

Working Group on Environmental Monitoring and Assessment

Twenty-third session

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PROGRESS IN ENVIRONMENTAL MONITORING AND ASSESSMENT – North Macedonia



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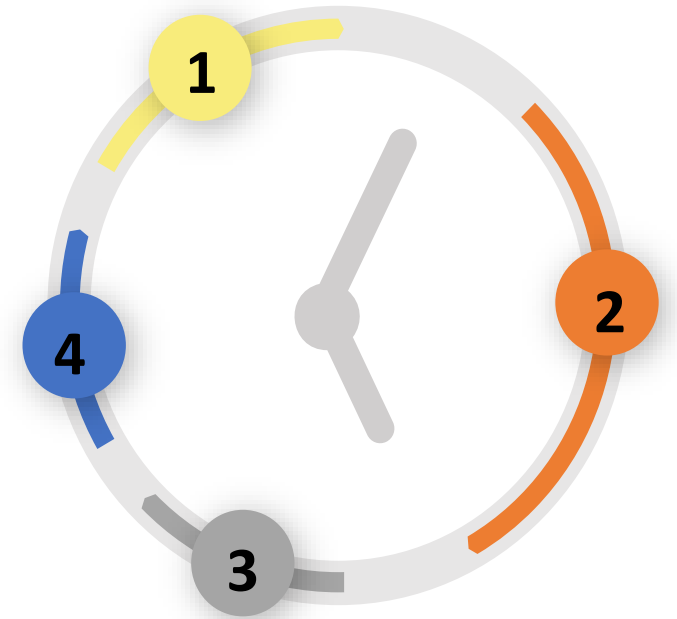
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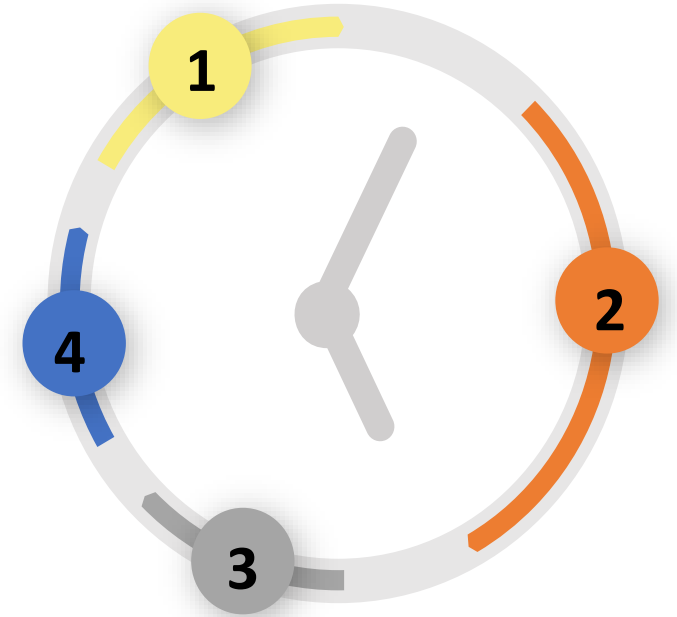
AGENDA:

- 1 Environmental reporting
- 2 The modernization and upgrading of national monitoring networks
- 3 Improvements in NEIS and NEMN
- 4 Further steps



AGENDA:

1 Environmental reporting



1 Status overview – Legal base



- **LAW ON ENVIRONMENT (framework act), 2005**
- **RULEBOOK ON THE STATE OF ENVIRONMENT REPORT, 2010**
 - Form
 - Content
 - Targets
 - Methodology
 - Data sources
 - Report assessment

