

# **Streamlining the climate change mitigation in the national sectoral policies**

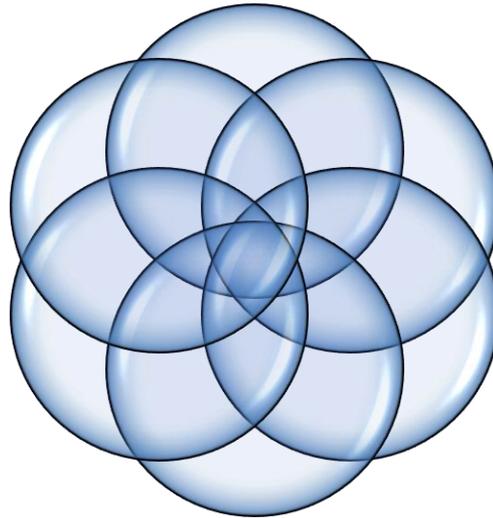
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# Climate change components

## CROSS CUTTING ISSUES

Research, education,  
capacity building,  
public awareness  
strengthening

Environment  
friendly transfer of  
technologies



GHG inventory

Climate scenarios

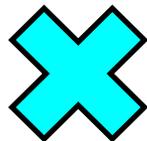
Measures for  
mitigations and  
adaptation to  
climate changes

# SDG 13: Take urgent action to combat climate change and its impacts

## Target 13.1.

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

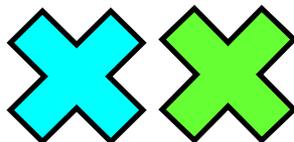
Full transposition and implementation of the EU climate acquis



## Target 13.2.

Integrate climate change measures into national policies, strategies and planning

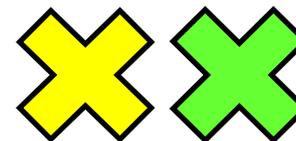
Achieving low-carbon economy



## Target 13.3.

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Achieving climate resilient society and economy



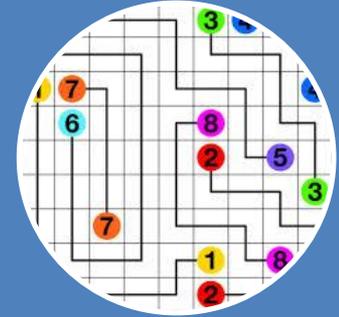
# Methodology



desk research on national planning documents adopted



Criteria based identification of the key mitigation sectors and technologies and their prioritisation



Mapping exercise, cross-cuttings analyse between priority sectors from the perspective of S.D



# Co-benefits

the synergies and trade-offs between mitigation and sustainable development are identified in order to provide a solid foundation for participatory prioritization

# National Case Study

Relevant national planning documents reviewed

- NCCC
- NSSD
- Rio+20 Macedonian Policy paper
- Scientific papers

Institutional mapping

Key mitigation sectors and options

Sectoral cross-cuttings

# National Strategy for Sustainable Development - Key Challenges

NSSD 1: Good governance and better policy-making

NSSD 2: Diversification of income in rural regions and sustainable development challenges

NSSD 3: Economic prosperity and job creation

NSSD 4: Sustainable human settlements

NSSD 5: Policies contributing to the knowledge society

NSSD 6: Climate change and clean energy

NSSD 7: Sustainable transport

NSSD 8: Sustainable consumption and production

NSSD 9: Conservation and management of natural resources

NSSD 10: Public health

NSSD 11: Social Inclusion, demography and migration

# National key mitigation sectors offer the greatest scope for cost-effective emission reduction

Mitigation sectors	Mitigation options	Leading ministry
Energy supply	Fuel switching, particularly coal to gas; Increased utilization of renewable energy sources (RES); Bio-energy production	MoE
Buildings	Energy efficiency (EE) improvement	MoE
Transport	EE improvement	MTC
Industry	EE improvement	MoE
Agriculture	Afforestation; Avoided deforestation; Forest management	MAFWE
Forestry	Cropland management; Grazing land management; Livestock management	MAFWE
Waste management	Engineered sanitary landfilling with landfill gas recovery; Biological processes for waste and wastewater; Incineration and other thermal processes; Recycling, re-use, and waste minimization	MoEPP

