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MINISTERUL MEDIULUI
AL REPUBLICII MOLDOVA

EU4ENVIRONMENT WATER AND DATA NATIONAL POLICY DIALOGUE – MOLDOVA

THEMATIC SESSION 2 - DIALOGUE ON ENVIRONMENTAL STATISTICS AND OPEN DATA IN THE FRAMEWORK OF THE EU4ENVIRONMENT WATER RESOURCES AND ENVIRONMENTAL DATA PROGRAMME

25 April 2023

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THEMATIC SESSION 2

- EU4Environment Water and Data aims to support Moldova in making progress in several thematic areas of environmental data related to policy development and EU approximation, including
 - Strengthen further **water monitoring and data management**
 - Support to **land-cover analysis**, based on Sentinel 2 imagery and derived products
 - Improving the availability of policy-relevant **air quality and waste management** data
 - Strengthen the sharing and use of data in reporting including Multilateral Environmental Agreements, UN-ECE and co-operation with the **European Environment Agency** as an important European integration step

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DEVELOPING WATER ACCOUNTS

- **Water accounts is linking hydrological information alongside economic information in a consistent way**
- **Preparation**
 - **Introduction** to Water Accounts in April 2022 – concept, definitions, data sources.
 - **Training** on Physical Flow and Use table in March 2023.
 - Follow-up **coordination** between statistical service and Apele Moldovei and key data providers on data sources and knowledge development in March 2023.
- **Test filling of Physical Supply and Use Tables (PSUT)**
 - Support to Apelei Moldovei and statistical service by first exchanging on ways to convert/convey the UNSD Joint Questionnaire to PSUT tables.
 - Identify gaps and work together for identifying where to find additional data and estimates to fill gaps in May 2023.
 - Data collection and estimates to **fill gaps** from June - Dec 2023, if possible also at RBD and monthly level.
 - Explore how to use draft **PSUT** as a supporting tool for RBMP and other national policies - Spring 2024.



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LAND MONITORING MEETING IN MOLDOVA

THE GOAL OF OUTPUT 2.2

Chisinau, 01 February – 02 February 2023



Workshop on land monitoring on 1-2 February

"I hope that in 2024 we will have a high-resolution cartographic representation with data and metadata that will reflect the full coverage of the territory of the Republic of Moldova with current CORINE data" Stefan Crigan, Deputy Director General of the Agency for Land Relations and Cadastre.

Participants focused on the following issues: national implementation of the Corine Land Cover pilot project, joint assessment of available global and national land monitoring data as well as preparation and decision on the use of High Resolution Land Cover (HRVPP) data for national assessments in a pilot area.

Andreas Littkopf, expert of the Environment Agency of Austria emphasizes that this work will provide an opportunity to develop new products on biodiversity and climate change monitoring.

Read more (RO): <https://arfc.gov.md/.../monitorizarea-funciar%C4%83-%C3...>



ARFC.GOV.MD

Agenția Relații Funciare și Cadastru a Republicii Moldova

Publicat la: Joi, 02/02/2023 - 09:22 În perioada 01-02 februarie curent, Agenția Relații Funciare și Cadastru în colaborare cu Institutul de Geodezie, Prospectivă Tehnică și Cadastru "Ingecod" găzduiește atelierul de lucru c...

<https://www.facebook.com/EU4Envwaterdata/>

- Perfectly organised by Maria and Andrei,
- at the Agency for Land Relations and Cadastre
- Around 30 experts from different ministries, Cadastre and statistical office, university lecturer, students and representative of relevant projects

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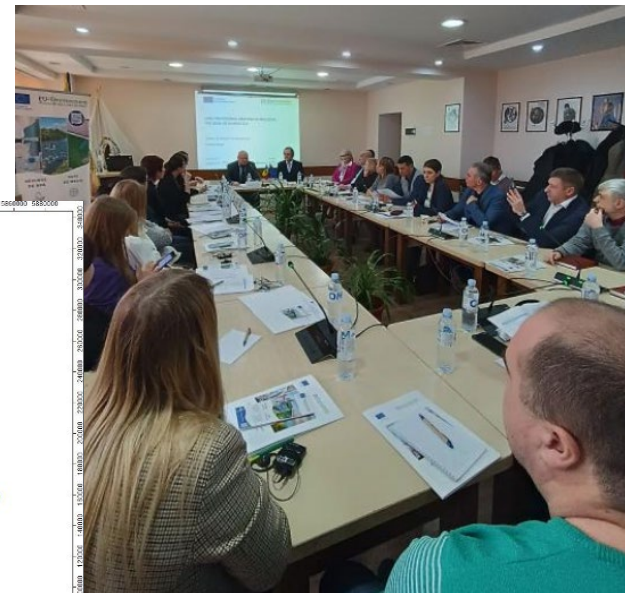
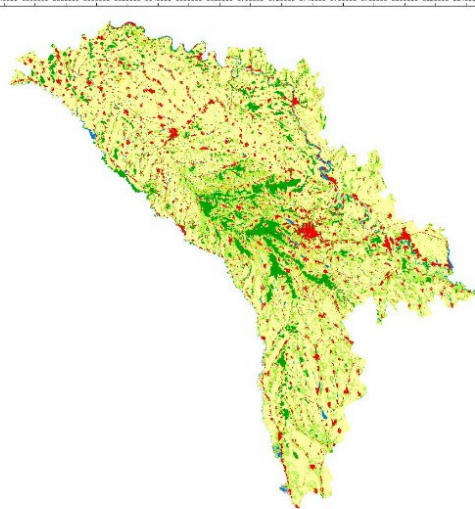




