project Implementing Unit (PIU) to ensure the national ownership who will act as the executive unit and be responsible for the overall management, backstopping and monitoring of the project as well as for management and delivery of assigned outputs, their proper monitoring and operational closure. The PIU Manager will perform the role of Project Manager.



Figure 7: Project organizational structure

- ^{136.} The Project Board (PB) is responsible for management and decision making when guidance is required by the PIU Manager (Project Manager), including recommendations for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, PB decisions should be made in accordance with standards that shall ensure management of development results, best value for money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the PB, the final decision shall rest with the UNDP Programme Officer and Project Manager. The PB shall:
 - Meet regularly (at least twice a year, tentatively April 2021, November 2021, April 2022, November 2022) to review project progress, discuss and agree on project multi-year work plans. The PB key roles will be as follows: Provide overall leadership, guidance and

direction in the successful delivery of outputs and their contribution to outcomes under the Programme;

- Be responsible for making strategic decisions by consensus, including the approval of substantive project changes (i.e. changes in the Project Document);
- Approve the work plans, reviews and other reports as needed;
- Review the progress achieved, management risks, and other relevant issues;
- Addresses any relevant project issues as raised by the PIU Manager and authorise any deviation from agreed work plans;
- Provide guidance on new project risks and agree on possible countermeasures and management actions to address specific risks.
- Ensure close co-operation among the institutions involved;
- Coordinate with other projects related to this field and with other relevant donors' projects to promote synergies and integration, etc.
- ^{137.} National Project Director (NPD) role will be performed by the person appointed by the Minister of Mining and Energy. NPD will be authorized to sign the disbursement requests. The NPD coordinates the project activities with activities of other Government entities; certifies the expenditures in line with approved budgets and work-plans; facilitates, monitors and reports on the procurement of inputs and delivery of outputs; approves the Terms of Reference for consultants and tender documents for sub-contracted inputs; and reports to PB on project delivery and impact.
- 138. Senior Supplier role will be performed both by MME, who also has the role of the Senior Beneficiary. As a public entity in charge of maintenance and technical services related to CGB, UZZPRO shall support the project implementation in all areas of UZZPRO competence (providing access to the buildings and relevant documents, time planning, logistics, consultancy, etc.). Given its significance, in all phases of project implementation, the UZZPRO will be represented in PB.
- 139. The executive role will be performed by the UNDP, who shall have a decisive power in day to day project management.
- 140. Senior Supplier is to provide guidance regarding the technical feasibility of the Project. This role will be held by a designated representatives from MME.
- ¹⁴¹. The senior Beneficiary role will be performed by representatives of MME and UZZPRO, typically at decision-making level, with the purpose of ensuring the realization of project benefits from the perspective of project beneficiaries.

- ^{142.} The project will be managed by a PIU Manager (Project Manager)³² who has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the PB. The PIU Manager is responsible for the day-to-day management and decision-making for the project. The PIU Manager's prime responsibility is to ensure that the project produces results (outputs) specified in the Project Document to the required standard of quality and within the specified constraints of time and cost.
- ^{143.} The Project assurance is the responsibility of each PB member; however, the role can be delegated. The project assurance role supports the PB by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. Project Assurance has to be independent of the PIU Manager (Project Manager); therefore, the Project Board cannot delegate any of its assurance responsibilities to the PIU Manager (Project Manager). The project assurance role for this project will be performed by UNDP.
- ^{144.} The Project Implementation Unit (PIU) established by UNDP will be responsible for technical and administrative aspects of the implementation of this Project including support to development, monitoring and evaluation of the implementation of selected applications/project proposals on other and/or dislocated locations where the services are actually performed. However, the final responsibility for all the activities to be undertaken by (or on behalf of) the UNDP remains fully on PIU Manager.
- 145. The PIU will be headed by professional full-time Project Manager recruited by UNDP, who will be delegated the authority for the day to day implementation of the project, including supervision, management and coordination of all project activities and financial matters, and to provide advice on the technical, legal and financial aspects of the project.
- 146. The members of the PIU are recruited by UNDP and include up to three Project Coordinators and up to two Project Assistants.
- ^{147.} The personnel assigned by the UNDP to the project, and under the contract with the UNDP shall work under the supervision of the NPD. The supervisory arrangements shall be determined in mutual consultation and described in the relevant terms of reference of the personnel. Personnel shall remain accountable to the UNDP for the manner in which assigned functions are discharged.
- 148. The PIU Manager and staff shall be approved by MME, prior to the commencement of their duties.

³² In context of this project the position of Project Manager corresponds to position of PIU Manager, which will be filled by the UNDP Energy Portfolio Manager.

- 149. The PIU shall be supported by short term consultants. Consultants will be selected jointly by MME and UNDP.
- 150. The PIU's responsibilities and activities include:
 - 1. Preparing and implementing the procurement process as per UNDP procedures;
 - 2. Monitoring and supervising the work of consultants;
 - 3. Monitoring and reporting on EECGP Programme implementation;
 - 4. Financial and other reporting to MME;
 - 5. Organizing and delivering trainings and awareness-raising activities;
 - Organizing and participating in the meetings of the PB, preparing relevant documents and MoMs;
 - 7. Coordinating with other institutions, etc.

IX. LEGAL CONTEXT

- 151. This Project Document shall be the instrument referred to as such in Article 1 of the Standard Basic Framework Agreement (SBFA) between the Government Socialist Federal Republic of Yugoslavia - SFRY (the Republic of Serbia as the legal successor of the SFRY) and UNDP, signed on 24th of March 1988. All references in the SBFA to "Executing Agency" shall be deemed to refer to "Implementing Partner."
- 152. This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices, and procedures.

X. RISK MANAGEMENT

- 153. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.).
- ^{154.} UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the project funds³³ is used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq sanctions list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
- 155. Social and environmental sustainability will be enhanced through the application of the UNDP Social and Environmental Standards (<u>http://www.undp.org/ses</u>) and related Accountability Mechanism (<u>http://www.undp.org/secu-srm</u>).
- 156. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
- 157. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual

³³ To be used where UNDP is the Implementing Partner

harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.

- 158. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or Project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
- 159. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party (if any), subcontractor and sub-recipient:
 - a. Consistent with the Article III of the SBFA or the Supplemental Provisions to the Project Document, the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipients custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
 - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the Project is being carried;
 - ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security and the full implementation of the security plan.
 - b. UNDP reserves the right to verify whether such a plan is in place and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's, and sub-recipient's obligations under this Project Document.
 - c. In the performance of the activities under this project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
 - d. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
 - e. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor

and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

- f. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- g. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

h. UNDP will be entitled to a refund from the responsible party, subcontractor or subrecipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or subrecipient under this or any other agreement.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- i. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- j. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- k. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

The PIU has not committed and no person to its present knowledge has committed, and undertakes that it will not commit, and no person, with its consent or prior knowledge, will commit, in connection with the implementation of the Technical Assistance or the execution of any contract under the Technical Assistance, a corrupt, fraudulent, coercive or collusive practice. UNDP shall inform the Project board of the result of investigation of any fraudulent, coercive or collusive practice it becomes aware of.

XI. PROCUREMENT

General Procedure

Initiation of the Tender Process

153. Initiation of the tender process encompasses the following:

- 1. Preparation of the ToR/Specification by the Project Implementation Unit (PIU). The ToR/Specification is done in cooperation with the national partner, except in regard to bidders' criteria. UNDP and the MME shall agree as to the scope of all services which are to be requested from potential bidders, prior to initiating a tender. UNDP shall not initiate any tenders without the confirmation from the MME that they are in agreement with the scope of services in the ToR. Also, UNDP and the MME shall jointly determine bidders' criteria, provided that these do not deviate from UNDP procurement principles (such as best value for money, fairness, integrity and transparency, effective competition etc);
- 2. Clearance of the ToR /Specification by the procurement staff and final approval by the Programme Analyst.
- Based on the approved ToR /Specification and depending on tender value and what is going to be procured, the procurement staff prepares appropriate tender document: Request for Quotation (RfQ) usually for lower value equipment or works; or Request for Proposal (RFP) for services or Invitation to Bid (ITB) for higher value equipment or works.
- 4. Once the tender documentation is prepared, UNDP Deputy Resident Representative (DRR) needs to approve it before publishing. UNDP Deputy Resident Representative formally approves tenders above USD 150,000. All tenders above USD 150,000 are now subject to e-tendering, but the tender dossier in a word document is still developed beforehand. Tenders below USD 150,000 are published after the procurement section has cleared the relevant solicitation document (tender dossier)
- 5. For the purpose of implementation of the loans, UNDP is able to share a final draft of the tender dossier with the Project Board members and incorporate this feedback if not contradicting to UNDP POPP. This can ensure compliance with different sets of rules guiding the implementation of CEB loan.
- 6. UNDP is able to accommodate a standstill period of 10 days following the day of information to bidders until the signing of the contract.