Annual Reports – Quality of the Environment Yearly



Environmental Indicators Every second year

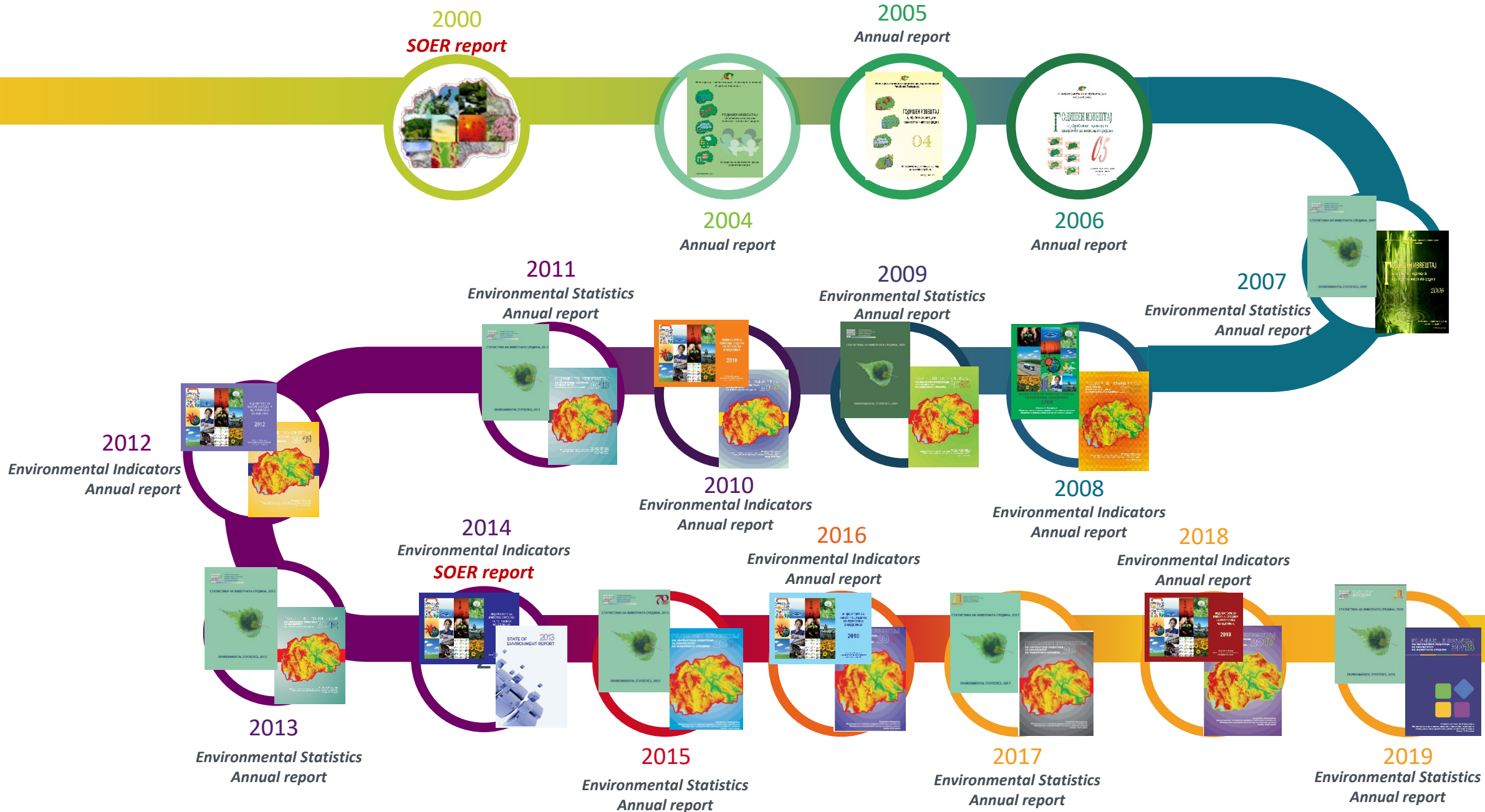


State of Environment Report Every fourth year



1

Status overview – Reports timeline



1

Status overview – Covered Topics

Annual Reports - Quality of the Environment

- 1 •AIR POLUTION
- 2 •WATER
- 3 •NATURE AND BIODIVERSITY
- 4 •WASTE
- 5 •NOISE
- 6 •SOIL

Environmental Statistic

- 1 •BASIC DATA FOR THE COUNTRY
- 2 •LAND USE AND AGRICULTURE
- 3 •BIODIVERSITY AND FORESTRY
- 4 •SOIL
- 5 •WASTE
- 6 •WATER
- 7 •AIR AND CLIMATE CHANGE
- 8 •ENERGY
- 9 •TRANSPORT AND NOISE
- 10 •TOURISM

Environmental Indicators

- 1 •AIR POLUTION
- 2 •NATURE AND BIODIVERSITY
- 3 •CLIMATE CHANGE
- 4 •SOIL
- 5 •WASTE
- 6 •WATER
- 7 •AGRICULTURE
- 8 •ENERGY
- 9 •FISHERIES
- 10 •TRANSPORT
- 11 •HEALTH
- 12 •TOURISM
- 13 •EXPENDITUURE

SOER

Outline	<ul style="list-style-type: none"> •Preface •Introduction •Summary •Environmental Protection approach •Conclusion
Separate topics	<ul style="list-style-type: none"> •Basic information for Country •Sustainable development •Spatial planning •Health and Environment •Climate Change and Ozone Layer protection
Environmental impacts	<ul style="list-style-type: none"> •Contains 13 separate thematic areas (ex. Agriculture, Tourism, Industry, Management of Water Resources, Noise)
Environmental media	<ul style="list-style-type: none"> •3 environmental media (Air, Water, Soil)
Thematic Areas	<ul style="list-style-type: none"> • Contains 5 parts – Biodiversity, Nature, National Parks, Forests, and Protection of Cultural Heritage

• Not/or partially covered in other topics

Example:

- 1 •GREEN ECONOMY
- 2 •FORESTRY
- 3 •ENVIRONMENTAL POLICY
- 4 •CHEMICALS
- 5 •HOUSEHOLD CONSUMPTION
- 7 •INDUSTRY
- 8 •NATURAL RESOURCES
- 9 •ENVIRONMENTAL ECONOMY