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CORINE LANDCOVER – WITH 100% COVERAGE OF THE REPUBLIC OF MOLDOVA



- CLC Implementation by IngeoCad supported by Lechner
- assistance is provided in selection and download of imagery
- additional hands on training for the Team is planned
- Realisation till march2024

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HIGH RESOLUTION VEGETATION PHENOLOGY AND PRODUCTIVITY

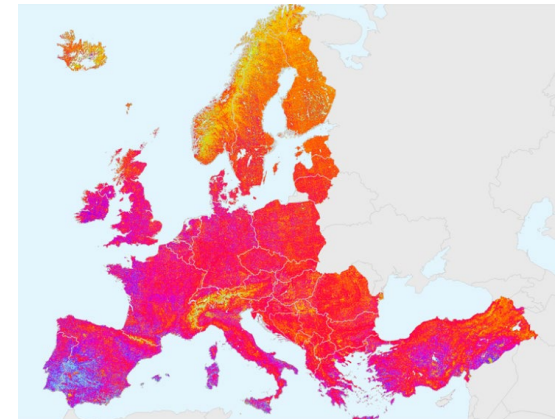
- The workshop in autumn 2023 will
- introduce the Copernicus land monitoring component (CLMS)
- detailed overview of available datasets
- Training on how to find and access the respective datasets through different data portals.



HR-VPP coverage in Moldova

Case studies will be done

- 1) To investigate shrinking of lakes due to low rainfalls and high temperatures,
- 2) to identify deforestation and establish links to illegal logging activities, and
- 3) to analyze inter-annual changes in vegetation cover and productivity.



HR-VPP in Europe

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EUROPEAN ENVIRONMENT AGENCY & EIONET

MEMBER STATES & CO-OPERATING COUNTRIES

→ EU ACCESSION COUNTRY MOLDOVA TO JOIN THIS CONTINUOUS CO-OPERATION ?



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AMONG NEXT ACTION POINTS

- Develop/negotiate for prepared Eastern EU Accession and Partner Countries including Moldova a **co-operating countries programme** with the European Environment Agency at the model of the EEA programme for Western Balkan countries
- **2022 status/baseline assessment** on
 - international reporting (focus UNECE Conventions)
 - policy relevant air quality and waste management data with proposed/agreed **improvement actions**
- Deciding scope and messages of **awareness action in Moldovan municipalities** on health-endangering Fine Particular Matter pollution
- **Air quality data** – managing/using data of new automated station(s), linking data from Moldova to European Air Quality index at EEA ?

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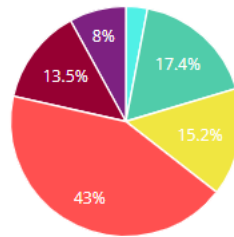
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EUROPEAN AIR QUALITY INDEX

IS-2 (RO0084A)

Air Quality Index Fair (due to PM10)
Date 2023-04-20 12:00 UTC+2
Country Romania
Location IASI
Classification Background
Area Urban