Soliciting Bids

- 154. The process of soliciting bids encompasses the following:
- The procurement staff publishes the tender notice on UNDP global website ("Procurement Notices"), UNDP Serbia website and Serbian daily newspaper. In addition to this, procurement notice is always posted on UNGM for tenders above USD 150.000 and on UNDP for tenders above USD 500.000.

- eTendering is mandatory for all tenders higher than USD 150.000 (meaning that bids are submitted and managed electronically and kept in electronic format for various levels of scrutiny);
- 3. Tenders are open for at least two or three weeks depending on the value of the tender. In some cases, where it is necessary for bidders to better understand the tender requirements, the procurement staff may organize a pre-bid meeting and site visit. While the tender is open, the potential Bidders may ask questions regarding the procedure or the solicitation documentation. Procurement staff, with the help of other staff, answers, and posts responses to the UNDP Serbia website.
- 4. To facilitate the implementation of the loans, UNDP assisted with the relevant body, publish tenders in the Official Journal of the European Union. UNDP will also be able to integrate the deadlines from CEB guide to procurement (i.e. 52 and 37 days open v. restrictive tenders respectively).

Evaluation of Bids

- 155. The process of evaluation of bids encompasses the following:
- 1. Before the closure of the tender, the procurement staff appoints one committee for bid opening and another one for evaluation. Bids are opened immediately after the closing of the tender.
- 2. For the procurement of goods and for works, where (RfQ for tenders up to USD 150,000 or the ITB for tenders above USD 150,000), the lowest price among qualified bids wins.
- 3. For the procurement of services, (RfP), the evaluation of bids is conducted through two stages:
 - a. Technical evaluation, where the evaluation committee scores a technical part of the bids as per criteria which are indicated in the tender document. Only the bids that pass 70% of the total obtainable score are qualified for the opening of the financial proposal;
 - b. Financial evaluation (30% of the total score), with subsequent weight score between technical and financial.
- 156. In the end, the evaluation committee (appointed for each tender) produces the report with a summary of findings and recommendations for contract award. The Evaluation Report must be endorsed by relevant procurement authority, depending on the contract value, as follows:
 - a. up to USD 50,000 UNDP Deputy Resident Representative;
 - b. between USD 50,000 and USD 150,000 CAP (Contract, Asset and Procurement committee) Local;
 - c. between USD 150,000 and USD 2,000,000 RACP (Regional Advisory Committee on Procurement);

- d. above USD 2,000,000 ACP (Advisory Committee on Procurement) HQ (Head Quarters).
- 157. The Procurement Review Committees render independent written advice and recommendations on a procurement action and the proposed commitment of funds to the person approving the procurement action. The committees confirm inter alia that the proposed procurement action is in accordance with UNDP Financial Regulations and Rules, procurement procedures and instructions, that the proposed vendor's eligibility that the procurement process was fair, competitive (where applicable), transparent, ethical and provides the best value for money.

Observing the Tender Process

- 158. In line with UNDP POPP, "Representatives from the funding source of the project, the client organization, or national project implementing partners may participate in the evaluation process, provided they are only present as observers". All persons, participating in the tender process, must sign the Declaration of Impartiality and Confidentiality, verifying that there is no conflict of interest with their participation in the said tender and that they will keep the information from the evaluation process as confidential.
- 159. As a matter of approach, UNDP Serbia will grant the status of an observer for the implementation of this project to one representative of the MME and one representative of the CEB. This person shall be entitled to observe the entire process, starting with bid opening, bid review and review of questions and answers to bidders in case clarification is sought. The representative(s) will be able to observe the documentation related to any annex request by service or works vendor of UNDP.

Contracting

- 160. When the appropriate Procurement Authority endorses the Evaluation Report, the procurement staff notifies the selected Bidder, prepares the contract, and organizes the contract signing and notifies unsuccessful bidders simultaneously.
- 161. Most commonly used Procurement Modalities

Request for Proposal (RfP) for services

162. UNDP uses the combined scoring method for contracting services through RfP method, through 70-30% distribution between technical and financial proposals respectively out of technically responsive offers or the lowest price among technically responsive bids. For the project in question, UNDP can use either method.

Invitation to Bid (ITB) for Works

163. UNDP uses the lowest price among qualified and responsive bids to contract works. UNDP sets the qualification bar itself.

Other Procurement

- 164. There are other procurement methods envisaged by POPP such as Micro Purchasing (procurements valued below USD 10,000); Direct contracting (rarely used, there are preconditions defined in POPP that must be fulfilled for using this procedure).
- 165. Using Long-Term Agreements (Framework Contracts)
- 166. UNDP may create a long-term agreement for standardized services. Since 2014, UNDP is running a series of long-term agreements for:
 - a. Design;
 - b. Technical control and verification of designs;
 - c. Supervision of works.
- 167. UNDP publishes a tender for LTA issuance with a case scenario for these three types of services. Bidders submit their technical and financial proposal (RfP 70%/30% ratio). The RfP is a normal process described above. Financial offer is standardized engineer/day.
- 168. In secondary bidding processes, bidders can submit an equal or lower price than those contracted through the long-term agreement but not higher.

Secondary Bidding Process

- 169. UNDP develops Standard Operating Procedures for the Secondary Bidding Process. Once UNDP enters into long-term (framework) agreements, the procedure for individual contract award (secondary bidding) is the following:
 - 1. Development of the ToR per usual procedure;
 - 2. Approval of the ToR by UNDP internal clearance process per usual procedures;
 - 3. Solicitation of offers from LTA companies: (duration approximately 72h);
 - 4. Canvassing of offers through comparison of prices (duration approximately 48 hours);
 - 5. The lowest offered price wins (if in line with the long-term agreement).
- 170. LTAs are an expedient way of contracting standardized services, which immensely facilitates the implementation and is likely to be used for the project with the Ministry of Mining and Energy

Procurement Plan

171. UNDP establishes annual procurement plans in its corporate procurement system. However, for the purpose of the implementation of loan-funded projects, UNDP is able to establish procurement plans for the purpose of the review by the Government of Serbia, and consequently the CEB. This Procurement plan would be updated on needs-basis, as results of studies and analysis become available.

- 172. Handling of Complaints:
- 173. The Unsuccessful bidders can ask for a debriefing to find out the reasons why their proposal was not selected. The scope of such debriefing is limited only to the strengthens and weaknesses of the technical proposal submitted by the bidder who asked the debriefing. In such a case, the Procurement staff debriefs the Bidder, usually by sending an email.
- 174. Observers in the tender process may also submit a complaint to the UNDP Resident Representative in case they deem that the process is flawed for whatever reason. In such cases, UNDP Resident Representative may decide to cancel the process.
- 175. After debriefing, Bidder can submit the protest which is an official complaint, by sending an email in an appropriate form to Head of the Business Unit/Resident Representative (RR). RR appoints the responsible person to conduct due diligence and investigation in the most neutral and objective manner. Based on a report from the responsible person, RR makes a decision whether the protest justified or not and informs the Bidder by sending them an email.
- 176. The bidder who is not satisfied with RR's decision can escalate the protest to director PSO in HQ. Director of PSO will make the final decision. If the PSO director identifies potential misconduct in the handling of the procurement, the case will be referred to UNDP Office for Audit and Investigation (OAI). RR, Director of PSO or a bidder may approach the OAI for advice at any stage, as well.
- 177. Vendor protest can suspend the contract implementation until the finalization of the entire process. However, RR can decide not to suspend the contract, if he/she finds that there is no solid ground for the protest, or if the contract suspension is not in the best interest of UNDP or for other reasons defined in UNDP Programme and Operation Policies and Procedures (POPP).
- 178. UNDP will inform the project board of the complaints and the process, in line with its policies and procedures.

Information about the Past Tenders

179. Upon request, the donor can receive summary information on the outcome of a number of selected UNDP tenders. None of these requests should be deemed as an audit or investigation.

Social and Environmental Screening

- 180. UNDP's Social and Environmental Standards (SES) underpin UNDP's commitment to mainstream social and environmental sustainability in its programmes and projects to support sustainable development.
- 181. The SES strengthen UNDP's efforts to attain socially and environmentally beneficial development outcomes and present an integrated framework for achieving a consistent level of quality in UNDP's programming.

