

# Regional climate cooperation

## ECRAN Environment and Climate Regional Accession Network

### Macedonia



This Project is funded by the European Union



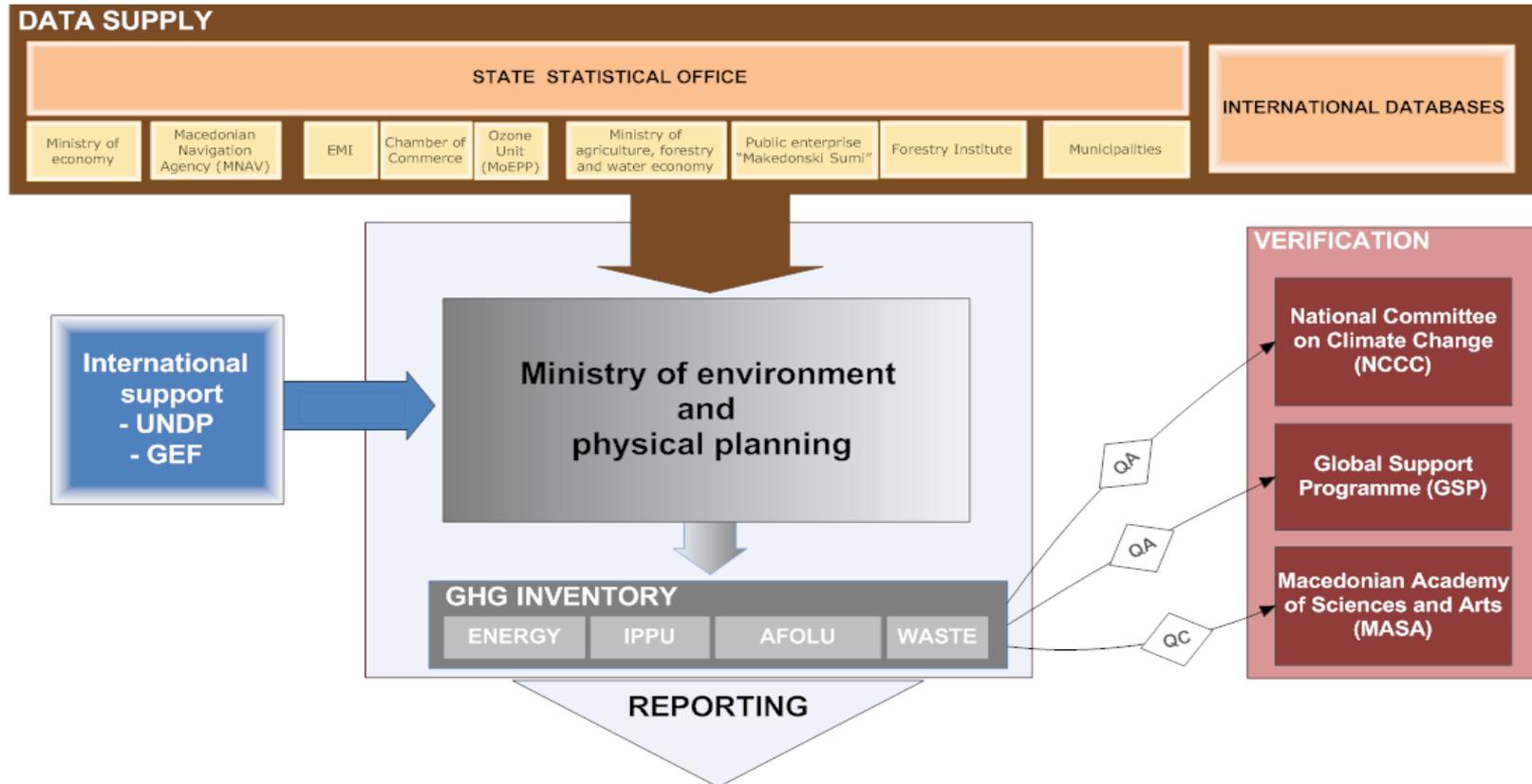
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## Country presentations

- Three national communications
- First Biennial Update Report (2014)
- **Country Specific Emission Factors** were established for *key source categories* for the first time in the TNC.
- Same team was working on the last two inventory preparations.



