

NS-46 - Improvement of old residential buildings envelope (exterior doors, windows and thermal insulation) in Serbia

Serbia

NAMA Seeking Support for Implementation

A Overview

| | |
|--|---|
| A.1 Party | Serbia |
| A.2 Title of Mitigation Action | Improvement of old residential buildings envelope (exterior doors, windows and thermal insulation) in Serbia |
| A.3 Description of mitigation action | Residential buildings in Serbia up to 1980's were generally built without any thermal insulation. That is the main reason for their tremendous energy consumption for space heating today. The objective of this project is rehabilitation of about 10% of the existing residential buildings in Serbia that were built in the period from 1950's to 1980's, what is approximately 10 millions square meters of houses and apartments buildings. Energy efficiency improvements in selected residential buildings of different size and shape throughout Serbia, aim to: reduce heat energy consumption and costs, increase the level of indoor comfort and end users' satisfaction and reduce GHG emission |
| A.4 Sector | <input type="checkbox"/> Energy supply <input checked="" type="checkbox"/> Residential and Commercial buildings <input type="checkbox"/> Agriculture <input type="checkbox"/> Waste management <input type="checkbox"/> Transport and its Infrastructure <input type="checkbox"/> Industry <input type="checkbox"/> Forestry <input type="checkbox"/> Other <input type="text"/> |
| A.5 Technology | <input type="checkbox"/> Bioenergy <input checked="" type="checkbox"/> Energy Efficiency <input type="checkbox"/> Hydropower <input type="checkbox"/> Wind energy <input type="checkbox"/> Carbon Capture and Storage <input type="checkbox"/> Land fill gas collection <input type="checkbox"/> Cleaner Fuels <input type="checkbox"/> Geothermal energy <input type="checkbox"/> Solar energy <input type="checkbox"/> Ocean energy <input type="checkbox"/> Low till / No till <input type="checkbox"/> Other <input type="text"/> |
| A.6 Type of action | <input type="checkbox"/> National/ Sectoral goal <input type="checkbox"/> Strategy <input checked="" type="checkbox"/> National/Sectoral policy or program <input type="checkbox"/> Project: Investment in machinery <input checked="" type="checkbox"/> Project: Investment in infrastructure <input type="checkbox"/> Project: Other <input type="checkbox"/> Other <input type="text"/> |
| A.7 Greenhouse gases covered by the action | <input type="checkbox"/> CO2 <input type="checkbox"/> N2O <input type="checkbox"/> PFCs <input type="checkbox"/> CH4 <input type="checkbox"/> HFCs <input type="checkbox"/> SF6 |

Other

B National Implementing Entity

B.1.0 Name
B.1.1 Contact Person 1 Ms. Jasminka Pavlovic
B.1.2 Address 22-26 Nemanjina Street, 11000 Belgrade
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B.1.4 Email jasminka.pavlovic@mgu.gov.rs
B.1.5 Contact Person 2
B.1.6 Address
B.1.7 Phone
B.1.8 Email
B.1.9 Contact Person 3
B.1.10 Address
B.1.11 Phone
B.1.12 Email
B.1.13 Comments

C Expected timeframe for the implementation of the mitigation action

C.1 Number of years for completion 8
C.2 Expected start year of implementation 2013

D Currency

D.1 Used Currency
Conversion to USD: 1

E Cost

E.1.1 Estimated full cost of implementation 723480000
E.1.2 Comments on full cost of implementation
E.2.1 Estimated incremental cost of implementation
E.2.2 Comments on estimated incremental cost of implementation

F Support required for the implementation the mitigation action

F.1.1 Amount of Financial support 578784000
F.1.2 Type of required Financial support
 Grant Guarantee
 Loan (sovereign) Equity
 Loan (Private) Carbon finance
 Concessional loan
 Other
F.1.3 Comments on Financial support The details of the financial mechanism will be decided upon the completion of the Feasibility study, therefore no further details are provided in this submission form.
F.2.1 Amount of Technological support
F.2.2 Comments on Technological support
F.3.1 Amount of capacity building support
F.3.2 Type of required capacity building support
 Individual level
 Institutional level
 Systemic level
 Other
F.3.3 Comments on Capacity Building support
F.4 Financial support for implementation required

F.5 Technological support for implementation required

F.6 Capacity Building support for implementation required

G Estimated emission reductions

G.1 Amount 0.504

G.2 Unit

G.3 Additional information (e.g. if available, information on the methodological approach followed) Total CO2 reduction for the 30 years period is 15,119,070 tCO2e. The calculations were made with the assumptions of the total floor areas to be rehabilitated in the existing buildings , total annual energy consumption before and after the implementation

H Other indicators

H.1 Other indicators of implementation Reduction of energy consumption and heating costs in residential buildings

I Other relevant information

I.1 Other relevant information including co-benefits for local sustainable development Positive economic, social and environmental effects will include: involvement of local partners in terms of production of construction products, project design and execution of works, increased demand and production of construction products, thus resulting in increase of revenue and employment of local companies, contributing to economic development of all regions of Serbia, involvement of stakeholders at local level (enterprises, certified engineers, local authorities for issuing building permits), reduction of energy consumption, reduction of GHG emissions and the increased level of indoor comfort and end users' satisfaction

J Relevant National Policies strategies, plans and programmes and/or other mitigation action

J.1 Relevant National Policies The new Regulation on Energy Efficiency in Buildings adopted in August 2011 and came into force in September 2012

J.2 Link to other NAMAs .

K Attachments

K Attachments

| Title | Description |
|--|--|
| SDImprovement of old residential buildings envelope (exterior doors, windows and thermal insulation) in Serbia.pdf | SDImprovement of old residential buildings envelope (exterior doors, windows and thermal insulation) in Serbia |

K.1 Attachment description

K.2 File

L Support received

L.1 Outside the Registry

L.2 Within the Registry

| Support provided | SupportType | Amount | Comment | Date |
|------------------|-------------|--------|---------|------|
|------------------|-------------|--------|---------|------|