

NS-36 - Rehabilitation of arterial roads in Serbia

Serbia

NAMA Seeking Support for Implementation

A Overview

A.1 Party	<input type="text" value="Serbia"/>														
A.2 Title of Mitigation Action	Rehabilitation of arterial roads in Serbia														
A.3 Description of mitigation action	<p>This action includes rehabilitation of the 19 different arterial road sections throughout Serbia. Total length of all proposed road sections is 324 km. Sections are located in different part of Serbia. The most of them belong to the southern-east region. Selected roads sections are very important for everyday transport of humans and goods, but with serious damages on the road surface (pavement) and very high Roughness Index (IRI). Mitigation target is to improve the efficiency and operation of these roads and reduce CO2 emissions from road vehicles. Decreasing of CO2 emissions will be ensured through improved fuel consumption level (-3.64%) by all vehicles that is achieved by running speed of 60 km/h, or the International Roughness Index (IRI) of the proposed roads are improved up to the value of 2.0 m/km.</p>														
A.4 Sector	<table border="1"><tr><td><input type="checkbox"/> Energy supply</td><td><input checked="" type="checkbox"/> Transport and its Infrastructure</td></tr><tr><td><input type="checkbox"/> Residential and Commercial buildings</td><td><input type="checkbox"/> Industry</td></tr><tr><td><input type="checkbox"/> Agriculture</td><td><input type="checkbox"/> Forestry</td></tr><tr><td><input type="checkbox"/> Waste management</td><td></td></tr><tr><td><input type="checkbox"/> Other <input type="text"/></td><td></td></tr></table>	<input type="checkbox"/> Energy supply	<input checked="" type="checkbox"/> Transport and its Infrastructure	<input 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"/>					
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A.5 Technology	<table border="1"><tr><td><input type="checkbox"/> Bioenergy</td><td><input type="checkbox"/> Cleaner Fuels</td></tr><tr><td><input checked="" type="checkbox"/> Energy Efficiency</td><td><input type="checkbox"/> Geothermal energy</td></tr><tr><td><input type="checkbox"/> Hydropower</td><td><input type="checkbox"/> Solar energy</td></tr><tr><td><input type="checkbox"/> Wind energy</td><td><input type="checkbox"/> Ocean energy</td></tr><tr><td><input type="checkbox"/> Carbon Capture and Storage</td><td><input type="checkbox"/> Low till / No till</td></tr><tr><td><input type="checkbox"/> Land fill gas collection</td><td></td></tr><tr><td><input type="checkbox"/> Other <input type="text"/></td><td></td></tr></table>	<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"/>	
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A.6 Type of action	<table border="1"><tr><td><input type="checkbox"/> National/ Sectoral goal</td><td><input type="checkbox"/> Project: Investment in machinery</td></tr><tr><td><input type="checkbox"/> Strategy</td><td><input checked="" type="checkbox"/> Project: Investment in infrastructure</td></tr><tr><td><input type="checkbox"/> National/Sectoral policy or program</td><td><input type="checkbox"/> Project: Other</td></tr><tr><td><input type="checkbox"/> Other <input type="text"/></td><td></td></tr></table>	<input type="checkbox"/> National/ Sectoral goal	<input 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	<input type="checkbox"/> Other <input type="text"/>							
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A.7 Greenhouse gases covered by the action	<table border="1"><tr><td><input type="checkbox"/> CO2</td><td><input type="checkbox"/> CH4</td></tr><tr><td><input type="checkbox"/> N2O</td><td><input type="checkbox"/> HFCs</td></tr><tr><td><input type="checkbox"/> PFCs</td><td><input type="checkbox"/> SF6</td></tr><tr><td><input type="checkbox"/> Other <input type="text"/></td><td></td></tr></table>	<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"/>							
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B National Implementing Entity

B.1.0 Name	
B.1.1 Contact Person 1	Mr. Zoran Drobnjak
B.1.2 Address	11000 Belgrade, Bulevar kralja Aleksandra 282, SERBIA
B.1.3 Phone	+381 11 30 40 701
B.1.4 Email	office@putevi-srbije.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	6
C.2	Expected start year of implementation	2014

