

# EXPERIENCES OF NATIONAL APPROACHES TO ADAPTATION

Regional Workshop  
Warsaw, 4 April 2023

## Turning Plans into Action Experience in Bulgaria

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# National Climate Change Adaptation Strategy and Action Plan until 2030

## CLIMATE

- Strategic documents >
- Implementation of EU climate change policy >
- International Negotiations and Adaptation >

UNFCCC and Kyoto Protocol  
Joint Implementation  
Paris Agreement  
National Green Investment Scheme  
**Adaptation**  
Adaptation reports

- Legislation >
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## ADAPTATION

### National Climate Change Adaptation Strategy and Action Plan

By Decision № 621/25.10.2019 was approved by Council of Ministers the National Climate Change Adaptation Strategy and Action Plan of the Republic of Bulgaria.

The aim of the Strategy is to serve as a reference document, setting a framework for climate change adaptation until 2030.

#### DOCUMENTS

- Strategy and Action Plan - Full Report - EN
- Appendix 1 - Agriculture Final (2019-07-03) - EN
- Appendix 2 - Biodiversity Final (2019-07-03) - EN
- Appendix 3 - Energy Final (2019-07-03) - EN\_1
- Appendix 4 - Forestry Final (2019-07-03) - EN
- Appendix 5 - Health Final (2019-07-03) - EN
- Appendix 6 - Tourism Final (2019-07-03) - EN
- Appendix 7 - Transport Final (2019-07-03) - EN
- Appendix 8 - Urban Final (2019-07-03) - EN
- Appendix 9 - Water Final (2019-07-03) - EN
- Appendix 10 - DRM Final (2019-07-03) - EN
- Appendix 11 - Economic analysis Final (2018-08-17) - EN

**NCCAS 2020-2030  
ADOPTED OCT. 2019  
SECTOR-DRIVEN  
APPROACH**

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МИНИСТЕРСТВО НА  
ОКОЛНАТА СРЕДА И ВОДИТЕ

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#### USEFUL LINKS

- Декларация за достъпност

## National context in developing the NCCAS and AP

- ❑ **Increase in the average annual temperature** in Bulgaria from **0.7°C to 1.8°C** by 2020
- ❑ **Forecasted temperature increase** – between **1.6°C and 3.1°C** by 2050, and between **2.9°C and 4.1°C** by 2080
- ❑ **Projected reduction in rainfall** – **10%** by 2020, **15%** by 2050 and **30 to 40%** by 2080, which will lead to a significant reduction in total water reserves in the country
- ❑ Trend to **increased frequency of extreme events** and disasters
- ❑ **Macro-economic implications:** **1.0 to 3.5% loss** in economic growth, depending on climate scenarios
- ❑ **All sectors of the economy are vulnerable to these changes** and the implementation of adaptation measures is becoming urgent and imperative!

# NCCAS scope & development process

- ❑ **9 sectors covered:** agriculture, biodiversity and ecosystem services, energy, forestry, human health, transport, tourism, urban environment and water
- ❑ **Disaster-risk management** considered as cross-sectoral topic (separate assessment report)
- ❑ **All sectoral and macro-economic reports** – appended to the Strategy, including cost benefit analyses (CBAs) per sector
- ❑ More than **60 national and international experts involved and over 30 stakeholders meetings carried out** through the process of developing strategic, operational objectives and actions (2017-2019)
- ❑ All draft sectoral reports, the Strategy and Action Plan went through **2 rounds of formal consultations**
- ❑ **Involvement of NGOs, academia, business and other stakeholders** – through the National Expert Council on Climate Change to the MoEW, established in 2013

# NCCAS Vision and General Strategic Objectives

**VISION:** To develop the country's highest possible level of resilience against climate change, by taking any measures needed and feasible, thus securing the undisturbed functioning of the country's economic sectors, safeguarding its population's health and well-being, and preserving its rich natural assets

**Long-term objective:** To pro-actively pursue long-term high-impact economic, social, and ecological resilience and sustainability, to allow Bulgaria's citizens, private sector, and public institutions to adequately prepare and protect themselves against vulnerabilities deriving from climate change