1

Why we need the new approach



Moving towards interdisciplinary, integrated environmental assessment approaches



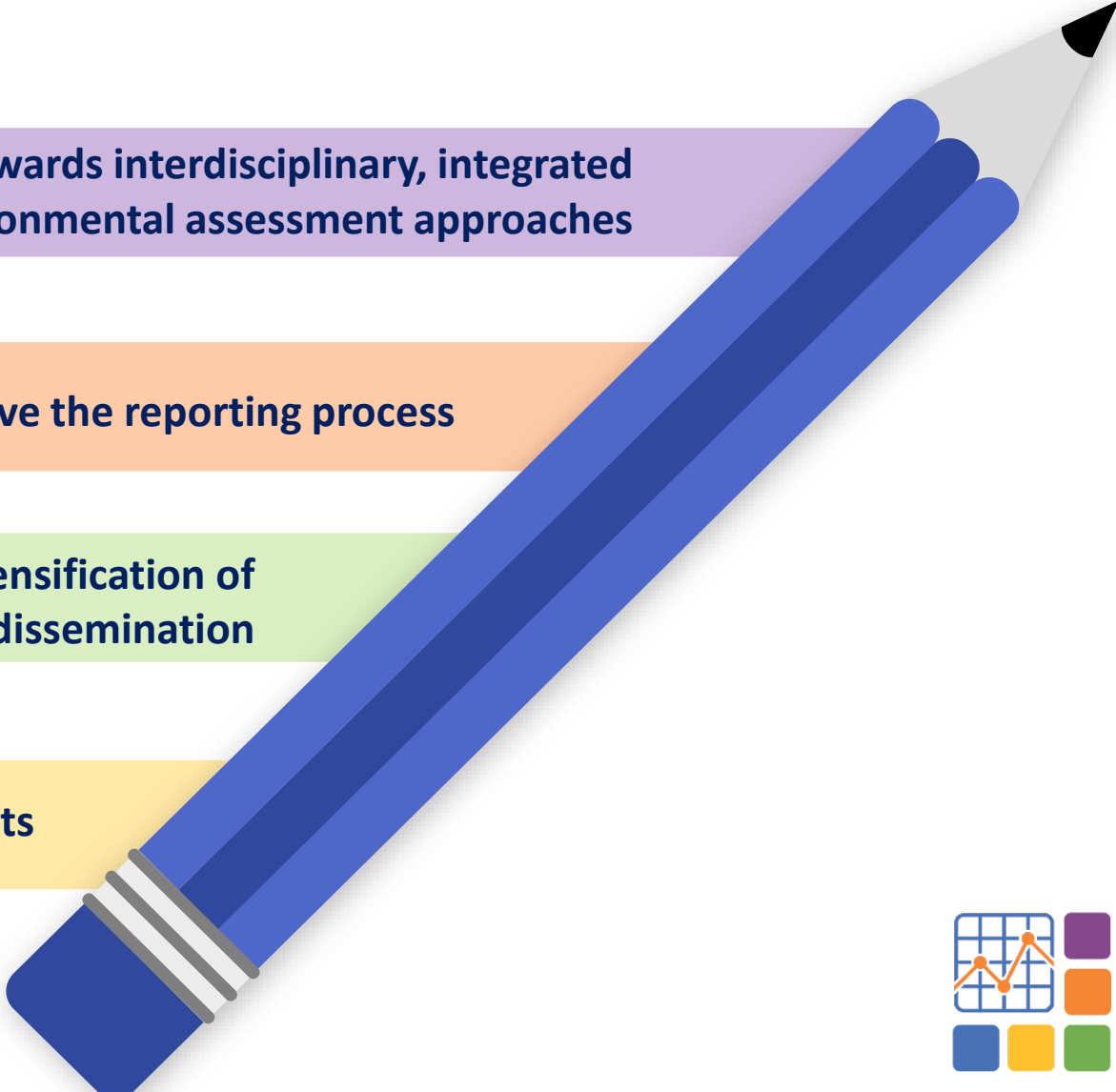
Simplify and improve the reporting process