- 182. The objectives of the SES are to:
 - 1. Strengthen the social and environmental outcomes of UNDP programmes and projects
 - 2. Avoid adverse impacts on people and the environment
 - 3. Minimize, mitigate, and manage adverse impacts where avoidance is not possible
 - 4. Strengthen UNDP and partner capacities for managing social and environmental risks
 - 5. Ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people
- 183. UNDP Social and Environmental Standards, along with its complaint mechanism are available here:

https://www.undp.org/content/undp/en/home/librarypage/operations1/undp-social-andenvironmental-standards.html

Table 13: Procurement plan

Funds available through CEB grant Funding to be determined (CEB loan funds or other)

Project: Preparatory Activities for the Programme "Energy Efficiency in Central Government Buildings"																																		
Project component			Q		0,2		Q3		Qé		01			Year 2	Q3		Q4	1	Q		02	Year	Q	3	c	24		1		Year 2	Q3		Q4	
PIU			1 2	3	4 5	6	7 8	9	10 11	1 12	1 2	3	4 5	5 6	7 8	9	10 11	1 12	1 2	3	4 5	6	7 8	9	10 1	11 12	1	2 3	4	6 6	7 8	9	10 11	12
Output 1: Technical assistance and professional services to the MME provided.			-																															
Activity 1.1: Project Implementation Unit (PIU) established and operational until the end of the project.		UNDP																																
Activity 2.10: Day to day management of PA (procurement, payments, issuing contracts)		UNDP																																
Activity 2.11: Monitoring and reporting on PA to MME and CEB, etc.		UNDP																																
Output 2: Technical preconditions for EER of 28 CGBs set.																																		
Inception phase																																		
Activity 2.1: Detailed planning of PA once the grant is approved.	MME & UZZPRO	UNDP																																
Phase 1: Initial energy certification of 25 CGBs and DEA for 26 CGBs including 4-6 priority buildings (5 LOTs)															-																			
Activity 2.2/1: Implementing the public procurement related to energy certification and DEA																				Π														
Conducting the public procurement process and contracting the consulting companies to perform energy certification and DEA		UNDP																																
Activity 2.3: Energy certification of 25 CGBs before the EER.		UNDP																																
Activity 2.4: Conducting DEA of 26 CGBs		UNDP																																
Phase 2: Geological explorations of groundwaters in the vicinity of the Palace of Serbia building																																		
Activity 2.2/2: Implementing the public procurement related to geological explorations of groundwaters in the vicinity of the Palace of Serbla building																																		
Conducting the public procurement process and contracting the consulting company to perform geological explorations of groundwaters in the vicinity of the Palace of Serbia building		UNDP																																
Activity 2.6: Geological explorations of groundwaters in the vicinity of the Palace of Serbia building.																																		
Activity 2.8/2: Obtaining permits and conditions.	MME & UZZPRO																																	
Phase 3: Elaborating FS for the Palace of Serbia and SIV III (2 LOTs)																																		
Activity 2.2/3: Implementing the public procurement related to FS for the Palace of Serbia and SIV III																																		
Conducting the public procurement process and contracting the the consulting companies to elaborate the FS for the Palace of Serbia and SIV II		UNDP													T																			
Activity 2.5: Elaborating the FS for the Palace of Serbla and SIV III																																		
Phase 4: Elaborating the design documents for the selected CGBs (4-6 buildings, totalling approx. 12,000 m	2)																																	
Activity 2.2/4: Implementing the public procurement related to elaboration of design documents for the selected CGBs																																		
Conducting the public procurement process and contracting the consulting company (es) to elaborate the set of design documents for the selected CGBs		UNDP																																
Activity 2.7/4: Elaborating the sets of design documents to the level of detail as required by the law.																																		
Activity 2.8/4: Obtaining permits and conditions.	UZZPRO																																	
Activity 2.9/4: Performing technical control of design documents when required by the law.	UZZPRO																																	

	-	-	 	 	 	 		 	 						 		 	 		
Phase 5: Elaborating the design documents for remaining 20-22 CGBs (4 LOTs)															 	_	 			
Activity 2.2/5: Implementing the public procurement related to elaboration of design documents for the selected CGBs																				
Conducting the public procurement process and contracting the consulting services related to elaboration of design documents for the remaining CGBs		UNDP																	\square	
Activity 2.7/5: Elaborating the sets of design documents to the level of detail as required by the law.																			\Box	
Activity 2.8/5: Obtaining permits and conditions.	UZZPRO																			
Activity 2.9/5: Performing technical control of design documents if required by the law.	UZZPRO																			
Phase 6: Elaboration of design documents for SIV III																				
Activity 2.2/6: Implementing the public procurement related to elaboration of design documents for SIV III																			T	
Conducting the public procurement process and contracting the consulting company to elaborate the set of design documents for SIV III		UNDP																		
Activity 2.7/6: Elaborating sets of design documents to the level of detail as required by the law.																				
Activity 2.8/6: Obtaining permits and conditions.	UZZPRO																			
Activity 2.9/6: Performing technical control of design documents if required by the law.	UZZPRO																			
Phase 7: Elaboration of design document for Palace of Serbia					-									-						
Activity 2.2/7: Implementing the public procurement related to elaboration of design documents for Palace of Serbia																				
Conducting the public procurement process and contracting the consulting company to elaborate the set of design documents for the Palace of Serbia		UNDP																		
Activity 2.7/7: Elaborating sets of design documents to the level of detail as required by the law.																				
Activity 2.8/7: Obtaining permits and conditions.	UZZPRO																			
Activity 2.9/7: Performing technical control of design documents if required by the law.	UZZPRO																			
Management of PA																				
Activity 2.10: Engineering support (procurement, payments, supervision of execution, etc.)		UNDP																		
Visibility of the PA																				
Output 3: Communication and visibility related to EECGB Programme secured																				
Activity 3.1: Elaboration of the communication plan.		UNDP			Ι									Ι						
Activity 3.2: Organizing inception workshop for stakeholders		UNDP																	\Box	
Activity 3.3: Performing information and communication activities.		UNDP																	\Box	
Activity 3.4: Organizing the final workshop.		UNDP																		

XII. ANNEXES

- 1. Project Quality Assurance Report
- 2. Social and Environmental Screening Template
- 3. Social and Environmental Risk Screening Checklist
- 4. Risk Analyses
- 5. Project Board Terms of Reference and ToRs of key management positions
- 6. Stakeholder Involvement Plan
- 7. Breakdown of Existing and Missing Budget

2. Social and Environmental Screening Template

Project Information

Table 14: Project Information

1	Project Information	
-	. Project Title	Preparatory Activities for the Programme "Energy Efficiency in Central Government Buildings"
1	. Project Number	00118272
	. Location (Global/Region/Country)	Republic of Serbia

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

Table 15: Integrating overarching principles to strengthen social and environmental sustainability

QUESTION 1: How does the project integrate the overarching principles in order to strengthen social and environmental sustainability?

Briefly describe in the space below how the project mainstreams the human-rights based approach

The project will promote energy efficiency with an emphasis on improving and scaling up the energy efficiency investments and related energy management practice in selected CGBs. Therefore, project will enhance availability, accessibility and quality of services related to energy efficiency and building management for all. More efficient and environmentally friendly building management can contribute to the advancement of the quality of life and rights to safe and clean environments for all, while also creating new employment and business opportunities. In addition, during its implementation, the project will contribute to the improvement of transparency and accountability of local governance and provide opportunities for meaningful public participation in decision making.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

Gender-related aspects have and will be considered by including gender-specific indicators into the project results framework, collecting genderdisaggregated data on the project impact during its implementation and specifically encouraging female experts to participate in project implementation. Project activities will ensure gender balance and will be implemented with a gender-sensitive approach so that there is a meaningful participatory process for engaging women's voices. Should at any point during the implementation, the monitored data indicate that either gender is significantly underrepresented among project beneficiaries and stakeholders, the project team would investigate the issue and introduce specific measures within the framework of adaptive management. It will be ensured that project is scored 1 as per the Atlas Gender Marker.

Briefly describe in the space below how the project mainstreams environmental sustainability

Mainstreaming environmental sustainability is in the core of project strategy by introducing and providing tools for environmentally sustainable management of all targeted public buildings in Serbia. By improving their energy efficiency, the project will effectively reduce Serbia's greenhouse gas emissions and help the country meet its commitments under the Paris Climate Agreement, while also contributing to the sustainable development of goals dealing with affordable and clean energy (SDG 7), sustainable cities and communities (SDG 11) and climate action (SDG 14).

Part B. Identifying and Managing Social and Environmental Risks

Table 16: Social and environmental risks (identification and mitigation)

QUESTION 2: What are the Potential Social and Environmental Risks? Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low	and environr	nental risks?	evel of significance of the potential social and 5 below before proceeding to Question 6	QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Projects. Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)		Description of assessment and management measures as reflected in the project design. If ESIA (Environmental and Social Impact Assessment) or SESA (Strategic Environmental and Social Assessment) is required to note that the assessment should consider all potential impacts and risks.
Risk 1: The outcome of the projects could affect the operating process in CGB. During their EER, buildings will be closed. This could potentially restrict the availability of basic services provided within these buildings, which may harm especially marginalized individuals or groups who depend on the provision of these services. (Principle 1.3)	I = 4 P= 2	Moderate	building for EER limits people's access to the services it has provided before.	As an essential part of the EER planning, the Government and UZZPRO need to ensure the continuation of similar services at an alternative location, which is still easily accessible also to marginalized individuals or groups. Detailed explanation about the arrangements to mitigate the associated risk needs to be included in the project plan before they can be approved for implementation.

