Importance of NAMA project

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Outline

- NAMA formulation
- Process of:
  - NAMAs development
  - NAMA long&short list selection
  - Short description development
- NAMA Guideline
- Barriers
- Advantages

NAMA formulation

- NAMA is a part of national action on mitigation of climate change by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in an MRV (measureable, reportable, and verifiable) manner (Decision 1/ CP.13 Bali Action Plan (p.3, FCCC/ CP/ 2007/ 6/ Add.1).
- NAMA international framework is not established yet and fully defined
- NAMA Registry under UNFCCC (prototype version)

NAMA Registry

- NAMA Registry contains detailed information on NAMAs submitted by developing countries as well as information on support developed countries are willing to provide.

  - 1. NAMA seeking support for preparation
  - 2. NAMA seeking support for implementation
  - 3. Other NAMAs for international recognition
  - 4. Information on support for NAMAs

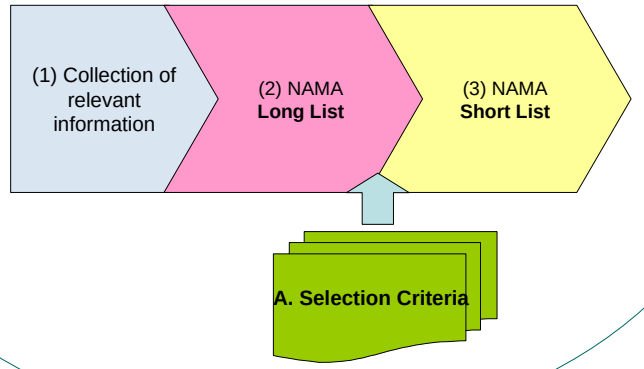
- **http://unfccc.int/cooperation_support/nama/items/6945.php**

NAMA activities in the Republic of Serbia

Process of NAMA development- Serbia

Targeted sectors:

- **Energy production**
- **Transportation**
- **Building**



(1) Collection of information

➢ **National documents:**

- **Laws** (Law on Energy, Law on Air Protection, Law on construction);
- **Strategies** (Initial National Communication; Energy development strategy by 2015; Energy Development Strategy for the City of Belgrade; Strategy of Railway, Road, Inland Waterway, Air and Intermodal Transport Development, 2008-2015);
- **Action plans** (The First Energy Efficiency Plan, 2010-2012; Biomass Action Plan, 2010-2012);
- **Regulations** (Regulation on energy efficiency in buildings; Regulation on establishing the program for realizing the power supply development strategy up to year 2015, 2007-2012);
- **Documents** (The White Book of the Electric Power Industry of Serbia).

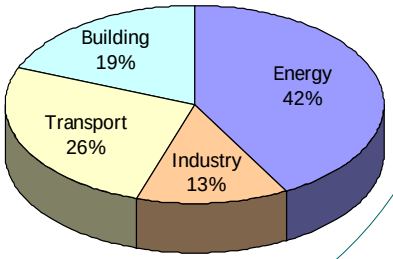
➢ Interviews/site visits

Institution	Location	Topics
Belgrade District Heating Company	Belgrade	Heat metering, rehabilitation of boilers, fuel change in heat distribution system
Belgrade Land Development Public Agency	Belgrade	Sustainable public urban transport
Business Association of Serbian District Heating Companies	Kokin Brod	Heat meters for district heating, fuel switch to biomass in heat plants, rehabilitation of district heating
District Heating Company Valjevo	Belgrade	Expansion of district heating network
Heat plant in Kragujevac	Kragujevac	Fuel switch from coal to natural gas
Josanicka Spa, Mataruska Spa	Josanicka, Mataruska	Geothermal for heating public buildings
Municipality of Cajetina	Cajetina	Biomass/geothermal for heating
MSP IPA 2007 Project	Belgrade	Energy efficiency for municipality

Institution	Location	Topics
Ministry of Infrastructure and Energy	Belgrade	Energy projects, Transport projects
Pribojska	Pribojska Spa	Geothermal energy for heating
Public Enterprise Electric Power Industry	Belgrade	Power generation projects
Public Enterprise Roads of Serbia	Belgrade	Road rehabilitation, bypass road construction, road material recycling
Secondary Agricultural School	Vrsac	Energy efficiency for public buildings
Serbian Energy Efficiency Agency	Belgrade	Energy efficiency improvement in public buildings
Serbian Wind Energy Association	Belgrade	Wind power generation and CDM application
Town of Cacak	Cacak	Geothermal, biomass, solar energy
Vinca Institute of Nuclear Sciences	Belgrade	Calculation methods for INC

(2) NAMA Long List

- **69 potential NAMAs**
  - Energy 29
  - Industry 9
  - Transport 18
  - Building 13