Update all data annually to ensure intensification of data dissemination



Include a summary for policymakers in all reports

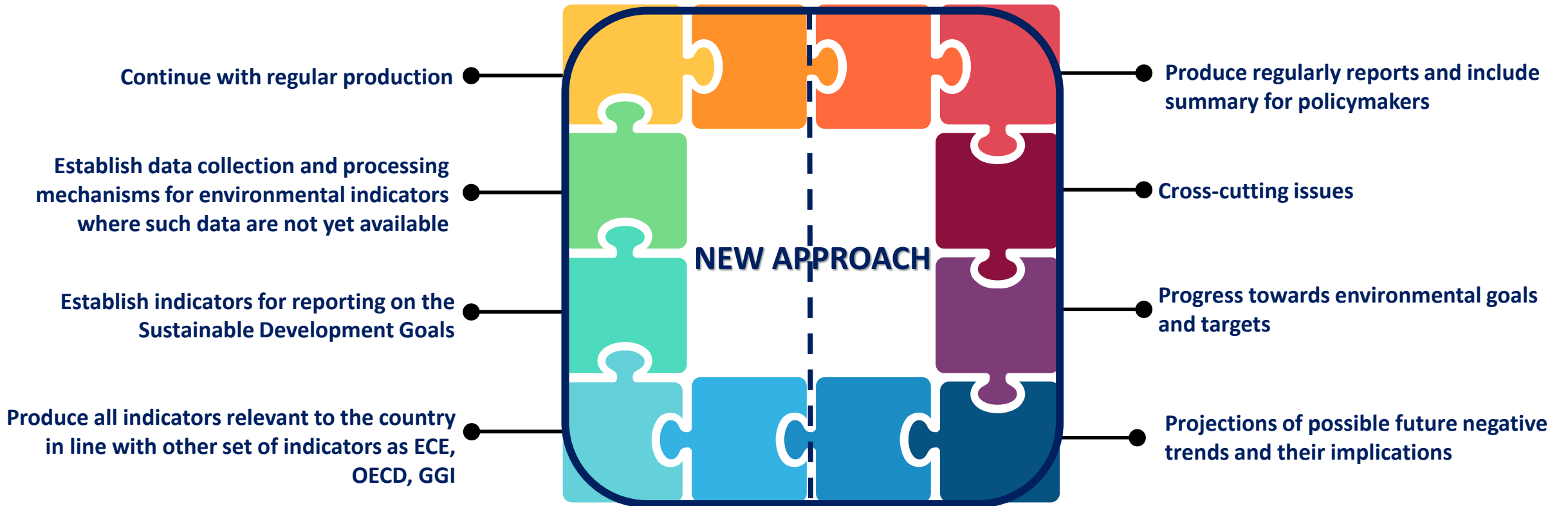


1

Why we need the new approach- 3rd EPR Recommendations

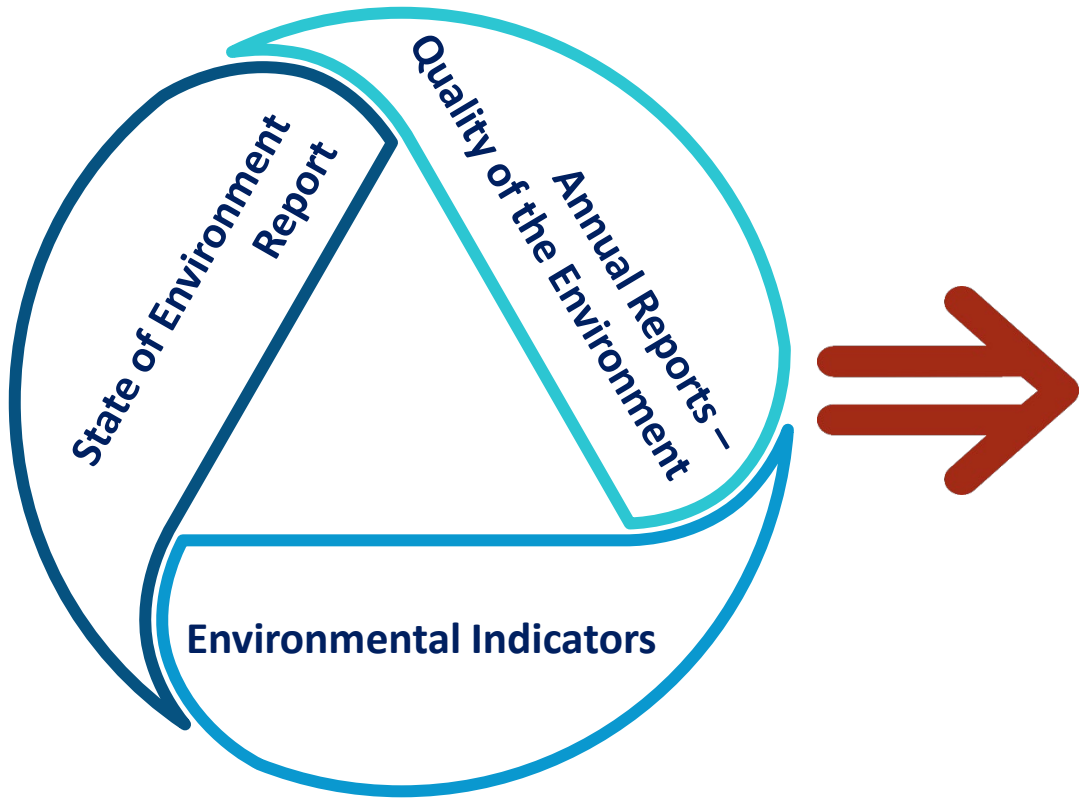
4.6 Environmental indicators

4.7 Environmental reporting



1 Structure of the report - GOAL in 2020

Obligation in accordance with the Law on environment



GOAL⁰² in 2020
Environmental

Integrated State of Environment Report with indicators approach

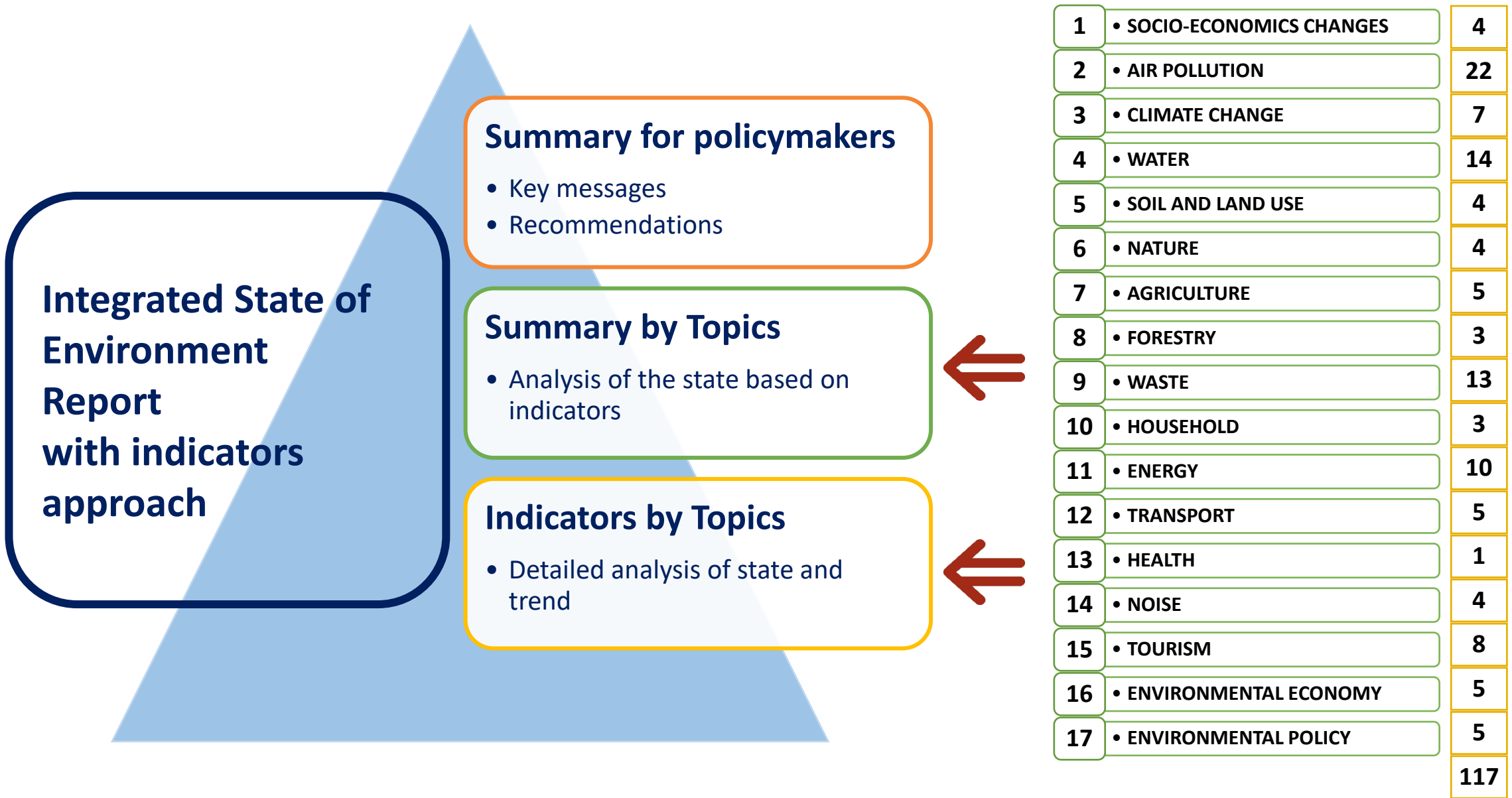
01
Current state of environment

03
Applying insight technologies

Supporting policy creation & policy change



1 Structure of the report – Parts of the report



1 The challenges



To answer the basic questions about the state of the environment for all indicators and topics such as:

What is happening?

- Changes in the last year
- Trend in the period under review
- Significant changes in the state

Why is it happening?

- Reasons for the trend in the period under review
- Reasons for significant changes (peaks)

Do we have a goal?
Has the goal been achieved?

- In terms of a specific national/international goal (Law, Directives, SDG....)



1 The challenges

Each topic to contain a list of indicators showing the trend and progress in relation to the target to be achieved

Code	Title of the indicator	Target	When the target should be achieved	Trend	Achievement of target
MK NI 001	EMISSIONS OF ACIDIFYING SUBSTANCES	Reduction of emissions of acidifying substances	To meet the targets of the CLRTAP protocols every year, starting from 2010 To meet the targets of the NERP and LCP in the period 2018-2027 year	→ (1990-2010) ↘ (2011-2018)	NOx <input checked="" type="checkbox"/> Towards the goal SOx <input checked="" type="checkbox"/> Towards the goal <input checked="" type="checkbox"/> Far from target (The target is achieved for two CLRTAP protocols, and not for one CLRTAP protocol as well as a ceiling for LCP from NERP)
MK NI 016	MUNICIPAL WASTE GENERATION	Reduction of biodegradable ingredients compared to 1995 base year: – 25% – 35% – 45%	2017 2018 2019	↘ Negative decreasing trend	<input checked="" type="checkbox"/> Far from target