**GENERAL  
STRATEGIC  
OBJECTIVES**



- **Mainstream and integrate CCA**
  - **Build institutional capacity for CCA**
  - **Raise awareness on CCA**
- 
- **Build climate change resilience**

# Action Plan until 2030



- ❑ **Strategic objectives** and related **operational objectives** developed for each sector
- ❑ **CCA activities proposed** on the basis of adaptation options identified in the sector assessment reports – priority setting exercise in stakeholder consultations (using multi criteria analysis)
- ❑ Proposed adaptation activities presented in **Action Plan per sector** (Annex 3 to the Strategy), including result and performance indicators, responsible institutions, deadlines and budget estimations
- ❑ **Short term highest priorities** are **highlighted** - mainly **soft measures** supporting: (a) building institutional capacity, (b) mainstreaming and integrating CCA into existing plans and programs, and (c) raising awareness

[illegible]

# NCCAS & AP until 2030

## Cost and Benefits Analysis (CBA)

Benefits of adaptation measures in sectors under different climate scenarios until 2050 (in €, million)

	Agriculture 		Biodiversity & Ecosystems		Energy		Forestry 		Human Health		Tourism		Transport		Urban Environment		Water	
Climate scenarios	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)	NPV (€ mln.)	Cost-eff. (Benefit/Cost ratio)
Realistic scenario +2°C	2	1.0	7,056	140.4	67	1.1	22,324	435.9	5	1.1	108	16.5	683	2.0	8,786	1.6	74	29.2
Optimistic scenario +2°C	26	1.3	8,946	177.8	115	1.1	38,177	744.7	9	1.2	135	20.3	735	2.1	13,285	1.9	86	33.9
Pessimistic scenario +2°C	-23	0.8	5,165	103.1	19	1.0	6,470	127.0	1	1.0	81	12.6	633	2.0	4,287	1.3	62	24.5
Realistic scenario +4°C	292	3.9	7,202	143.3	476	1.3	37,240	726.3	107	3.2	144	21.6	1,420	3.2	20,523	2.3	99	38.7
Optimistic scenario +4°C	386	4.9	9,247	183.7	548	1.4	53,093	1,035.1	119	3.4	179	26.7	1,502	3.3	29,741	2.9	115	44.9
Pessimistic scenario +4°C	198	3.0	5,158	102.9	403	1.3	21,387	417.7	96	2.9	109	16.6	1,344	3.0	11,304	1.7	83	32.5

# **Financial context in implementing the NCCAS and AP**

## **Streamlining CC Action into the Budget!**

**2014-2020**

**At least 20% of the EU Budget to be channeled to climate change actions (€ 205 billion) →  
Low carbon, resource efficient and climate resilient economy**

**2021-2027**

**At least 30% of the EU Budget to be channeled to climate change actions(€ 540 billion) →  
In the context of the European Green Deal**



# Streamlining of Environment and Climate Change into the EU Funded Programmes



OPERATIONAL PROGRAMME  
**ENVIRONMENT 2014-2020**



EUROPEAN UNION  
EUROPEAN STRUCTURAL AND  
INVESTMENT FUNDS

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AND WATERS

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**FUND OF FUNDS**  
FUND MANAGER OF  
FINANCIAL INSTRUMENTS  
IN BULGARIA