Accumulated past 365 days



General population

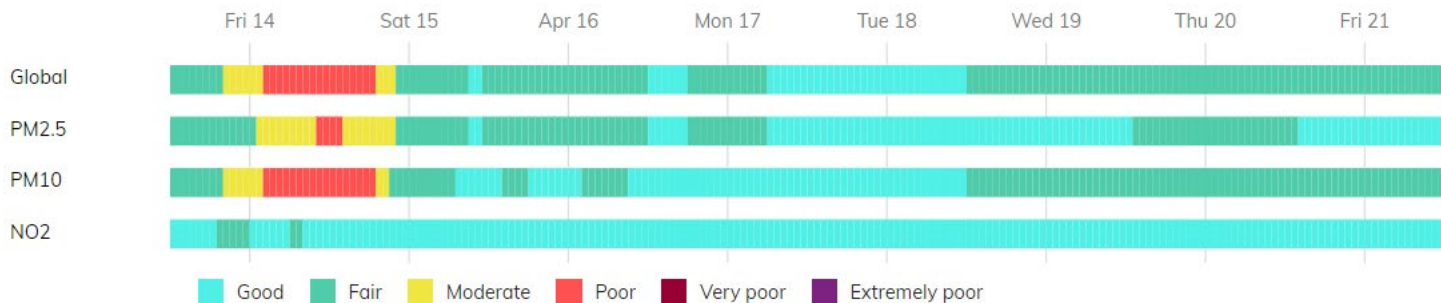
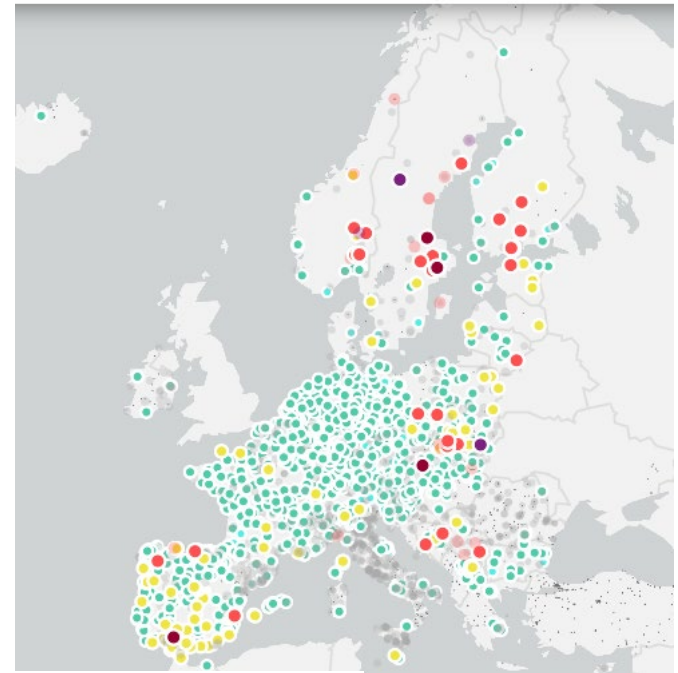
Enjoy your usual outdoor activities.

Sensitive population

Enjoy your usual outdoor activities.

EXAMPLE IASI - ROMANIA

European Air Quality Index





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FROM EU ASSOCIATION TO EU ACCESSION REQUIREMENTS

- **Air Quality Monitoring** – Air Quality Framework Directive requirements already included in Association Agreement and implementation concept
→ with EU support for automated monitoring stations, also sufficient spare parts, consumables, trained staff needed ..
→ Use of European Air Quality index not yet obligatory, but proposed for future in current Directive review
- **Waste Management Reporting** – necessary to prepare for evaluating obligatory European recycling targets for waste streams, to support Extended Producer Responsibility systems < all EU reporting obligations via Eurostat >
→ Need to review current Waste management information system in its content, institutional handling and operational responsibilities in order to adapt to the future requirements