D Currency

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

E.1.1	Estimated full cost of implementation	130213084
E.1.2	Comments on full cost of implementation	
E.2.1	Estimated incremental cost of implementation	9114915
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	139328000										
F.1.2	Type of required Financial support	<table style="width: 100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> Grant</td> <td><input type="checkbox"/> Guarantee</td> </tr> <tr> <td><input type="checkbox"/> Loan (sovereign)</td> <td><input type="checkbox"/> Equity</td> </tr> <tr> <td><input type="checkbox"/> Loan (Private)</td> <td><input type="checkbox"/> Carbon finance</td> </tr> <tr> <td><input type="checkbox"/> Concessional loan</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other <input style="width: 100px;" type="text"/></td> <td></td> </tr> </table>	<input checked="" type="checkbox"/> Grant	<input type="checkbox"/> Guarantee	<input type="checkbox"/> Loan (sovereign)	<input type="checkbox"/> Equity	<input type="checkbox"/> Loan (Private)	<input type="checkbox"/> Carbon finance	<input type="checkbox"/> Concessional loan		<input type="checkbox"/> Other <input style="width: 100px;" type="text"/>	
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F.1.3	Comments on Financial support	It could be subject of negotiations										
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	<table style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> Individual level</td> </tr> <tr> <td><input type="checkbox"/> Institutional level</td> </tr> <tr> <td><input type="checkbox"/> Systemic level</td> </tr> <tr> <td><input type="checkbox"/> Other <input style="width: 100px;" type="text"/></td> </tr> </table>	<input type="checkbox"/> Individual level	<input type="checkbox"/> Institutional level	<input type="checkbox"/> Systemic level	<input type="checkbox"/> Other <input style="width: 100px;" type="text"/>						
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F.3.3	Comments on Capacity Building support											
F.4	Financial support for implementation required	<input type="checkbox"/>										
F.5	Technological support for implementation required	<input type="checkbox"/>										

F.6 Capacity Building support for implementation
required

G Estimated emission reductions

G.1 Amount	2617
G.2 Unit	MtCO ₂ e/yr
G.3 Additional information (e.g. if available, information on the methodological approach followed)	Total reduction: 5,234 tCO ₂ e (20 years) Methodology applied for estimation: Computer Programme to calculate Emissions from Road Transport (COPERT 4)

H Other indicators

H.1 Other indicators of implementation

I Other relevant information

I.1 Other relevant information including co-benefits for local sustainable development	improved infrastructure will ensure higher level on transport service on rehabilitated roads, not only regarding travel time and safety but also by reducing CO ₂ emission and fuel consumption. Creation of local employment opportunities: during rehabilitation works many temporary working places will be open for local residents. Education and awareness raise: - Reduction of fuel consumption: direct impact of rehabilitated roads on fuel consumption will be indirectly confirmed and estimated by measuring CO ₂ emissions along road sections which are subject of proposed Serbian Arterial Road Rehabilitation Project. During project implementation a systematic measurement of CO ₂ emissions will be established, including activities before, during and after road rehabilitation works. Environmental monitoring is consisting part of proposed project.
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J Relevant National Policies strategies, plans and programmes and/or other mitigation action

J.1 Relevant National Policies	In line with: o Law on air protection ("Official Gazette of RS", 36/09) o Law on planning and construction ("Official Gazette of RS" No. 72/2009, 81/2009) o Law on nature protection ("Official Gazette of RS", 36/09) o Law on environmental protection ("Official Gazette of RS" No. 135/04, 36/09, 72/09) o Law on EIA ("Official Gazette of RS" No. 135/2004, 36/2009) o Law on waste management ("Official Gazette of RS", 36/09) Law on noise protection ("Official Gazette of RS", 36/09) o Law on water ("Official Gazette of RS", 46/91, 53/93, 67/93, 48/94, 54/96, 101/05) Regulations established on the basis of the Law on EIA include the following: o Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS" No. 114/08) o Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIS ("Official Gazette of RS" No. 69/05) o Rulebook on the contents of the EIS ("Official Gazette of RS" No. 69/05) o Rulebook on the procedure of public inspection, presentation and public consultation about the EIS ("Official Gazette of RS" No. 69/05) o Regulations on permitted noise level in the environment ("Official Gazette of RS" No. 54/92)
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J.2 Link to other NAMAs

K Attachments

K Attachments	Title	Description
	SDRehabilitation of Arterial Roads in Serbia.pdf	

K.1 Attachment description

K.2 File

Browse...

L Support received

L.1 Outside the Registry

L.2 Within the Registry

Support provided SupportType Amount Comment Date