

# **Multi-criteria Analysis**

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## Purpose of the multi-criteria analysis

- One of the main objectives of the Project is development of the Country Programme (CP) of priorities for financing from the GCF
- It is necessary to establish criteria that will show what the Republic of Serbia needs to emphasize precisely with the GCF
- It is necessary to look at the needs of Serbia by integrating different aspects
- Climate, but also economic, social, scientific component
- Separately consider mitigation and adaptation to climate change
- Participation of different stakeholders in the discussion is necessary



# Methodology

- Special analysis for adaptation and mitigation
- Setting the criteria
- Proposal of list of measures / activities / project ideas
- Evaluation of measures / activities / project ideas by criteria
- Result Country Programme of priorities for some time period
- The Country Programme at the same time suggests fields of future projects / programmes for application to the GCF
- We expect your suggestions and suggestions



#### Identified areas:

- Energy efficiency production, distribution, consumption
- Use of renewable energy sources
- Transport type of fuel, mobility
- Science innovation
- Heat, electricity, domestic hot water



#### Proposed criteria:

- Impact on reduction of GHG emissions and share in the national goal of reducing GHG emissions (NDCs) according to the Paris Agreement
- Additional benefits from the project (air quality, water) and reduction of negative impacts on natural resources
- The involvement of the private sector and the impact on employment
- Emergency of application of measure / activity
- The territory at which the measure / activity is applied
- Positive impact on the health, safety of people and the well-being of households
- Inclusion of local self-government and balanced regional development
- Innovation



Proposed measures/activities/project ideas:

- Increasing energy efficiency in buildings
- Increasing energy efficiency in the production, distribution and consumption of energy
- Use of renewable energy sources (RES)
- Incentives for innovation and promotional projects
- Incentives for the production of bio-fuels and placing on the market
- Replacement of using electricity for production of domestic hot water



N o	Measure/ activity	Impact on reduction of GHG emis. and share in the NDCs	Additional benefits from the project and reduction of negative impacts on nat. resources	Involve- ment of private sector and the impact on employ -ment	Emergency of application of measure / activity	The territory at which the measure / activity is applied	Positive impact on the health, safety of people and the well-being of households	Inclusion of local self-government and balanced regional development	Innova- tion	Total num- ber of points
1	Increasing energy eff. in buildings	5	4	5	5	5	5	5	4	4.80
2	Increasing energy eff. in prod, distr. and cons.	5	4	5	4	5	4	4	5	4.60
3	Use of RES	5	4	5	4	5	4	4	5	4.60
4	Incentives for innovation and promot. projects	5	4	5	4	4	5	4	5	4.55
5	Incentives for of bio-fuels	4	4	4	4	4	4	4	4	4.00
6	Replacement of using elec. for DHW	3	4	4	3	4	4	4	3	3.50
	Weighting coefficients	0.25	0.10	0.10	0.15	0.15	0.10	0.05	0.10	



## Adaptation to climate change

#### Proposed criteria:

- Vulnerability to changed climate conditions
- Connection with other sectors and activities
- Incentive to reduce risk
- Contribution to mitigation
- Improving infrastructure
- Contribution of the sector to the GDP
- Incentive for innovation and promotional projects



## Adaptation to climate change

#### Proposed measures/activities/project ideas:

- Increasing efficiency of the system
- Application of the best available techniques
- Improving monitoring and other non-investment measures
- Improving efficient use of natural resources
- Introduction of adaptive management practice

Common names for measures applied in different sectors: water resources, forestry, agriculture, health, infrastructure, etc.

Based on national climate change reports (communications).



Adaptation to climate change

No.	Measure/ activity	Vulnerability to changed climate conditions	Connection with other sectors and activities	Incentive to reduce risk	Contributi on to mitigation	Improving infrastruc- ture	Contribution of the sector to the GDP	Incentive for innovation and promotional projects	Total number of points
1	Increasing efficiency of the system	5	5	5	5	4	4	4	4.70
2	Application of the best available techniques	5	4	5	4	4	4	5	4.55
3	Improving monitoring and other non-investment measures	5	5	5	4	4	3	4	4.45
4	Improving efficient use of natural resources	5	4	5	4	4	4	4	4.45
5	Introduction of adaptive management practice	5	4	5	4	4	3	4	4.35
	Weighting coefficient	0.30	0.10	0.15	0.15	0.10	0.10	0.10	



## Multi-criteria analysis - conclusion

### **Priority sectors:**

- Energy, transport, agriculture, water resources, forestry, health, infrastructure

### Modes on operation:

- prevention, efficiency, monitoring, application of the best available techniques

### A crucial and necessary step:

- discussion, suggestion, agreement



# Thank you



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