Risk 2: The project might potentially reproduce discriminations against women, especially with regards to their participation in the design and implementation of the Project or access to opportunities and benefits provided by project outcomes. (Principle 2.2)	I = 1 P = 1	Low	The participation of women may not be adequately ensured, when, for instance, engaging designers or energy auditors in projects specific activities. Based on the experience from similar projects, there are still somewhat fewer women than men, who are engaged as designers or energy managers/auditors. The number of women who hold a designer license is sufficient, therefore the gender balance could be obtained.	The Project will facilitate and closely monitor that women have access to equal opportunities for engaging in EER of CGB, in their capacity as licensed designers and energy auditors. This will also be closely monitored by collecting gender-specific data on the stakeholders involved in project activities as well as on the direct project beneficiaries.
Risk 3: The outcome of the project may be sensitive or vulnerable to potential impacts of climate change (Principle 3, Standard 2.2)	I = 4 P = 2	Moderate	In planning the EER, there is a need to consider not only the current climate conditions but also the projected changes in average temperatures, precipitation and winds and eventual extreme weather conditions such as heatwaves, heavy rains or stormy winds, which may put more stress on the building envelope or thermal conditions inside the buildings.	In the repair and EER plans of each building, the projected future impact of climate change with different scenarios has to be taken fully into account, when assessing and calculating, for instance, the requirements for maintaining comfortable thermal conditions inside the buildings or strength of the building outdoor structures to the extreme weather conditions.
Risk 4: The outcome of the project could pose safety risks. The elements of construction, operation or decommissioning during the project's implementation may pose potential safety risks to local communities (Principle 3, Standards 3.1, 3.2 and 3.4)	I = 4 P = 2	Moderate	This risk is not fundamentally different from the risks associated with any other building construction works within the cities, but in any case, should be properly monitored and managed during the project implementation stage.	As an essential part of planning the EER, the local authorities need to ensure that the related works are not posing any safety risks for the population as required also by the Serbian laws. Detailed explanation about the arrangements to mitigate this risk needs to be included in project plans before they can be approved for implementation.
Risk 5: The outcome of the project could pose the risks related to occupational health and safety during the EER works and that the employment opportunities provided by the project may fail to comply with national and international labour standards (Principle 3, Standards 3.7 and 3.8)	I = 4 P = 2	Moderate	associated with any other ongoing construction	Occupational Health Management Protocol will be produced to be an inherent part of each set of EECGB Programme preparatory documents. The Project will also produce an action plan and promotion materials to support, in particular companies and individuals involved in the EER works, as of how to undertake preventive measures to ensure occupational safety of workers. As part of the project design, trainings and awareness-raising will be organized for stakeholders and practitioners to better understand safety issues associated with EER of old buildings.

Risk 6: The proposed project may result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values (Principle 3, Standard 4 .1)	P=2	Moderate	Many public buildings in need of EER have cultural and/or architectural values, which planned EER works may put at risk, if not p taken into account.	the	All EER works of objects of historical, cultural or architectural value(s) need to be carefully planned in close co-operation with the experts and authorities with a duty to protect these values, while also taking into account the views of different civil society organizations affiliated with the subject. No permission for the requested EER works shall be given before it can be ensured that the eventual historical, cultural and architectural values of the targeted building have adequately been ensured.
Risk 7: The proposed measures and EER projects may generate waste that is harmful to the environment and human health, if not properly managed and disposed of. (Principle 3, Standards 7.1 and 7.2)	P = 3	Moderate			The project will mitigate this risk by having a requirement for all d investments supported by the project to include an adequate waste management plan within the project design. All proposals should also have a broader impact assessment, which besides waste issue shall also address the other identified risks.
	QUESTIO	N 4: What i	s the overall project risk categor	ization	?
		Select	one (see <u>SESP</u> for guidance)		Comments
			Low Risk		
			Moderate Risk		Given that no high-risk element was identified during this pre- screening, the project as a whole can be assessed as a moderate risk project.
			High Risk		
	QUESTIO	N 5: Based		ategori	zation, what requirements of the SES are relevant?
	Duinciple de la	man Dichte	Check all that apply	x	Comments
	Principle 1: Human Rights				
	Principle 2: Ge	nder Equality a	ind Women's Empowerment		
	y Conservation	and Natural Resource Management			
	2. Climate Ch	ange Mitigatio	on and Adaptation	x	

3. Community Health, Safety and Working Conditions	X
4. Cultural Heritage	x
5. Displacement and Resettlement	
6. Indigenous Peoples	
7. Pollution Prevention and Resource Efficiency	x

Final Sign Off

Table 17: Final sign off

Signature	Date	Description
QA Assessor	Anothen	UNDP staff member responsible for the project, typically a UNDP Programme Officer. The final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver	Rowin	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. The final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair	Alanna,	UNDP chair of the Project Appraisal Committee (PAC). In some cases, PAC Chair may also be the QA Approver. The final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

3. Social and Environmental Risk Screening Checklist- SESP Attachment

Table 18: Social and environmental risk screening checklist

Princ	iples 1: Human Rights	Answer (Yes/No)
1.	Could the project lead to adverse impacts on the enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ³⁴	No
3.	Could the project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	Yes
4.	Is there a likelihood that the would exclude any potentially affected stakeholders, in particular, marginalized groups, from fully project participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the project during the stakeholder engagement process?	No
8.	Is there a risk that the project would exacerbate conflicts among and/or the risk of violence to Project- affected communities and individuals?	No
Princ	iple 2: Gender Equality and Women's Empowerment	
1.	Is there a likelihood that the proposed project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the project during the stakeholder engagement process and has this been included in the overall project proposal and in the risk assessment?	No
4.	Would the project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No
	For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	
	iple 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by pecific Standard-related questions below	
Stand	lard 1: Biodiversity Conservation and Sustainable Natural Resource Management	

³⁴ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.1	Would the project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical	No
1.1	habitats) and/or ecosystems and ecosystem services?	NO
	For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	
1.2	Are any project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	Does the project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would project activities pose risks to endangered species?	No
1.5	Would the project pose a risk of introducing invasive alien species?	No
1.6	Does the project involve the harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the project involve significant extraction, diversion or containment of surface or groundwater? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	No
1.9	Does the project involve the utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	No
	For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same project) need to be considered.	
Stand	ard 2: Climate Change Mitigation and Adaptation	
2.1	Will the proposed project result in significant ³⁵ greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the project be sensitive or vulnerable to potential impacts of climate change?	Yes
2.3	Is the proposed project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	No
	For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	
Stand	ard 3: Community Health, Safety and Working Conditions	
3.1	Would elements of project construction, operation, or decommissioning pose potential safety risks to local communities?	Yes

³⁵ In regard to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.2	Would the project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.3	Does the project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	Yes
3.5	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction, operation, or decommissioning?	Yes
3.8	Does the project involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?	Yes
3.9	Does the project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Stand	ard 4: Cultural Heritage	
4.1	Will the proposed project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect, and conserve Cultural Heritage may also have inadvertent adverse impacts)	Yes
4.2	Does the project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Stand	ard 5: Displacement and Resettlement	
5.1	Would the project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the project would lead to forced evictions? ³⁶	No
5.4	Would the proposed project possibly affect land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	No
Stand	ard 6: Indigenous Peoples	
6.1	Are indigenous peoples present in the project area (including the project area of influence)?	No
6.2	Is it likely that the project or portions of the project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal	No

³⁶ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

	titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	
	If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the project would be categorized as either Moderate or High Risk.	
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Stand	ard 7: Pollution Prevention and Resource Efficiency	
7.1	Would the project potentially result in the release of pollutants to the environment due to routine or non- routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Yes
7.2	Would the proposed project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3	Will the proposed project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the project propose the use of chemicals or materials subject to international bans or phase-outs?	No
	For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	
7.4	Will the proposed project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the project include activities that require significant consumption of raw materials, energy, and/or water?	No

4. Risk Analysis

Table 19: Risk analysis

No.	Description	Date identified	Туре	Probability & Impact	Countermeasures / Mitigation response	Owner	Submitted, updated by	Last Update	Status
1.	Risk of the Republic of Serbia stopping its negotiations to join the European Union and therefore making energy- efficiency less of a priority.		Political	P = 2 I = 5	Even in the unlikely event that negotiations were stopped or even cancelled, energy-efficiency is likely to remain as a priority for the government, because of its significant cost-savings potential across the economy. This risk is considered low and is mitigated by the fact that the Government has already made a decision to apply for EUR 40 mil sovereign guarantee loan to finance the EER of the first 28 CGB.	Board,			
2.	Forthcoming elections (April 2022) could affect the pace of project implementation due to possible reshuffling of the Government and substantial staff change in beneficiary institutions.		Political	P = 4 I = 4	This risk is considered high and is mitigated by the detailed planning of project activities immediately after the signing of the Project Document in a way that most of the activities foreseen in the transition period will not be affected by the possible changes in beneficiary institutions	Board,			
3.	MCTI failing to adopt the new regulations concerning energy efficiency in buildings which shall prescribe the national minimum energy performance requirements for buildings in line with Article 4 of Directive 2010/31/EU.		Legislative	P = 3 I = 3	meet these requirements, so failing in its setting could jeopardize	Project Board, PIU			