Positive developments

↗ Positive decreasing trend

↘ Positive increasing trend

Towards the goal

Neutral developments

→ Constant trend

↕ Variable trend

Mixed progress

Negative developments

↗ Negative decreasing trend

↘ Negative increasing trend

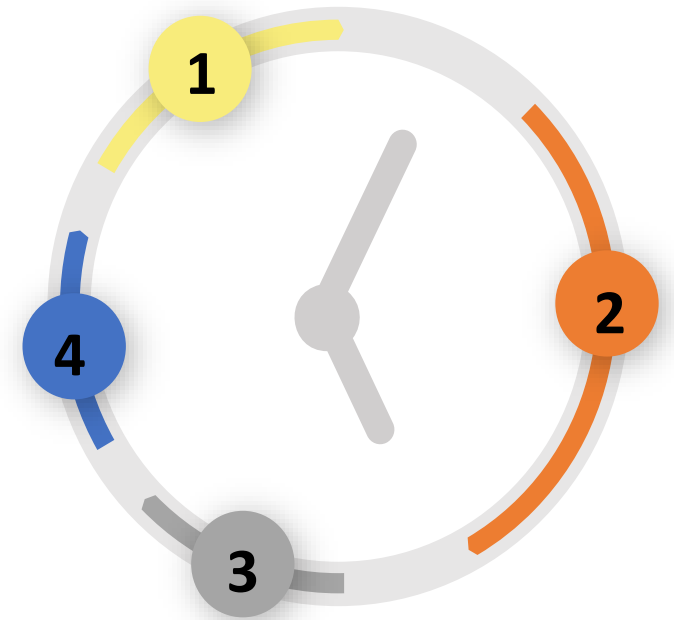
Far from target



AGENDA:

2

The modernization and upgrading of national monitoring networks



2

Air quality monitoring

1998 year

- JICA – study for air quality monitoring in Republic of Macedonia
- 4 monitoring stations and a central software

2002 year

- PHARE COP'99 - 3 monitoring stations and 3 high volume samplers

2004 year

- CARDS 2001 - 8 monitoring stations, 1 high volume sampler and 6 low volume samplers
- Calibration laboratory, balance and a service vehicle