# Sectoral cross-cutting topics and relevant institutions (1/3)

Mitigation sectors	Cross-cutting topics	Relevant ministries
<b>Energy supply</b>		
Coal to gas switching	Jobs losses in the domestic coal industry High investments for gas transmission and distribution networks Environmental impacts of gas transmission and distribution networks Worsening of balance of trade due to gas import	MoE, MLSA MoE, MoF  MoE, MoEPP, MAFWE MoE, MoF

## Synergies and trade-offs: Energy supply – SD (2/3)

	<b>Energy supply</b>
	<b>Replacing imported fossil fuels with domestic alternative energy sources (increased utilization of renewable energy sources - hydro, solar, wind and geothermal for electricity and heat generation)</b>
SD Ec	Creation of new indigenous industries
SD Soc	
SD Env	Reduction of local air pollutant emissions
SD Trade ofts	Balance of trade improvement is traded off against increased capital required for investment; Fossil fuel-exporting countries may face reduced exports; Domestic hydropower plants may displace local populations and cause environmental damage to water bodies and biodiversity

## Synergies and trade-offs: Energy supply – SD (3/3)

	Energy supply
	<b>Bio-energy production</b>
SD Ec	
SD Soc	High potential for creation of rural employment
SD Env	Reduction of local air pollutant emissions
SD Trade offs	Negative environmental consequences if practised unsustainably; Biodiversity loss; Water resource competition; Increased use of fertilizer and pesticides; Competition with food production. Problem with food security and increased food costs.

## Cross-cuttings of mitigation sectors and NSSD key challenges

Mitigation sectors	Good governance and better policy making	Diversification of income in rural regions	Economic prosperity and job creation	Sustainable human settlements	Policies contributing to the knowledge society	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public health	Social inclusion, demography and migration
<b>Energy Supply</b>											
Coal to gas switching						X			X		
Increased utilization of RES						X			X		
Bio-energy production		X				X	X		X		
<b>Buildings</b>											
EE improvement						X		X			
Fuel switching						X					
<b>Transport</b>											
EE improvement				X			X				
<b>Industry</b>											
EE improvement								X			
<b>Forestry</b>		X							X		
<b>Agriculture</b>		X							X		
<b>Waste Management</b>		X		X							

# Conclusions - recommendations

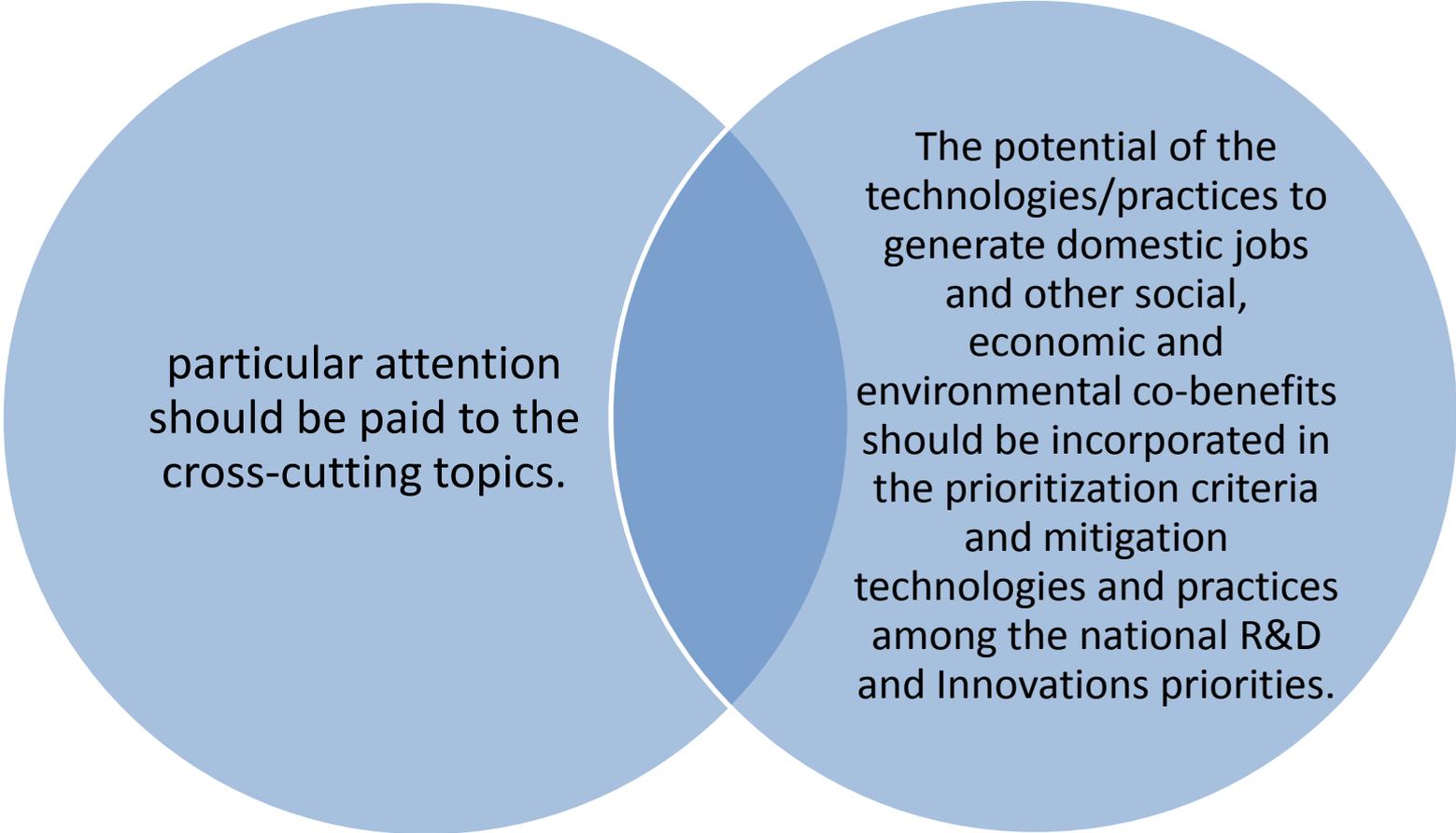
resources for the planning (“academia-policy-making” partnerships are needed)