No.	Description	Date identified	Туре	Probability & Impact	Countermeasures / Mitigation response	Owner	Submitted, updated by	Last Update	Status
4.	The Government does not have the financial resources to provide necessary additional funding to support the proposed EER under CEB loan.		Financial	P = 2 I = 3	This risk considered low with medium impact and is mitigated by the fact that the Government has already decided to apply for EUR 40 mil sovereign guarantee loan to finance EER of the first 28 CGB, and that donors (the Kingdom of Spain, Republic of Slovakia) have already expressed their interest to contribute to Government efforts. In addition, Government EE fund has recently been increased so in case of need missing funds will be allocated from EE fund.	Board			
5.	Due to technical problems with the planned EE investments and technologies used, the trust of the key stakeholders on the proposed measures is lost.		Technology		The promoted technologies are already considered to be technically mature technologies, so the risk of their technical failure due to the early stage of their technical development is considered as low. This does not detract, however, from the importance of adequate quality control of both products and installations at all stages of implementation.	Board, PIU,			
6.	The planned energy efficiency investments to be implemented under EECGB Programme (such as building and lighting retrofits) may generate waste, which, if not properly managed, may be disposed in an environmentally not sound manner.		Environment al risk	I = 5	The project will mitigate this risk by having a requirement for all investment proposals seeking project support to include an adequate waste management plan incorporated into the project design. Environmentally sound waste management as it relates to the implementation of different EER works and disposal of related materials and appliances will be an issue to be addressed also when supporting the Serbian municipalities to prepare their municipal energy efficiency action plans	Board, PIU, Beneficiari es			
7.	Lack of adequate co- ordination and co-operation between the institutions of		Organization al		This risk is considered from medium to high due to the large number of institutions that use CGB. The project seeks to mitigate this risk by intensive communication and information exchange	Board,			
No.	Description	Date	Туре	-	Countermeasures / Mitigation response	Owner	Submitted,	Last	Status
-----	---	------	--------------------	-------	---	--------	------------	--------	--------
8.	the central government MME, UZZPRO and MCTI which implement the project on behalf of Government. Lack of adequate co- ordination and co-operation institutions of the central government, namely MME, UZZPRO and MCTI as project implementing institutions on one side, and institutions that use CGBs on the other side, to effectively reach the stated goals.		Organization al	P = 3	activities through the project. This risk is considered from medium to high due to a large number of institutions involved in project coordination. The project seeks to mitigate this risk by intensive communication and information exchange activities through the project.	Board,	updated by	Update	
	Inadequate local capacity of the central government employees to effectively understand the need for EER of CGBs and envisaged measures.		Operational		This risk is considered from medium to high due to a large number of employees in CGB. The strong focus of the project on communication with employees in institutions that use CGBs is expected to mitigate this risk.	Board,			

5. Project Board Terms of Reference and TORs of Key Management Positions

Project Board

Duties and Responsibilities:

The Project Board (PB) is the main body to supervise the project implementation in accordance with UNDP rules and regulations and referring to the specific objectives and the outcomes of the project with their agreed performance indicators.

The main functions of the PB are:

- General monitoring of project progress in meeting its objectives and outcomes and ensuring that they continue to be in line with national development objectives;
- To provide strategic leadership and serve as a coordination mechanism for various partners involved;
- Facilitating co-operation between the different Government entities, whose inputs are required for successful implementation of the project, ensuring access to required information and resolving eventual conflict situations faced during project implementation when trying to meet its outcomes and stated targets;
- Supporting the elaboration, processing and adoption of the required institutional, legal and regulatory changes to support the project objectives and overcoming of related barriers;
- Facilitating and supporting other measures to mitigate the identified risks to project success;
- Approving annual work plans and progress reports, the first plan being prepared at the outset of project implementation;
- Approving project management arrangements; and
- Approving any amendments to be made in the project strategy that may arise due to changing circumstances, after careful analysis and discussion of the ways to solve problems.

Project Board Structure and Reimbursement of Costs

Besides the representative of the MME, the PB is expected to include representatives of the UZZPRO and UNDP. The final list of the PB members will be completed at the outset of project operations and presented in the Inception Report. New members into the PB or participants into the PB meetings during the project implementation can be invited at the decision of the PB, by ensuring, however, that the Board will remain sufficiently lean to facilitate its effective operation. The final list of the PB members will be completed at the outset of project operations and presented in the Inception Report. New members into the Board or participants into the Board presented in the Inception Report. New members into the Board or participants into the Board

meetings during the project implementation can be invited at the decision of the Board, by ensuring, however, that the PB will remain sufficiently lean to facilitate its effective operation. Project Manager will participate as a non-voting member in the PB meetings.

The costs of the PBs work shall be considered as the Government's or other project partners' voluntary in-kind contribution to the project and shall not be paid separately by the project. They are also not eligible to receive any monetary compensation from their work as experts or advisers to the project.

Meetings

It is suggested that the PB will have regular meetings, twice a year, or more often if required. A tentative schedule of the PB meetings will be agreed as a part of the annual work plans, and all representatives of the PB should be notified again in writing 14 days prior to the agreed date of the meeting. The meeting will be organized provided that the executing agency, UNDP and at least 50% of the other members of the Board can confirm their attendance. The Project Manager shall distribute all materials associated with the meeting agenda at least 5 working days prior to the meeting.

National Project Director

As a representative of MME which is the project's main Government partner, the main duties and responsibilities of the National Project Director (NPD) include:

- Supervise and guide the project implementation directly as well as through the PB meetings chaired by the NPD by reviewing and commenting project progress reports and project implementation reviews and by meeting at regular intervals with the Project Manager;
- Coordinate the project activities with those of the Government and provide guidance on policy issues;
- Certifying the annual and, as applicable, quarterly work plans, financial reports and ensuring their accuracy and consistency with the Project Document and its agreed amendments;
- Taking the lead in developing linkages with the relevant authorities at the national, provincial and governmental level and supporting the project in resolving any institutional or policy-related conflicts that may emerge during its implementation.

Project Implementation Unit

Main Tasks and Responsibilities:

The Project Implementation Unit (PIU) who will act as the executive unit and be responsible for the overall management, backstopping and monitoring of the Project as well as for management and delivery of assigned outputs, their proper monitoring and operational closure. Within this overall framework, the specific tasks of the PIU shall include, among others:

- General coordination, management and supervision of project implementation in compliance with the provisions of the Project Document and the UNDP and national rules and procedures;
- Preparing and implementing the procurement process as per UNDP procedures;
- Monitoring and supervising the work of consultants;
- Monitoring and reporting on project implementation;
- Financial reporting to MME;
- Organizing and implementing information dissemination and awareness-raising activities;
- Organizing and participating in the meetings of the PB, preparing relevant documents and MoMs;
- Coordinating with other institutions;
- Identifying and actively initiating and establishing partnerships with other national and international organisations working in the project related fields to exploit synergies with similar endeavours, etc.

For the duration of the project, the expected results and related milestones of the PIU will be consistent with those of the Project Results Framework. Further targets, as applicable, for the post-project period will be defined in consultation with the BP.

The PIU shall promptly inform the MME of any comments it may have on the results of the consultancy services, advise the MME of any fact or event known to the PIU that might prejudice or substantially affect the completion of the TA Project or the consultancy services to be procured and follow implementation of the consultancy services to be procured under the TA Project, and present for approval the outputs of the preparatory activities, and keep all outputs available for CEB for review if needed during project implementation. The PIU shall use its reasonable endeavours to procure permission for any authorised representatives of CEB to communicate with and if necessary to visit the consultants to be contracted under the TA Project in order to obtain all such information as CEB may require with regard to the progress.

The PIU shall cooperate in good faith and work jointly with the MME towards MME fulfilling all its obligations towards CEB stemming from requirements of the Article 6 of the WBIF GA and SIGA/SCA GA.

Staffing Schedule

The PIU will be embedded in the existing UNDP Energy Portfolio and headed by the Energy Portfolio Manager (PIU Manager) for the duration of the project, the core team of the PIU will consist of:

• PIU Manager will be responsible for project management and in charge of the overall project implementation in compliance with the Project Document and the UNDP and the

national rules and procedures. PIU Manager will have operational and financial responsibility and will report to the responsible UNDP Programme Officer.

- Three Project Coordinators out of which two Project Coordinators will deal only with technical issues, such as preparation of ToRs, bill of quantities, monitoring the execution of contracted engineering tasks, etc. One Project Coordinator will deal with day to day administrative activities related to procurement (organizing procurement, drafting contracts, etc.).
- Up to two Project Assistants will deal with day to day administrative activities related to procurement, project administration, payments, monitoring, logistics, etc.