2011 year

- IPA 2008 – 2 monitoring stations and software for air quality data management

2017 year

- IPA 2012/2013 – 11 analyzers, mobile station and a service vehicle

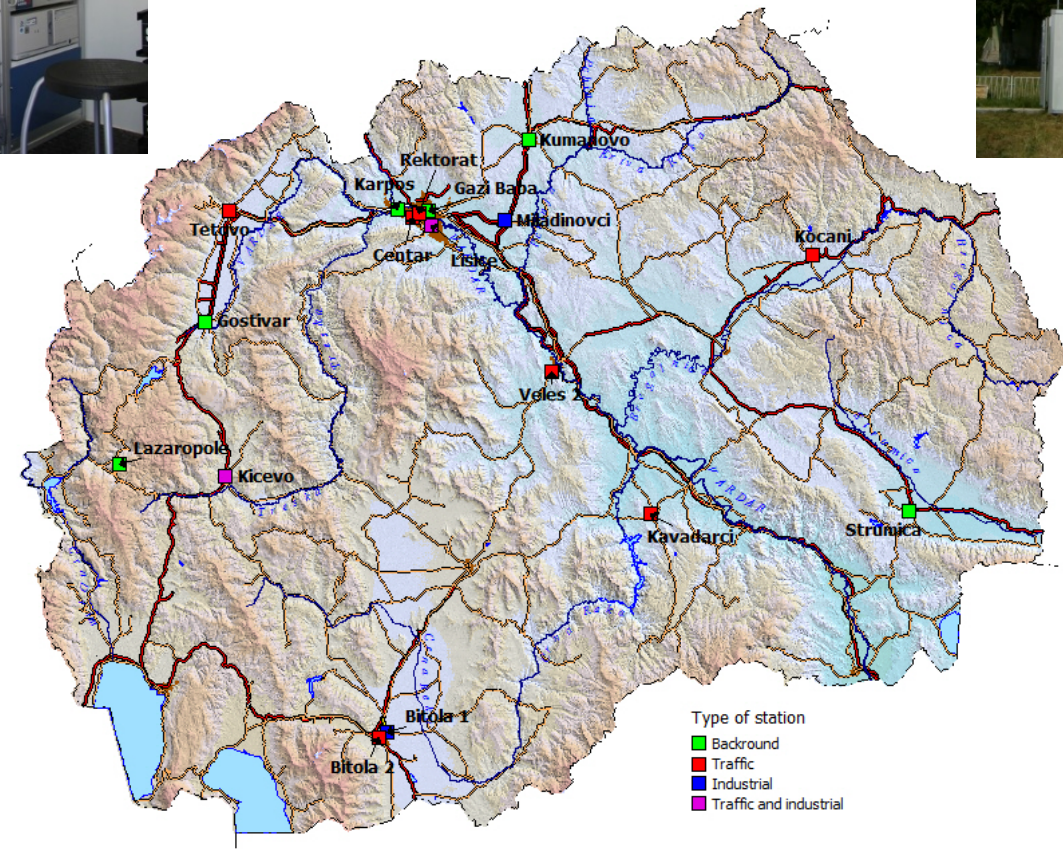
2020 year

- IPA CBC MK - Greece – 1 monitoring station, 7 instruments



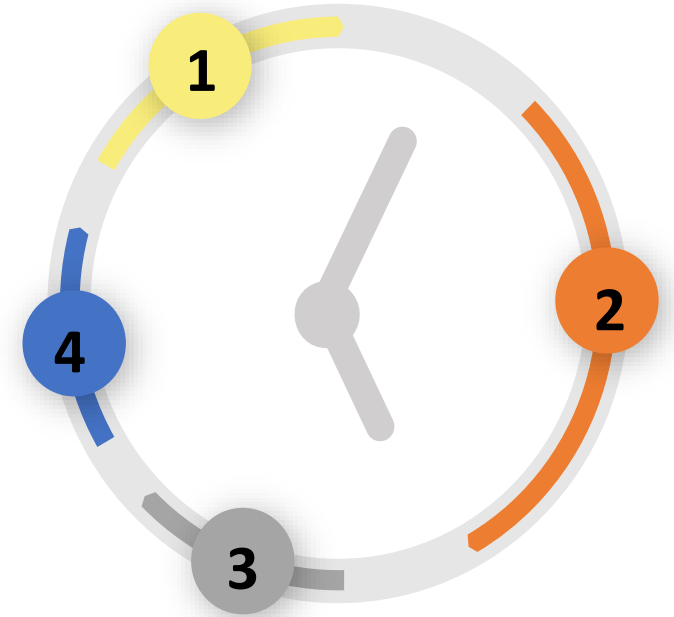
2 State monitoring system for ambient air quality

- **18 fixed** monitoring stations
- **1 mobile** monitoring station
- **Parameters:** SO₂, NO, NO₂, NOX, CO, O₃, PM10, PM2.5
- Indicative measurements for heavy metals and PAHs



AGENDA:

3 Improvements in NEIS and NEMN



3

Improvements in NEIS and NEMN

Ongoing Project -Development of Environmental Monitoring and Information System

1

Fully functional MNEIS

- capable of supporting the monitoring, processing, reporting and dissemination of all environmental data

2

Developing a National Monitoring program & strategy

- annual cycle of programming of integrated State environmental monitoring
- developing a coordinated approach to informing the public sector

3

Strengthening administrative & technical capacities

- for implementation of MNEIS and NEMN



3

Component I: Development of National Environmental Information System (NEIS)



Activity

Output

Development of equipment needs assessment, market analysis and technical specifications for equipment for the operation and maintenance of NEIS

- Assessment report of the current legal and operational situation of NEIS
- Technical specifications (software and hardware) and market analysis for NEIS

Preparation of detailed design of NEIS which includes all existing information systems and development of operational software of NEIS

- Detailed design of NEIS and **developed fully functional NEIS**
- Operational report for installation, testing, and deployment of the NEIS with trainings provided
- Law and secondary legislation amendments in the area of the Environment information system and Decree on the structure, content, form, the method of management and maintenance of the information system prepared and three amendments or drafting new secondary legislation



3

Component II: Development of National Environmental Monitoring Network (NEMN)



Activity

Output

Gap assessment of compliance of existing NEMN (monitoring stations and monitoring parameters for air, noise and water) and environmental monitoring legislation with EU monitoring environmental and climate action legislation requirements

- Assessment report of legal and administrative capacity for performing environmental monitoring
- Gap Assessment Report for Environmental Monitoring

Preparation of necessary primary and secondary legislation and procedures for performing monitoring in the environmental and climate action sector

- Minimum 10 legislative acts prepared related to environmental monitoring

Development of monitoring equipment needs assessment and preparation of technical specification for the needed equipment with assessment of the financial needs for operation and maintenance of NEMN

- Technical and Financial reports for environmental monitoring with technical specification and market analysis for the priority needed equipment

Preparation of National Environmental Monitoring Strategy with Action Plan.

- **National Environmental Monitoring Strategy with Action Plan prepared** and workshop organised

Preparation of National Environmental Monitoring Programme

- **National Environmental Monitoring Programme prepared** and workshop organised



