

NS-32 - Introduction of metering system and billing on the basis of measured consumption in district heating systems in Serbia

Serbia

NAMA Seeking Support for Implementation

A Overview

A.1 Party	Serbia
A.2 Title of Mitigation Action	Introduction of metering system and billing on the basis of measured consumption in district heating systems in Serbia
A.3 Description of mitigation action	Almost all residential consumers connected to the district heating (DH) network in Serbia are paying their bill based on the floor size, instead of the actual amount of heat consumption. This billing system has prevented consumers from having energy saving mindset. The NAMA involves installation of devices that allow metering of heat consumption by each consumer, which is a necessary prerequisite for billing on the basis of actual heat consumption. Measures to be introduced include heat allocators with radio modem, thermostatic radiator valves as well as rehabilitation of 50% of existing substations in Serbia (approximately 12,500 substations) and installation of heat meters, automatic control, pumps with integrated frequency converters, plate heat exchangers, valves, etc. The NAMA will contribute to climate change mitigation through reducing the consumption of heat at residential sector, which is generated by fossil fuels.
A.4 Sector	<input type="checkbox"/> Energy supply <input type="checkbox"/> Transport and its Infrastructure <input checked="" type="checkbox"/> Residential and Commercial buildings <input type="checkbox"/> Industry <input type="checkbox"/> Agriculture <input type="checkbox"/> Forestry <input type="checkbox"/> Waste management <input type="checkbox"/> Other <input type="text"/>
A.5 Technology	<input type="checkbox"/> Bioenergy <input type="checkbox"/> Cleaner Fuels <input checked="" type="checkbox"/> Energy Efficiency <input type="checkbox"/> Geothermal energy <input type="checkbox"/> Hydropower <input type="checkbox"/> Solar energy <input type="checkbox"/> Wind energy <input type="checkbox"/> Ocean energy <input type="checkbox"/> Carbon Capture and Storage <input type="checkbox"/> Low till / No till <input type="checkbox"/> Land fill gas collection <input type="checkbox"/> Other <input type="text"/>
A.6 Type of action	<input type="checkbox"/> National/ Sectoral goal <input checked="" type="checkbox"/> Project: Investment in machinery <input type="checkbox"/> Strategy <input checked="" type="checkbox"/> Project: Investment in infrastructure <input type="checkbox"/> National/Sectoral policy or program <input type="checkbox"/> Project: Other

A.7 Greenhouse gases covered by the action	<input type="checkbox"/> Other <input type="text"/>
	<input type="checkbox"/> CO2 <input type="checkbox"/> CH4 <input type="checkbox"/> N2O <input type="checkbox"/> HFCs <input type="checkbox"/> PFCs <input type="checkbox"/> SF6
	<input type="checkbox"/> Other <input type="text"/>

B National Implementing Entity

B.1.0	Name	
B.1.1	Contact Person 1	Mr. Petar Vasiljevic
B.1.2	Address	Savski nasip 11, Belgrade, Serbia
B.1.3	Phone	+381-11-20-93-392
B.1.4	Email	p.vasiljevic@beoelektrane.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	4
C.2	Expected start year of implementation	2013

D Currency

D.1	Used Currency	<input type="text" value="AED"/>
		Conversion to USD: 1

E Cost

E.1.1	Estimated full cost of implementation	212000000
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	212000000
F.1.2	Type of required Financial support	<input checked="" type="checkbox"/> Grant <input type="checkbox"/> Guarantee <input checked="" type="checkbox"/> Loan (sovereign) <input type="checkbox"/> Equity <input type="checkbox"/> Loan (Private) <input checked="" type="checkbox"/> Carbon finance <input type="checkbox"/> Concessional loan <input type="checkbox"/> Other <input type="text"/>
F.1.3	Comments on Financial support	
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	<input type="checkbox"/> Individual level <input type="checkbox"/> Institutional level <input type="checkbox"/> 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 0.32

G.2 Unit

G.3 Additional information (e.g. if available, information on the methodological approach followed) 6,582,340 tCO₂e (20 years) Methodology applied for estimation: the one applied for Initial National Communication, which is based on IPCC Guidelines

H Other indicators

H.1 Other indicators of implementation Several pilot projects ongoing

I Other relevant information

I.1 Other relevant information including co-benefits for local sustainable development Efficient use of domestic and imported energy sources Education and awareness raise of consumers about benefits and technical possibilities of energy saving Development of heat billing methodology Creation of local employment opportunities

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

J.1 Relevant National Policies In line with The first Energy efficiency plan of the Republic of Serbia for the period from 2010 to 2012: Billing on the basis of actual (measured) consumption of energy by consumers connected to district heating system.

J.2 Link to other NAMAs

K Attachments

K Attachments

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
ODA for Climate Change Measures building	Capacity	0		11/4/2014 12:00:00 AM