Project management and quality assurance will be cost-shared with other portfolio initiatives. If necessary, the Project will subcontract additional expert(s) to facilitate execution of the foreseen tasks.

PIU Manager (Project Manager)

Duties and Responsibilities

Operational project management in accordance with the Project Document and the UNDP guidelines and procedures includes the following duties and responsibilities:

- Assumes primary responsibility for daily project management both organizational and substantive matters- ensuring that budgeting, planning and general monitoring of the Project are in accordance with the Project Document and the rules and procedures established in the UNDP Programming Manual;
- General coordination, management and supervision of project implementation;
- Preparation of annual work plans and budgets with close monitoring of the overall project progress and conducting required adaptive management to reflect the changing circumstances and eventually emerging new opportunities;
- Managing the procurement and the project budget under the supervision of UNDP to assure timely involvement of local and international experts, organisation of training and public outreach, purchase of required equipment etc. in accordance with UNDP rules and procedures;
- Submission of annual Project Implementation Reviews and other required progress reports (such as QPRs) to the PB and the UNDP in accordance with the section "Monitoring and Evaluation" of the Project Document (with close linkage to required adaptive management actions);
- Supervising and coordinating the contracts of the experts working for the Project;
- As applicable, communicating with the project's international partners and other donors and financing entities active in the Republic of Serbia for leveraging additional financing for meeting the project objective and targets;

- Actively exploring opportunities for new partnerships and opportunities for co-ordination and co-operation with other EE related ongoing and planned activities in the Republic of Serbia and abroad; and
- Ensuring otherwise successful completion of the Project in accordance with the stated outcomes and performance indicators summarized in the project's results framework and within the planned schedule and budget.

Expected Qualifications

- Advanced university degree (MSc. or former VII/1 national grade in mechanical/electrical/architectural engineering, spatial planning, economics) and at least 15 years of professional experience in the specific area the Project is dealing with (energy efficiency), including solid knowledge of the state-of-the-art approaches and best practices in catalysing energy efficiency investments in the public sector;
- Experience in managing/coordinating projects of similar value, complexity and nature,
- Experience in working in Serbian public sector;
- Demonstrated capacity to manage people and actively explore new, innovative implementation and financing mechanisms to achieve the project objective;
- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;
- Good analytical and problem-solving skills and the related ability for adaptive management with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organise it, and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Good communication skills and competence in handling the project's external relations at all levels;
- Fluent/good knowledge of Serbian and English languages; and
- Familiarity and prior experience with UNDP requirements and procedures are considered as an asset.

Project Coordinator 1

Duties and Responsibilities

Supporting the Project Manager in delivering the agreed project results and meeting the project targets with a specific responsibility in facilitating, managing and coordinating the support offered to the MME, UZZPRO and other project beneficiaries, in particular:

- Preparing and coordinating the technical issues related to the procurement process, including the elaboration of ToRs and provision of technical backstopping for evaluation of the proposals received;
- By regular field visits to the CGB, facilitating and supervising their project implementation and providing other technical backstopping, as requested by the MME and UZZPRO;
- Energy administration of EMIS and management of central database in EMIS, coordinating the data collection related to CGB with the other energy-related data gathering and management activities of (such as the preparation of the annual reports on energy savings) so as to avoid overlapping activities, full access to, exchange and consistency of the data gathered and their storing and processing in a format that can be used to serve all reporting needs of the Government as it concerns any public sector energy use;
- Monitoring the execution of contracted services;
- Providing guidance for and reviewing the deliverables of consultants/companies engaged in the Project to ensure their consistency in terms of the reporting formats and accuracy of the data provided;
- Contributing to the preparation of annual work plans, Terms of Reference and Project Progress Reports (with related adaptive management planning) as well as of any public outreach and training materials as it concerns any activities implemented by or through the Project, etc.

Expected Qualifications

- Advanced university degree (MSc or former VII/1 national grade in mechanical engineering) and at least 10 years of professional experience related in technical areas the Project is dealing with;
- Experience in coordinating activities of similar complexity and nature, including demonstrated capacity to actively explore new, innovative implementation and financing mechanisms to achieve the project objective;
- Demonstrated experience and success in the engagement of and working with the public and private sector, creating partnerships and leveraging financing for activities of common interest;
- Ability and demonstrated success to work in a team, to effectively organize it works and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Good communication skills and competence in handling the project's external relations at all levels;
- Fluent in Serbian and English languages;
- Familiarity and prior experience with UNDP requirements and procedures are considered as an asset.

Project Coordinator 2

Duties and Responsibilities

Supporting the Project Manager in delivering the agreed project results and meeting the project targets with a specific responsibility in facilitating, managing and coordinating the support offered to the MME, UZZPRO and other project beneficiaries, in particular:

- Preparing and coordinating the procurement process, including the provision of technical backstopping for evaluation of the proposals received;
- By regular field visits to the CGB, facilitating and supervising their project implementation and providing other technical backstopping, as requested by the MME and UZZPRO;
- Providing guidance for and reviewing the deliverables of consultants/companies engaged in the Project to ensure their consistency in terms of the reporting formats and accuracy of the data provided;
- Contributing to the preparation of annual work plans, Terms of Reference and Project Progress Reports (with related adaptive management planning) as well as of any public outreach and training materials as it concerns any activities implemented by or through the Project, etc.

Expected Qualifications

- Advanced university degree (MSc or former VII/1 national grade in engineering /economics) and at least 10 years of professional experience related to technical aspects of project implementation;
- Experience in coordinating activities of similar complexity and nature, including demonstrated capacity to actively explore new, innovative implementation and financing mechanisms to achieve the project objective;
- Demonstrated experience and success in the engagement of and working with the public and private sector, creating partnerships and leveraging financing for activities of common interest;
- Ability and demonstrated success to work in a team, to effectively organize it works and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Good communication skills and competence in handling the project's external relations at all levels;
- Fluent in Serbian and English languages;
- Familiarity and prior experience with UNDP requirements and procedures are considered as an asset.

Procurement Assistant

Duties and Responsibilities

Supporting the Project Manager in delivering the agreed project results and meeting the project targets with a specific responsibility in facilitating, managing and coordinating the procurement process within the project, in particular:

- Preparing and coordinating the procurement process, including the provision of technical backstopping for publishing call for proposals and evaluation of the proposals received;
- Preparing requests for proposals and requests for quotations;
- Issuing contracts to selected bidders;
- Providing guidance for and reviewing the deliverables of consultants/companies engaged in the Project to ensure their formal compliance;
- Contributing to the preparation of annual work plans and Project Progress Reports (with related adaptive management planning) as well as of any public outreach and training materials as it concerns any activities implemented by or through the Project, etc.

Expected Qualifications

- Advanced university degree (MSc or former VII/1 national grade in engineering/spatial planning/economics) and at least 8 years of professional experience related to Project implementation;
- Experience in managing procurement processes of similar complexity and nature;
- Demonstrated experience and success in the engagement of and working with the public and private sector, creating partnerships and leveraging financing for activities of common interest;
- Ability and demonstrated success to work in a team, to effectively organize it works and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Good communication skills and competence in handling the project's external relations at all levels;
- Fluent in Serbian and English languages;
- Familiarity and prior experience with UNDP requirements and procedures are considered as an asset.

Project Assistant

Duties and Responsibilities

Supporting the Project Manager in the implementation of the Project, including:

• Responsibility for logistics and administrative support of project implementation, including administrative management of the project budget, required procurement support, etc.

- Controlling project expenditures and maintaining up to date business and financial documentation, in accordance with UNDP and other project reporting requirements;
- Organizing meetings, business correspondence and other communications with the project partners;
- Provide logistical support to the project team and consultants working for the Project in organising duty travel, meetings, seminars, workshops, informative sessions etc;
- Ensuring effective dissemination of, and access to, information on project activities and results and supporting the project outreach and PR activities in general, including keeping the project web-site up to date in co-operation with the IT and communication consultant;
- Managing the projects files and supporting the project teams in preparing the required financial and other reports required for monitoring and supervision of the project progress; and
- Supporting the project teams in managing contracts, in organizing correspondence and in ensuring effective implementation of the project otherwise.

Expected Qualifications

- University degree/College degree in economy, or similar (MSc/BSc (appl.) or former VI national grade) and at least 5 years of related professional experience;
- Fluent/good knowledge of the Serbian and English languages;
- Demonstrated experience and success of work in a similar position;
- Good administration and interpersonal skills;
- Ability to work effectively under pressure;
- Good computer skills;
- Familiarity and prior experience with UNDP requirements and procedures, as well as energy-related projects are considered as an asset.

Engineering support (in-house engineering support and vacant)

In-house engineering support (Tech Cell)- 5 positions:

- 1. Architect, one position;
- 2. Mechanical Engineer, one position;
- 3. Civil Engineer (construction), one position;
- 4. Civil Engineer (hydro), one position;
- 5. Electrical Engineer.