# Overview National System



## DELIVERABLES:

- UNFCCC (National Communications, BURs)
- EEA
- Various national strategic documents in the areas: energy, transport, industry, agriculture, forestry, waste etc.
- Input for other various analyses: CC mitigation and adaptation analyses.



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A revised national structure for the development of the National GHG inventories was established in the framework of the TNC and the same inventory management structure was retained in the framework of the FBUR.

- **The Ministry of Environment and Physical Planning**, responsible for supervising the national inventory process and reporting the emissions to UNFCCC
- **The Project Management Unit**, responsible for managing and coordinating the Third National Communication on climate change
- **The GHG Inventory Team**, composed of three junior consultants responsible for preparing the GHG inventory
- **A National Technical Advisor**, responsible for training and transfer of knowledge to the GHG inventory team and for supervision and verification of the GHG inventory
- **The National Communication Support Programme (NCSP)**, responsible for supporting and revising the GHG inventory

- **Training materials** were prepared for each sector, including a step-by-step process for completing inventory tables, explanations of good practices and sources of data and emission factors.
- **A data documenting structure** was reported for each activity rate, emission or conversion factor directly in the sectorial and sub-sectorial excel worksheets in the IPCC software. This enables long-term sustainability and continuation of the inventorization process.
- **Quality control/Quality assurance** was provided by ensuring that each Expert inter-checked one or two other sectors, sectorial and sub-sectorial worksheets to ensure the entered data was of good quality. QC/QA was ensured through additional reviews from the National Experts of the Macedonian Academy of Sciences and Arts.
- For the purposes of the First Biennial Update report the **Uncertainty analysis** was performed for each CO<sub>2</sub>-emitting category for the whole period 1990-2012. The analysis was conducted by using the build in functionality in the 2006 IPCC software.

## Completeness and non-estimates

- **Completeness**
  - Years covered: 1990-2012
  - Energy, IPPU, AFOLU, Waste
  - Gases covered: CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>2</sub>, PFCs
- **Non-estimates (NEs)**
  - Lack of data for F-gases



# Key categories

(Energy and IPPU)

- 1.A.1 Energy Industries - Solid Fuels
- 1.A.2 Manufacturing Industries and Construction – Liquid Fuels
- 1.A.3.b Road Transportation
- 1.A.4 Other Sectors - Liquid Fuels
- 1.A.1 Energy Industries - Liquid Fuels
- 1.A.2 Manufacturing Industries and Construction - Solid Fuels
- 2.C.2 Ferroalloys Production
- 2.A.1 Cement production

## Critical Issues

# 1. ENERGY

- AD: Official National Energy Balance 2003 and 2004
- AD: Misallocation of certain AD in the recent Energy Balances
- Mismatch of the SSO Energy Balances and Ministry of Economy Energy Balances
- Absence of national electronic vehicle database (for implementation of higher Tiers in the road transport subsector)
- Usage of non-registered biomass (illegal wood logging)



# Critical Issues

## 2. IPPU

- AD: Usage of raw materials (e.g. Ceramics)
- AD: F-Gases (Ref. and stationary air conditioning, mobile air-conditioning, fire protection)
- AD: Non-energy fuels from fuels and solvent use
- AD: SF<sub>6</sub> in electrical equipment
- AD: NO<sub>2</sub> for medical purposes

# Progress

## 1. ENERGY

- Most of the key sources under Energy sector are estimated with usage of Tier 2 methodology and CS EF
- The CS EFs have been published in the international EFDB

## 2. IPPU

- Calculated CS EF for several categories
- AD and EF data will be collected with EMI



Thank you for your attention