A. Selection criteria (1)

- **2-steps screening** - different selection criteria

- **1st Screening** – selection criteria:
  Basic Condition and General
- **2nd Screening** – selection criteria:
  Sustainability and MRV

1st Screening (1)

Step	Category	Criteria	Rationale
1st Screening	Basic Condition	Distinctiveness	A mitigation action is a clearly defined project, which provides information on expected or identified location and type of activities.
		Information availability	Sufficient data and information on activity are available for mitigation potential related assessments.
		No double-counting	A mitigation action has not applied or been registered into any market mechanism such as CDM in order to avoid double counting of emission reduction.
		Timeline	A mitigation action has not been realized yet and will ensure emission reduction by 2020.
		Voluntary participation	Operating entity is willing to implement the mitigation action under NAMA scheme, and voluntarily take a role of implementing the action.
	General	Compliance	A mitigation action is in line with Serbia's national/ sectoral development policy, plan or strategy.
		GHG reduction potential	A mitigation action will lead to the reduction or limitation of GHGs emissions in Serbia.

Result of 1st Screening

Sub-sector	Number of potential NAMAs	1st Screening passed
Energy	29	10
Industry	9	0
Transport	18	3
Building	13	4
Total	**69**	**17**

2nd Screening

Step	Category	Criteria	Rationale
2nd Screening	Sustainability	Financial Feasibility	A mitigation action ensures certain level of financial performance that is considered appropriate for operating entity.
		Technical Viability	A mitigation action will use already-proven technology.
	MRV	MRVability	A mitigation action will be able to be measured, reported, and verified under expected NAMA scheme. • Emission reduction can be calculated using the internationally approved methodologies such as CDM or IPCC, or methods based on such internationally used methodologies. • Sufficient and transparent data to estimate emission reduction will be available. • A NAMA implementing entity will be able to monitor and report all parameters specified in the methodology.

Result of 2nd Screening

Sub-sector	1st Screening passed	2nd Screening passed
Energy	10	10
Industry	0	0
Transport	3	2
Building	4	4
Total		**16**

➢ **The most potential NAMA do not pass screenings:**

- Undeveloped concrete project
- Insufficient data for assessment of mitigation potential

Shortlisted NAMAs (1)

No.	NAMA	Implementing Entity	Type of NAMA/ Boundary	Mitigation Potential ($t\text{-}CO_{2e}$/ year)	Domestic/ Supported
Energy Sub-sector					
1	Construction of a 790 MW Ultra Supercritical Lignite Power Plant TPP Nikola Tesla - Unit B3	EPS	Project/ Local	1,337,728	Supported
2	TPP Nikola Tesla – Modernization and capacity increase, Unit B2	EPS	Project/ Local	355,142	Supported
3	TPP Nikola Tesla - Modernization and Capacity Increase, Unit A3	EPS	Project/ Local	91,796	Supported
4	Construction of a new CHP power plant Novi Sad	EPS	Project/ Local	1,019,380	Supported
5	TPP Kostolac B - Construction of a new Unit, Block B3	EPS	Project/ Local	1,390,533	Supported

Shortlisted NAMAs (2)

No.	NAMA	Implementing Entity	Type of NAMA/ Boundary	Mitigation Potential ($t\text{-}CO_{2e}$/ year)	Domestic/ Supported
Energy Sub-sector					
6	Construction of 9 New Small Hydropower Plants (HPPs) in Serbia	EPS	Project/ Local	102,343	Supported
7	Installation of heat metering device and introduction of heat billing system on the basis of measured consumption in district heating systems in Serbia	Belgrade District Heating Company, Association of District Heating Company	Program/ National	329,117	Supported
8	Introduction 1000 MW of Small Biomass Boilers in Serbia	MEDEP	Program/ National	414,501	Supported
9	Use of Solar energy for domestic hot water production in Heat plant “Cerak”	Belgrade District Heating Company	Project/ Local	611	Supported
10	Construction of a new pipeline from thermal power plant Nikola Tesla A to New Belgrade Heat Plant	EPS, Belgrade District Heating Company, City of Belgrade, MEDEP	Project/ Local	161,875	Supported

Shortlisted NAMAs (3)

No.	NAMA	Imple-menting Entity	Type of NAMA/ Boundary	Mitigation Potential (t-CO_{2e}/ year)	Domestic/ Supported
Transport Sub-sector					
11	Rehabilitation of arterial roads in Serbia	MOT, Energy Public Enterprise Roads of Serbia	Project/ Local	2,617	Supported
12	Rehabilitation of regional roads in Serbia	MOT, Energy Public Enterprise Roads of Serbia	Project/ Local	6,476	Supported

Shortlisted NAMAs (4)