Vacant engineering support – 3 positions:

6. Mechanical Engineer, one position, vacant;

7. Architect, two positions, vacant.

Duties and Responsibilities

Supporting the PIU in the implementation of the Project tasks which require specific engineering expertise, including:

- Advising Project Manager and PIU members regarding respective engineering tasks;
- Assisting Project Manager and PIU members by preparing requests for proposals and requests for quotations (elaborating respective parts of the ToRs, specifications of works, bill of quantities, etc.)
- Facilitating the procurement process by participating in the panels for evaluation of the received proposals/offers;
- Communicating with the consultants/companies about the technical issues which are related to the specific area of technical expertise, as requested by the Project Manager.
- Reviewing the deliverables of consultants/companies engaged in the Project to ensure their consistency in terms of the reporting formats and accuracy of the data provided;
- Providing guidance for and quality reviewing the deliverables of consultants/companies engaged in the Project to ensure their substantial and formal compliance against the respective ToR.
- Facilitating and supervising the project implementation y field visits and providing other technical backstopping, as requested by the Project Manager.

In house PR support

Duties and Responsibilities

Supporting the PIU/UNDP, MME and UZZPRO in organizing and implementing communication and awareness-raising activities defined in the project document. Communication and visibility activities will comply with the WBIF related requirements set out in Guidelines for WBIF Technical Assistance Grants and will ensure visibility of EU/bilateral donor assistance.

- Elaborating communication plan with the purpose to identify and timely address the relevant stakeholders.
- Organizing inception workshop for representatives of employees in government institutions which use CGB, other interested parties and media. The purpose of the workshop is to inform the stakeholders and media about the EECGB Programme and envisaged programme/project activities and expected results.
- Delivering media outlets with the purpose to regularly inform employees of CGBs and general public on the status of project activities.

• Organizing workshop for representatives of employees in government institutions which use CGB, other interested parties and media for the purpose of presenting project results and plans for execution of forthcoming EER works.

Table 20: Staffing schedule

oject: Preparatory Activities for the Pr	ogramme "Energy Efficienc	y in				Yea	r 1							Y	'ear 2							Year								Yea	4				
entral Government Buildings"			Q	1	Q	2	c	13		Q4		Q1		Q2	(13	c	24	Q1		Q2		Q3	3	Q4	ł	Q1		Q2		Q3		Q4		
Role/Position	Name, specialization		1 2	3	4 5	6	7	89	10	11 12	2 1	2 3	4	5 6	j 7	89	10 1	11 12	1 2	3	4 5	6	7 8	9	10 11	12	1 2	3	4 5	6	7 8	9	10 11 1	2 MN	VI N
Oversight and Compliance																																			
1 UNDP Deputy Resident Representative	Anas Fayyad Quarman	UNDP																																Perma	an. Per
2 UNDP Programme Specialist	Žarko Petrović	UNDP																																Perma	an. Per
3 Head of Procurement UNIT	Predrag Zekić	UNDP																																Perma	an. Per
4 Programme and Finance Associate	Aleksandar Jovanović	UNDP																																Perma	an. Per
Implementation																																			
PIU/Project Manager	Maja Matejić, Mech. Eng.	UNDP																																24	1
Project Coordinator	Dragan Urošević, Mech. Eng.	UNDP																																24	L .
Project Coordinator	Dragan Stefanović, Ecc.	UNDP																																24	1 C
Procurement Assistant	Lazar Divjak, Spatial Planner	UNDP																																24	1
0 Project Assistant	Nataša Čakarmiš, Ecc.	UNDP																																24	1 ()
1 In house engineering support (Tech Cell)	Nebojša Savićević, Civil Eng.	UNDP																																4	
2 In house engineering support (Tech Cell)	Đorđije Popović, Civil Eng.	UNDP																																4	
3 In house engineering support (Tech Cell)	Dejan Ranđić, Mech. Eng.	UNDP																																8	
4 In house engineering support (Tech Cell)	Stefan Zdujić, Electr. Eng.	UNDP																																9	
5 In house engineering support (Tech Cell)	Zorica Savičić, Arch.	UNDP																																6	
6 Vacant	Mechanical Engineer	Vacant																																8	
7 Vacant	Architect	Vacant																																4	
8 Vacant	Architect	Vacant																																4	
9 In house PR support	Danijela Šever Radovanović	UNDP																																0.5	5 (
0 Editor		Vacant																																1	
1 Interpreter		Vacant																																2	
22 In house backstopping (driver, etc.)		UNDP																															7	0.5	5 (

6.Stakeholder Involvement Plan

Stakeholder	Envisaged role and potential areas for co-operation during project implementation
Central government adm	inistration and related organisations and companies
MME	The main project partner and Government counterpart responsible for the project and coordination of government institutions involved in a project as partners (UZZPRO and MCTI) and beneficiaries (users of the CGB). Also, the MME will have a key role in communication with public utility companies which are tasked to provide technical conditions for designing.
UZZPRO	The Administration for Joint Services of the Republic Bodies, which provides centralized maintenance of selected 28 CGBs is envisaged as a key partner responsible for operational support to project activities.
МСТІ	The key partner to the project responsible to provide support related to technical support in obtaining conditions and construction permits.
Local (city) administratio	n and PUCs
City of Belgrade	Envisaged project partner responsible for issuing location information, technical conditions and permits
PUCs	Envisaged project partners responsible for issuing technical conditions for the design
Energy and Construction	related NGOs and professional associations
Chamber of Commerce and Industry	Envisaged project partner for engaging private sector
Chamber of Engineers	Envisaged project partner for engaging professionals and providing advisory services related to technical designing and construction.
Universities and other sc	ientific, research and educational entities
Belgrade University	Envisaged project partner for engaging professionals and providing advisory services related to technical designing and construction.
International organisatio	ons and financing entities

Table 21: Stakeholder involvement plan

СЕВ	Financing institution providing loan for implementation of EECGB Programme totalling EUR 40 mil and CEB Trust Fund grants totalling EUR 0.6 mil form Slovakia and Spain.
EU/WBIF	Financing institution providing EUR 0.3 mil for the operation of PIU
KfW	Financing institution providing loan for EER of Military Medical Academy totalling EUR 40 mill which is a similar programme to EECGB
UNDP	Responsible for operation of PIU and implementation of project activities.