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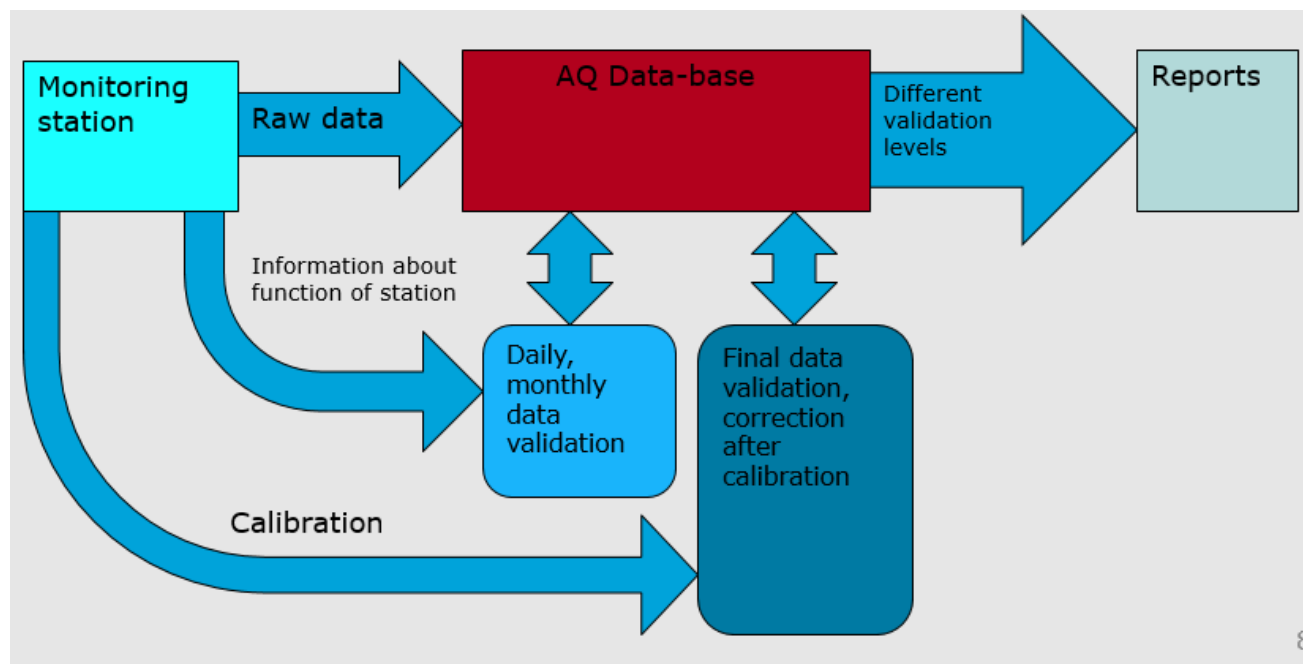




ASSURE & IMPROVE QUALITY OF MONITORING DATA

Defined quality assurance measures / certified methods for laboratory and monitoring work, calibration of monitoring equipment, data validation

Example air quality monitoring from automated stations



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ASSURE & IMPROVE QUALITY OF REPORTED DATA

- Primary responsibility for correct data always remains with the reporter
- Authorities check for plausibility & completeness, request corrections
- Cross-checks with other data sources – eg production statistics vs emission reporting
- Data audits for emission inventories and inspections to focus on large emitters
- National waste statistics need to analyse and complete data reported by waste generators with statistical methods
- Regular independent audits when reported data directly relate to payments (eg for Extended Producer Responsibility Schemes in waste management)

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FURTHER DEVELOPING OPEN DATA ACCESS

- **Government Open Data Portal** <https://data.gov.md/en/> is the entry point for access to the open data in Moldova but there are only few dataset related to environment published in this portal.
- Need to confirm the “Integrated Environmental Information system “ (IEIS) planned to be developed by the Environmental Agency, as main entry **point for access to environmental datasets**. This **IEIS** which should be connected to sub thematic system such the water cadastre, could **feed the Government Open Data Portal, and could give access to :**
 - Environmental datasets and information, respecting access rights defined with the producers;
 - Metadata describing existing dataset produced by various institutions with information on their and level of access, their level of access,
- There is a **need for clear institutional framework** on definition of responsibilities and obligations for public authorities to publish environmental datasets
- A particular accent has to be put on the **metadata production by all institutions** on the environmental datasets that they produce, in order to allow easy retrieving, traceability and information of the potential data users on the characteristics of the available datasets (sources, level of quality control, conditions of use, detailed description, etc...).

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FURTHER DEVELOPING OPEN DATA ACCESS

- **Through its component 2.4, the EU4ENV project is an opportunity :**
 - **To support the effective creation of the Integrated Environment Information system (as planned in gov decision n° 549/ 13-06-2018)**
 - Draft of potential decree defining objectives
 - Portal implementation
 - Metadata catalogue
 - On line Services for access to data and information
 - **To support link with existing information system and data sources**
 - Water cadastre
 - Other databases from Environment Agency or other institutions
 - **To reinforce some data sources to facilitate their availability and link to the platform**

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SOME POLICY QUESTIONS

NPD Steering Committee Members are invited to consider open policy questions regarding environmental data, including the following:

- What are the **key priorities and implementation challenges** for inter-ministerial cooperation and access to environmental statistics and open data?
- In which areas do you experience the most critical challenges regarding the **availability of relevant data** for your policy implementation work ?
- Does Moldova aim to **establish regular co-operation with the European Environment Agency** as the EU Accession Western Balkan countries ?
- Where do you see priorities for the next steps in developing **air quality** monitoring and **waste management** reporting and data management ?
- How could environmental **open data access** could be reinforced, including entry point portal definition and maintenance, inter-institutional co-operation, metadata development and better environmental dataset access?

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