3

Component III: Strengthening the capacity for implementation of NEIS and NEMN



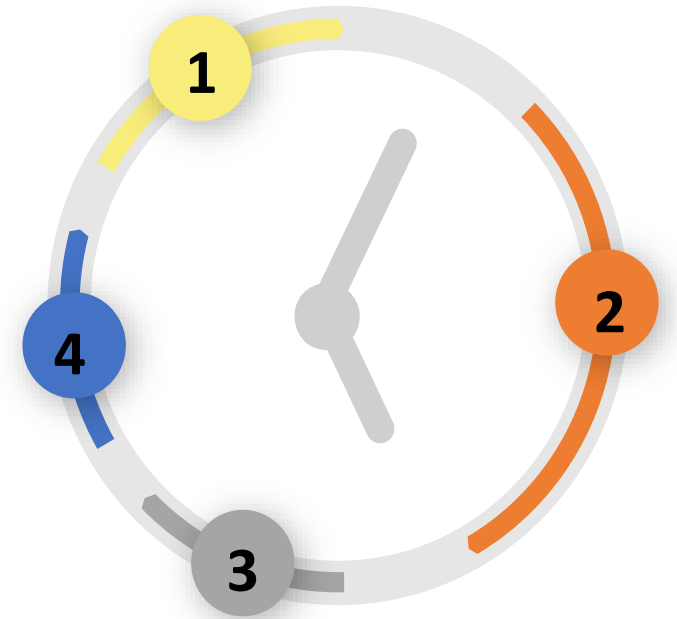
Activity

Output

Assessment of the existing administrative and financial capacity for implementation of NEIS and NEMN which will include as minimum MEPP, AE, Ministry of Health – Institute for Public Health (IPH), Hydro-Meteorological Administrati	<ul style="list-style-type: none"> • Assessment Report of the Administrative capacity for Environmental Information System and Monitoring
Development of functional analysis of the tasks and obligations of relevant institutions responsible for keeping of NEIS and NEMN	<ul style="list-style-type: none"> • Functional analysis of the tasks and obligations of relevant institutions responsible for keeping of NEIS and NEMN
Preparation of recommendations for administrative organizational set up for implementation of NEIS and NEMN	<ul style="list-style-type: none"> • Institutional Plan for Strengthening the Capacity for Implementation of NEIS and NEMN
Development of procedures for environmental information dissemination and access to information	<ul style="list-style-type: none"> • Minimum 6 procedures developed for environmental information dissemination and access to information
Preparation of training materials and delivering training for NEIS and NEMN	<ul style="list-style-type: none"> • Long and Short-Term Training plans
Organisation and implementation of at least two (2) Study visits to exchange experience with EIS and Environmental Monitoring Networks in EU MS	<ul style="list-style-type: none"> • 10 training materials prepared and trainings delivered to a minimum 80 civil servants • At least two (2) study visits organised for a minimum 20 participants



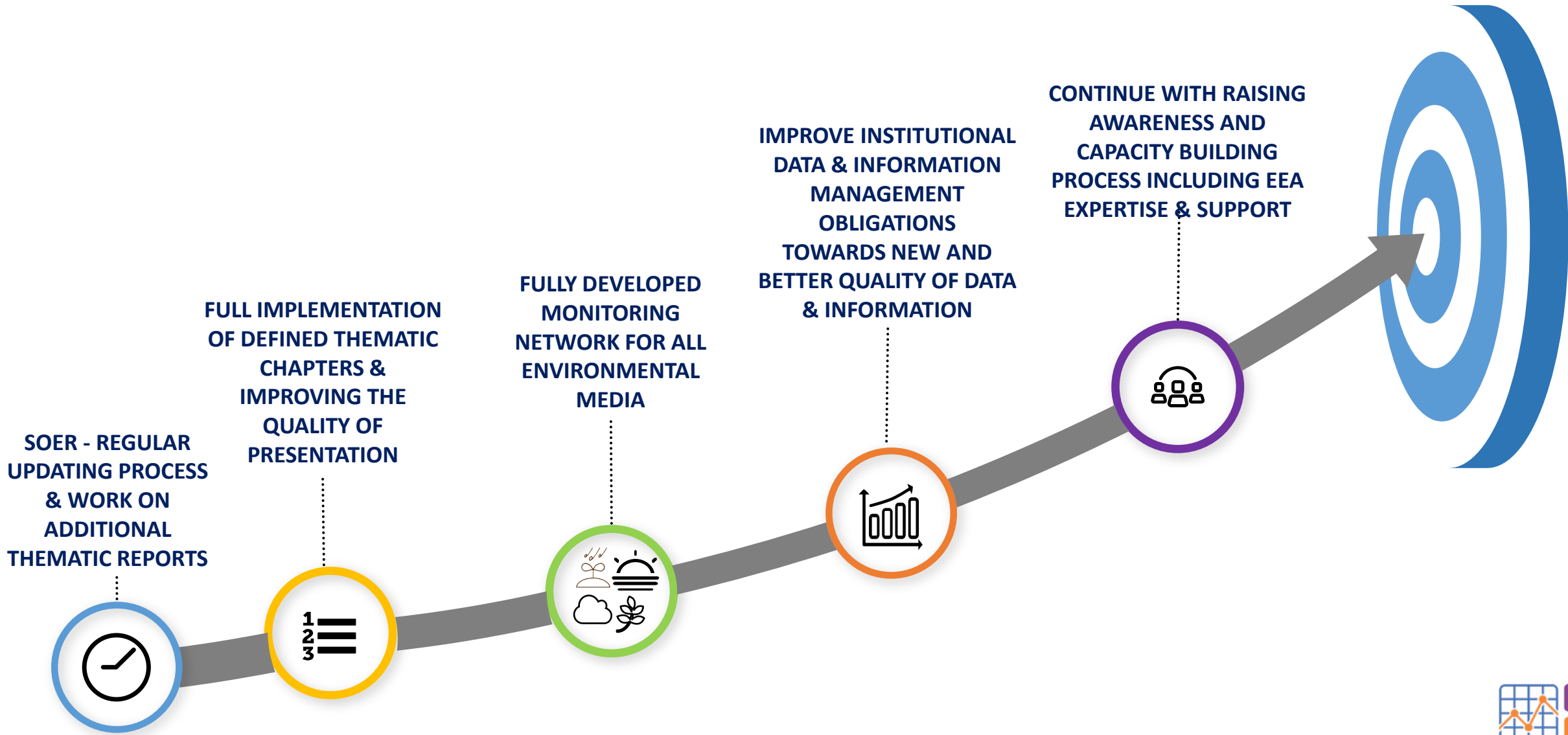
AGENDA:



4 Further steps



4 Further steps – General target





Thank you!