**Integration of Environment and Climate**

- **First Phase on Mainstreaming of Environmental Policy and Climate Change Policy**  
[Guidelines on Mainstreaming of Environmental Policy and Climate Change Policy into EU Funds 2014 - 2020](#) (approved by protocol decision under point 7 of the Protocol № 8 of the Ministers meeting on March 1, 2013)
- **Second Phase on Mainstreaming of Environmental Policy and Climate Change Policy**  
[Guidelines on Mainstreaming of Environmental Policy and Climate Change Policy into EU Structural and Investment Funds - Phase "Implementation of the Partnership Agreement and Programmes for the period 2014 – 2020"](#) (approved by Council of Ministers Decision № 16 January 2016)
- **Other Document and Materials**  
[Integration of biodiversity and natura 2000 in partnership agreements and operational programmes 2014-2020](#)  
Presentations from the meeting of April 16th 2013, related to the integration of Environmental policy (EP) and Climate change policy (CCP) in the programming of the funds of the Common Strategic Framework for 2014-2020:  
[Guidelines for mainstreaming the environment policy \(EP\) and the climate change policy \(CCP\) into the funds of the Cohesion Policy, the Common Agricultural Policy and the Common Fisheries Policy for the period 2014-2020](#)  
[Mainstreaming of EP and CCP in the OP Regions in Growth 2014-2020, Ministry of Regional Development and Public Works](#)  
[Mainstreaming of EP and CCP in the OP Innovation and Competitiveness, Ministry of Economy, Energy and Tourism](#)  
[Mainstreaming of EP and CCP in the OP Transport and transport infrastructure, Ministry of Transport, Information Technologies and Communications](#)  
[Mainstreaming of EP and CCP in the Rural Development Programme 2014-2020, Ministry of Agriculture and Food](#)  
[Mainstreaming of EP and CCP in the Programme for Maritime Affairs and Fisheries 2014-2020, Fisheries and Aquaculture Executive Agency](#)  
[Mainstreaming of EP and CCP in the OP Human Resources Development 2014-2020, Ministry of Labor and Social Policy](#)
- [European Network of Environmental Authorities – Managing Authorities \(ENEA-MA\)](#)

**GUIDELINES FOR  
INTEGRATION  
ADOPTED IN 2016  
... UNDER REVISION**

# NAP monitoring, reporting and evaluation

**CLIMATE ADAPT used for reporting!**

**National circumstances relevant to adaptation actions**

▼ BIOGEOGRAPHICAL CHARACTERISTICS

▼ DEMOGRAPHIC SITUATION

▼ ECONOMIC AND INFRASTRUCTURAL SITUATION

Reporting updated until: 2021-03-15

Item	Status	Links
National adaptation strategy (NAS)	• actual NAS - adopted	• <a href="#">National Climate Change Adaptation Strategy and Action Plan</a>
National adaptation plan (NAP)	• actual NAP - adopted	• <a href="#">National Climate Change Adaptation Strategy and Action Plan</a>
Sectoral adaptation plan (SAP)	• actual SAP - adopted	• <a href="#">National Climate Change Adaptation Strategy and Action Plan</a>
Climate change impact and vulnerability assessment		
Meteorological observations		
Climate projections and services		
Adaptation portals and platforms		
Monitoring, reporting and evaluation (MRE) indicators and methodologies		
Key reports and publications		
National communication to the UNFCCC		• <a href="https://unfccc.int/NC7">https://unfccc.int/NC7</a>
Governance regulation adaptation reporting		• <a href="https://reportnet.europa.eu/public/dataflow110">https://reportnet.europa.eu/public/dataflow110</a>

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The European Climate Adaptation Platform Climate-ADAPT is a partnership between the European Commission and the European Environment Agency.

Other European Information Systems:

European Commission Logo EEA Logo BISE Logo WISE Logo FISE Logo Copernicus Climate Logo DRMC Logo CAMS Logo

- **National CCA reporting mechanism** set in the NCCAS
- **Ministry of Environment and Water** assigned with M&E
- **Reporting on CCA action every 2 years, starting in 2021**, according to the Energy Union Governance Regulation
- **Mid-term Assessment** envisaged in 2025 to track progress in implementation of measures
- **Final Report in 2031** to evaluate the overall implementation of the Strategy and its Action Plan