formulation of goals which should support the general national development objectives and be responsive to the international and European obligations, while at the same time, being harmonised with the national specifics and possibilities

# Institutional arrangements

In order to enable integration of the CC mitigation elements into planning, for each of the national mitigation sectors a leading institution should be appointed that has a coordinative role, as well as other ministries and institutions that are relevant for the given sector – other governmental institutions, business entities, the NGO sector and local governments.

# Prioritisation of the policies



particular attention should be paid to the cross-cutting topics.

The potential of the technologies/practices to generate domestic jobs and other social, economic and environmental co-benefits should be incorporated in the prioritization criteria and mitigation technologies and practices among the national R&D and Innovations priorities.

# FUNDING



For the implementation, it is of essential significance to determine the ways and sources of funding of mitigation actions, both national and foreign.



An option that could be recommended is centralised funding and coordinated allocation of funds to priority projects. Hence, funds could be made available to the established priority policies.

# MRV on funding

## Needs:

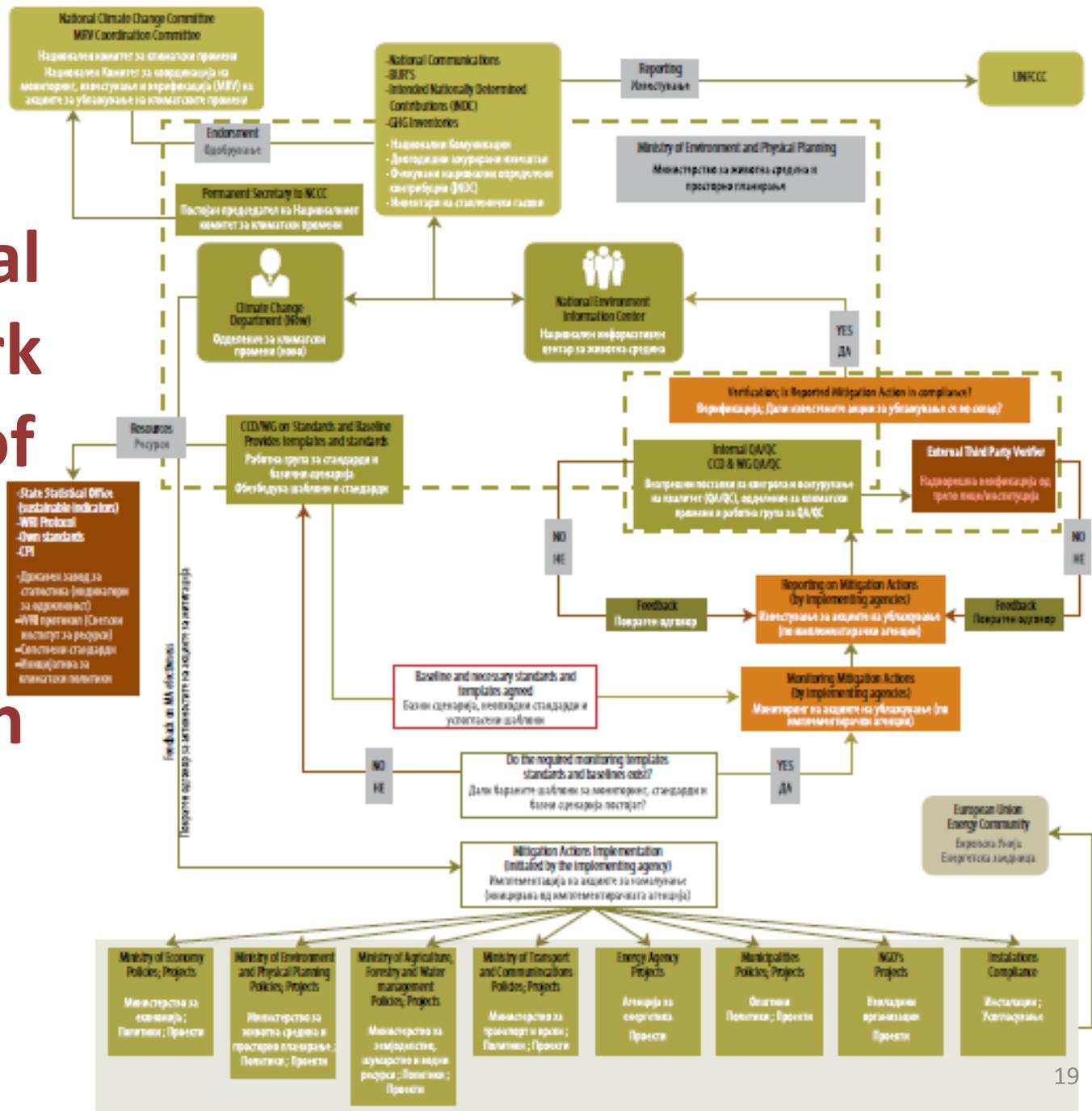
- Allocation of domestic v.s foreign funding
- Development of criteria, WHAT is climate change related funding (mitigation sectors, adaptation, research....)
- Development of scheme and institutional framework for tracking the funds (WHO to WHOM),

# Monitoring of implementation

A monitoring framework should be developed encompassing methodologies and indicators for measuring the progress in achieving the formulated goals, as well as allocation of measuring responsibilities (what is to be measured, how it is to be measured and who should do the measuring).