7. Breakdown of Existing and Missing Budget

Table 22: Analysis of the existing and missing budget

	CEB GR	ANT					
	MISSING	G FUNDS					
	CEB GR	ANT+MISS	ING FUNDS				
1			(11,932 m2) AS SPECIFIED BY UZZPRO IN NOVEMBER 20 NG ALREADY HAS AN ENERGY PASSPORT (2,596 m2))19			
	LOT 1	1ESE BIULDI	NG ALREADY HAS AN ENERGY PASSPORT (2,596 m2)				
				GFA	Unit pr.	TOTAL	
	1 Energy pas	snorts		m2 9,336	EUR/m2 0.65	EUR 6,068	
	2 Detailed e			11,936	1.30	15,517	
3	3 Designing			11,932	1.70	20,284	GRANT
					TOTAL ontingency 10%	41,870 4,187	
					TOTAL	46,057	
2	22 0100		JT 4 PRIORITY BUILDINGS, SIV I AND SIV III (116,568 m2)				
2			NGS ALREADY HAVE AN ENERGY PASSPORT (4,254 m2)				
				GFA m2	Unit pr. EUR/m2	TOTAL EUR	
	1 Energy pas	sports		112,314	0.65	73,004	COANT
- 2	2 Detailed e			116,568	1.30	151,538	GRANT
3	3 Designing			116,568	6.00 TOTAL	699,408 224,543	MISSING
				Co	IOTAL ontingency 10%	92,395	GRANT MISSING
					TOTAL	1,016,346	GRANT+MISSING
3	GEOLOGY		TIONS OF GROUNDWATERS		T		
-	GLULUGIU	S & EXPLORA		UNIT	Unit pr.	TOTAL	
				Study	EUR/study	EUR	
1	1 Study on G	eological ex	plorations of groundwaters	1	100,000	100,000	GRANT
	-			Co	ontingency 10% TOTAL	10,000 110,000	MISSING
						,	
4	SIV III AND	SIVI (TOTA	L 79.160 m2, SIV I (54,660 m2) already has an energy pas		11-14		
				GFA m2	Unit pr. EUR/m2	TOTAL EUR	
1	1 Energy pas	sports		24,500	0.65	15,925	
		nergy audits		79,160	1.20	94,992	GRANT
			rsis and designs 1 rsis and designs 2	79,160 79,160	0.5	39,580 79,160	MISSING
	5 Designing	anying anai	sis and designs z	79,160	20	1,583,200	MISSING
					TOTAL	150,497	GRANT
				Co	ontingency 10% TOTAL	181,286 1,994,143	MISSING GRANT+MISSING
					TOTAL	1,994,145	GRANTENISSING
5	COMMUN	ICATIONS					
				No	Package/year EUR/unit	TOTAL	
	1 Package ir	cluding:		1	11,000	11,081	GRANT
	1	Communica		Co	ontingency 10%	1,108	MISSING
		Inception W Media outle			TOTAL	12,190	GRANT+MISSING
		Final WS	15				
6	PIU TOTAL	. COST (STAF	F, PREMISES, STATIONARY, IT, ETC.)	Year	Package/year	TOTAL	
				rear	EUR/year	EUR	
:	1 Package in			1	200,000	200,000	GRANT
		PIU Staff (5 Premises	positions, 120 MM/year)	0.5	200,000 200000	100,000	
		Equipment		1	200,000	200,000	MISSING
	4	IT Commun	ications	1	200,000	200,000	
		Stationary Etc.			TOTAL TOTAL	300,000	GRANT MISSING
	6				TOTAL	800,000	GRANT+MISSING
		(ENCINEED)	IG, PR, INTERPRETATION, ETC.) AND BACKSTOPPING ST				
7	SUPPORT	ENGINEERI		Year	Package/year	TOTAL EUR	
7	SUPPORT	ENGINEERII					
	SUPPORT			1	EUR/year 185,000	185,000	
	1 Package in 1	<mark>icluding:</mark> In house en	gineering support (5 engineers, app. 25 MM/year)	1	185,000 185,000	185,000	MISSING
	1 Package in 1 2	i <mark>cluding:</mark> In house en External en	gineering support (5 engineers, app. 25 MM/year) gineering support (3 vacant positions, app. 32 MM/year)	1 1	185,000 185,000 185,000	185,000 185,000	MISSING
	1 Package ir 1 2 3	<mark>icluding:</mark> In house en		1	185,000 185,000	185,000	MISSING
	Package in 1 2 3 4	<mark>cluding:</mark> In house en External en Interpreter	gineering support (3 vacant positions, app. 32 MM/year)	1 1	185,000 185,000 185,000 185,000	185,000 185,000 185,000	
	1 Package in 1 2 3 4 5	icluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping	1 1	185,000 185,000 185,000 185,000	185,000 185,000 185,000	
	1 Package in 1 2 3 4 5	icluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year)	1 1 1 1	185,000 185,000 185,000 185,000	185,000 185,000 185,000	
	1 Package in 1 2 3 4 5	icluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping	1 1 1 PREPARATI	185,000 185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT	185,000 185,000 185,000 740,000 EUR 832,177	MISSING GRANT
	1 Package in 1 2 3 4 5	icluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping	1 1 1 PREPARATI	185,000 185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT TOTAL MISSING	185,000 185,000 185,000 740,000 EUR 832,177 3,886,557	MISSING GRANT MISSING
	1 Package in 1 2 3 4 5	icluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping	1 1 1 PREPARATI	185,000 185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT	185,000 185,000 185,000 740,000 EUR 832,177	MISSING GRANT MISSING
	1 Package ir 1 2 3 4 5 PREPARA'	icluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping TIES, 4 YEARS	1 1 1 PREPARATI	185,000 185,000 185,000 185,000 TOTAL TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL MISSING ANT+MISSING	185,000 185,000 185,000 740,000 EUR 832,177 3,886,557 4,718,734	MISSING GRANT
	1 Package ir 1 2 3 4 5 PREPARA'	cluding: In house en External en, Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping TIES, 4 YEARS	1 1 1 PREPARATI	185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT TOTAL GRANT TOTAL MISSING ANT+MISSING	185,000 185,000 740,000 EUR 832,177 3,886,557 4,718,734 EUR	MISSING GRANT MISSING GRANT+MISSING
	1 Package ir 1 2 3 4 5 PREPARA'	cluding: In house en External en, Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping TIES, 4 YEARS	1 1 1 1 PREPARATI	185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT	185,000 185,000 185,000 740,000 740,000 832,177 3,886,557 4,718,734 EUR EUR 4,1609 194,328	MISSING GRANT MISSING GRANT+MISSING GRANT MISSING
	1 Package ir 1 2 3 4 5 PREPARA'	cluding: In house en External en, Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping TIES, 4 YEARS	1 1 1 1 PREPARATI	185,000 185,000 185,000 TOTAL TOTAL TOTAL GRANT TOTAL GRANT DPC TOTAL GRANT	185,000 185,000 185,000 740,000 EUR 832,177 3,886,557 4,718,734 EUR EUR 41,609	MISSING GRANT MISSING GRANT+MISSING GRANT
8	1 Package in 1 2 3 4 5 PREPARA DIRECT PR	cluding: In house en External en Interpreter Editor In house ba	jineering support (3 vacant positions, app. 32 MW/year) ckstopping TIES, 4 YEARS (5%)	1 1 1 1 PREPARATI	185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT	185,000 185,000 185,000 740,000 740,000 832,177 3,886,557 4,718,734 EUR EUR 4,1609 194,328	MISSING GRANT MISSING GRANT+MISSING GRANT MISSING
	1 Package in 1 2 3 4 5 PREPARA DIRECT PR	cluding: In house en External en Interpreter Editor In house ba	gineering support (3 vacant positions, app. 32 MM/year) ckstopping TIES, 4 YEARS	TOTAL GI	185,000 185,000 185,000 TOTAL ORY ACTIVITIES TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT	185,000 185,000 185,000 740,000 740,000 832,177 3,886,557 4,718,734 EUR EUR 4,1609 194,328	MISSING GRANT MISSING GRANT+MISSING GRANT MISSING
8	1 Package in 1 2 3 4 5 PREPARA DIRECT PR	cluding: In house en External en Interpreter Editor In house ba	jineering support (3 vacant positions, app. 32 MW/year) ckstopping TIES, 4 YEARS (5%)	1 1 1 1 PREPARATI	185,000 185,000 185,000 185,000 105,000 TOTAL TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT	185,000 185,000 185,000 740,000 EUR 4,718,734 EUR 4,718,734 235,937 EUR EUR 26,214	MISSING GRANT MISSING GRANT+MISSING GRANT+MISSING GRANT+MISSING GRANT
8	1 Package in 1 2 3 4 5 PREPARA DIRECT PR	cluding: In house en External en Interpreter Editor In house ba	jineering support (3 vacant positions, app. 32 MW/year) ckstopping TIES, 4 YEARS (5%)	1 1 1 1 PREPARATI	185,000 185,000 185,000 185,000 185,000 185,000 185,000 107AL TOTAL GRANT TOTAL GRANT TOTAL MISSING GMS GMS GMS	185,000 185,000 185,000 740,000 EUR 832,177 3,886,557 4,718,734 EUR 41,609 194,328 235,937 EUR EUR 26,214 12,2427	MISSING GRANT MISSING GRANT+MISSING GRANT+MISSING GRANT MISSING
8	1 Package in 1 2 3 4 5 PREPARA DIRECT PR	cluding: In house en External en Interpreter Editor In house ba	jineering support (3 vacant positions, app. 32 MW/year) ckstopping TIES, 4 YEARS (5%)	1 1 1 1 PREPARATI	185,000 185,000 185,000 185,000 185,000 TOTAL TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT TOTAL GRANT	185,000 185,000 185,000 740,000 EUR 4,718,734 EUR 4,718,734 235,937 EUR EUR 26,214	MISSING GRANT MISSING GRANT+MISSING GRANT+MISSING GRANT MISSING
8	I Package in 1 2 3 3 4 5 PREPARA DIRECT PR GLOBAL M	cluding: In house en External en, Interpreter Editor In house ba FORY ACTIVI	jineering support (3 vacant positions, app. 32 MW/year) ckstopping TIES, 4 YEARS (5%)	1 1 1 PREPARATI TOTAL GR	185,000 185,000 185,000 185,000 185,000 185,000 107AL TOTAL GRAY TOTAL GR	185,000 185,000 185,000 740,000 EUR 832,177 3,886,577 4,718,734 EUR 41,609 194,328 235,937 EUR 26,214 12,427 148,640	MISSING GRANT MISSING GRANT+MISSING GRANT+MISSING GRANT+MISSING GRANT
8	I Package in 1 2 3 3 4 5 PREPARA DIRECT PR GLOBAL M	cluding: In house en External en, Interpreter Editor In house ba FORY ACTIVI	jineering support (3 vacant positions, app. 32 MW/year) ckstopping TES, 4 YEARS (5%)	1 1 1 PREPARATI TOTAL GR	185,000 185,000 185,000 185,000 185,000 185,000 185,000 107AL TOTAL GRANT TOTAL GRANT TOTAL MISSING GMS GMS GMS	185,000 185,000 185,000 740,000 EUR 832,177 3,886,557 4,718,734 EUR 41,609 194,328 235,937 EUR EUR 26,214 12,2427	MISSING GRANT MISSING GRANT+MISSING GRANT+MISSING GRANT MISSING