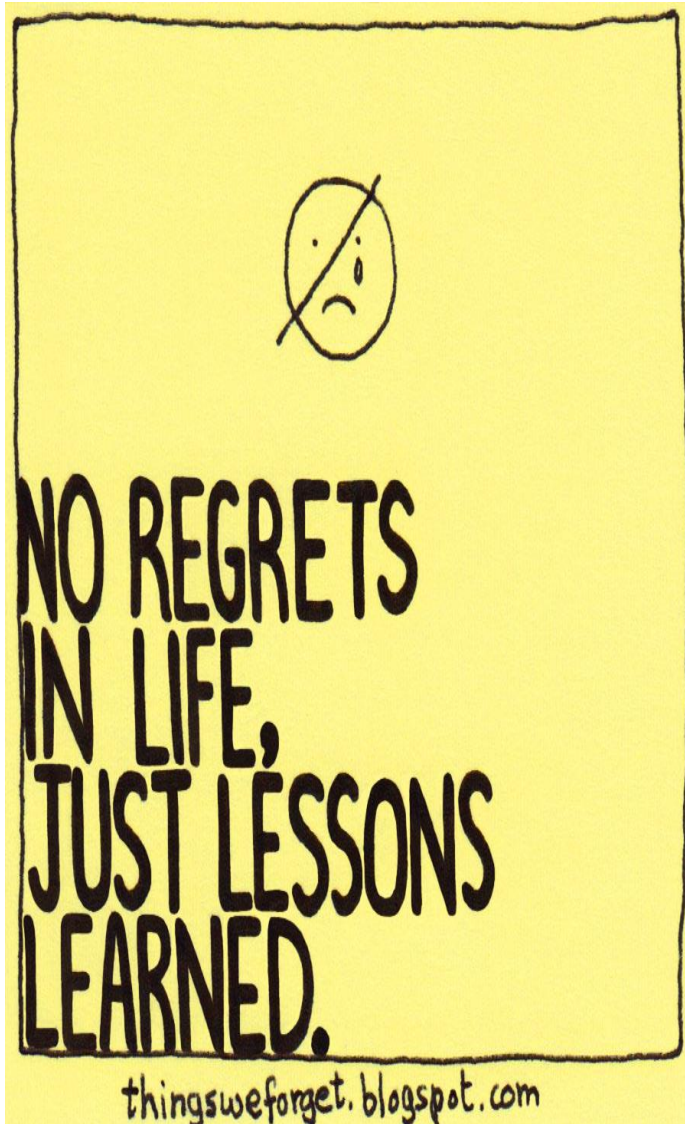
# NAP stock taking & CCA reporting 2021

- ❑ **First reporting in March 2021** covering the period of one year – since NAP approval in October 2019 to the end of 2020
- ❑ **Reporting covers all 9 sectors** set out in the Strategy, focusing on CCA mainstreaming in sectoral strategies, actions and budgeting
- ❑ **Priority actions are mainly related to the enabling conditions:** provision of reliable CCA information; development of knowledge and communication; capacity building and awareness raising
- ❑ Targeted **adaptation action on regional and local level** is lagging behind mitigation efforts 
- ❑ **Overall confusion between measures** targeting climate change adaptation, mitigation, disaster risk reduction and disaster risk management 

# Findings of the NAP stock taking 2021

- ❑ Streamlining guidelines for planning and budgeting worked best for the **Biodiversity, Forestry** and **Agriculture sectors** – for implementing existing (*in Forestry*), or developing new sectoral strategies and programmes (*the Biodiversity Strategy until 2030 and the National program for protection, sustainable use and restoration of soil functions 2020-2030*)
- ❑ Reported **actions in the Energy and Transport** sectors relate mainly to mitigation efforts, though some “soft” measures (*e.g. standards for energy and transport infrastructures*) could be relayed to adaptation as well
- ❑ Number of reported activities in the **Water Management** and **Urban Environment** are focused on the response to extreme weather events and their consequences (*DRM rather than adaptation*)

# Lessons learned from the NAP process



- ❑ Reporting is not always underpinned by **measurable indicators**
- ❑ **Lack of agreed methodology to evaluate progress** towards reducing climate risks and impacts, while increasing resilience and adaptive capacity
- ❑ **Lack of reliable information on spendings earmarked for CCA** per sector, including in disaster risk management
- ❑ Overview of **CCA measures taken at sub-national level** is not available



When planning, make better use of taxonomy, climate budget tagging, indicators and guidelines for CCA mainstreaming!

# Thank you for the attention!

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