In addition, a monitoring reporting and verification mechanism for achieved greenhouse gases reductions as a result of a certain mitigation activity need to be developed.

# Conceptual Framework for MRV of climate change mitigation actions



## CRITERIA

**Transparency:**  
Is the process open, accessible, and comprehensible to relevant audiences?

**Comparability:**  
Is information comparable across time, agencies, and different levels of government? Is it comparable to other countries' data or reports?

**Reliability:**  
Is information likely to be accurate?

**Usefulness:**  
Does the MRV system connect to the policymaking process?

**Timeliness:**  
Is information collected and delivered frequently enough to support decision-making and meet other needs?

**Completeness:**  
Does the system provide sufficient information to support decision-making in all important sectors?

## INDICATORS

**Very:**  
All or almost all of the indicators are present in the country's MRV system.

**Fairly:**  
Most indicators are present, but some are missing or only partially present.

**Somewhat:**  
Some indicators are present but others are not; or indicators are present, but only to a limited extent.

**Not very:**  
Some indicators are present but most are not.

**Not at all:**  
None or almost none of the indicators are present.

# Pathway for implementation of the proposed domestic MRV framework

**1.**  
Establish institutional arrangements and processes

**2.**  
Define GHG Mitigation Action Accounting Standards

**3.**  
Define monitoring and data collection responsibilities

**4.**  
Define reporting obligations

**5.**  
Verify and assure compliance

- Thank you for your attention

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