No.	NAMA	Imple-menting Entity	Type of NAMA/ Boundary	Mitigation Potential (t-CO_{2e}/ year)	Domestic/ Supported
Building Sub-sector					
13	Expansion of existing district heating network and construction of substations in Valjevo	City of Valjevo, District Heating Company Valjevo	Project/ Local	12,141	Supported
14	Improvement of Old Residential Buildings Envelope (exterior doors, windows and thermal insulation) in Serbia	MCU	Program/ National	503,929	Supported
15	Construction of new energy efficient buildings based on energy efficiency regulation in Serbia	MCU	Program/ Regulation/ National	275,282	Domestic
16	Energy Efficiency Improvements in public schools, hospitals and social care institutions in Serbia (Serbian Energy Efficiency Project, SEEP)	MEDEP	Program/ National	8,326	Supported

NAMAs Portfolio

- **Individual NAMA:**
  - Activity description
  - Nature of Action
  - Boundary and Location
  - BAU Scenario
  - Mitigation Target
  - Mitigation Potential
  - MRV
  - Expected Benefits
  - Finance and Cost
  - Current Status
  - Expected starting date of Action
  - Lifetime
  - Implementing Entity and Contact Information

NAMAs Short description

No.	Sub-Sector	NAMA Title
1	Energy	Construction of a 790 MW Ultra Supercritical Lignite Power Plant TPP Nikola Tesla - Unit B3
2	Energy	Construction of 9 New Small Hydropower Plants (HPPs) in Serbia
3	Energy	Introduction 1000 MW of Small Biomass Boilers in Serbia
4	Energy	Using of Waste Heat from Thermal Power Plant for Heating the City of Belgrade, Serbia
5	Transport	Rehabilitation of Arterial Roads in Serbia
6	Building	Improvement of Old Residential Buildings Envelope (Exterior Doors, Windows and Thermal Insulation) in Serbia
7	Building	Energy Efficiency Improvements in Public Buildings: 23 Schools and 26 Hospitals - Serbian Energy Efficiency Project (SEEP)

NAMAs Short description

- **Individual NAMA:**
- Title of NAMA
- Description of the Mitigation Action
- Technologies/ measures
- Location
- NAMA Implementing Entity
- Implementing Schedule
- Expected starting date of Action
- Lifetime
- Current Status
- Coverage
- Finance and Cost
- Description of Support Required
- Expected Mitigation Potential
- Methodologies and Assumptions
- BAU scenario
- Calculation of emission reduction
- Measurement, Reporting, and Verification (MRV)
- Monitoring plan
- Data and parameters to be monitored
- Monitoring plan and structure
- Domestic MRV arrangements
- Contribution to Sustainable Development
- Stakeholder consultation
- Contact information

NAMAs Guideline

- Background
- History and Current Situation of NAMA
- Definition and Types of NAMA
- International Discussion on NAMA
- Benefits of NAMAs for the Republic of Serbia
- NAMA Development Cycle
- NAMA Development Process in the Republic of Serbia
- NAMA Selection Criteria
- NAMA Short Description
- Methodologies for GHG Emission Reduction Estimation
- Available Methodologies
- Project Evaluation and Financial Analysis
- Types of Project Analysis
- Evaluation of Project
- Project Funding and Financial Analysis
- Incentive and Subsidy
- MRV for NAMA
- MRV for NAMA
- Existing MRV systems
- MRV of Clean Development Mechanism (CDM) under Kyoto Protocol
- MRV of EU-ETS

NAMAs project organizational structure

NAMA Working group

- Ministry of Energy, Development and Environmental protection; Ministry of construction and urbanism, Ministry of transportation; PE EPS; Road Safety Agency; PE Roads of Serbia; City of Belgrade; Valjevo municipality
- 8 WG meetings

Joint Coordinaton Committee (JCC)

- Ministry of Energy, Development and Environmental protection and JICA
- 6 JCC meetings

Barriers in NAMAs development

- **Lack of:**
- In-country capacities
- Experiences for financial and reduction assessments
- Information and data
- **International MRV requirements**

Advantages of NAMAs development

- Identification and prioritization of mitigation activities
- Identification of mitigation potential
- Assessment of possibilities for implementation
- Facilitate national action and planning
- Identification of current situation on and improvement of capacities
- Confirmation of emissions reduction
- Improvement of exchange of information and intersectoral cooperation
- Improvement of capacities for future NAMAs development

Advantages of NAMAs development

- Stratightening country's willingness to emission limitation and economy development in line with its own capabilities and possibilities and in accordance with sustainable development principles
- Increasing opportunities for financing at the international level and implementation of specific actions important for the country
- Building national capacities for both implementation and definition of NAMAs
- Experience monitoring and reporting activities, among else, because the country will be required to follow EU's strict directives

Thank you for your attention!

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