Kingdom of Morocco
Ministry of Energy, Mines and Sustainable Development

WORKSHOP FOR THE FACILITATIVE SHARING OF VIEWS (FVS) UNDER THE INTERNATIONAL CONSULTATION AND ANALYSIS PROCESS (ICA)

Kingdom of Morocco

Bonn, 15 May 2017

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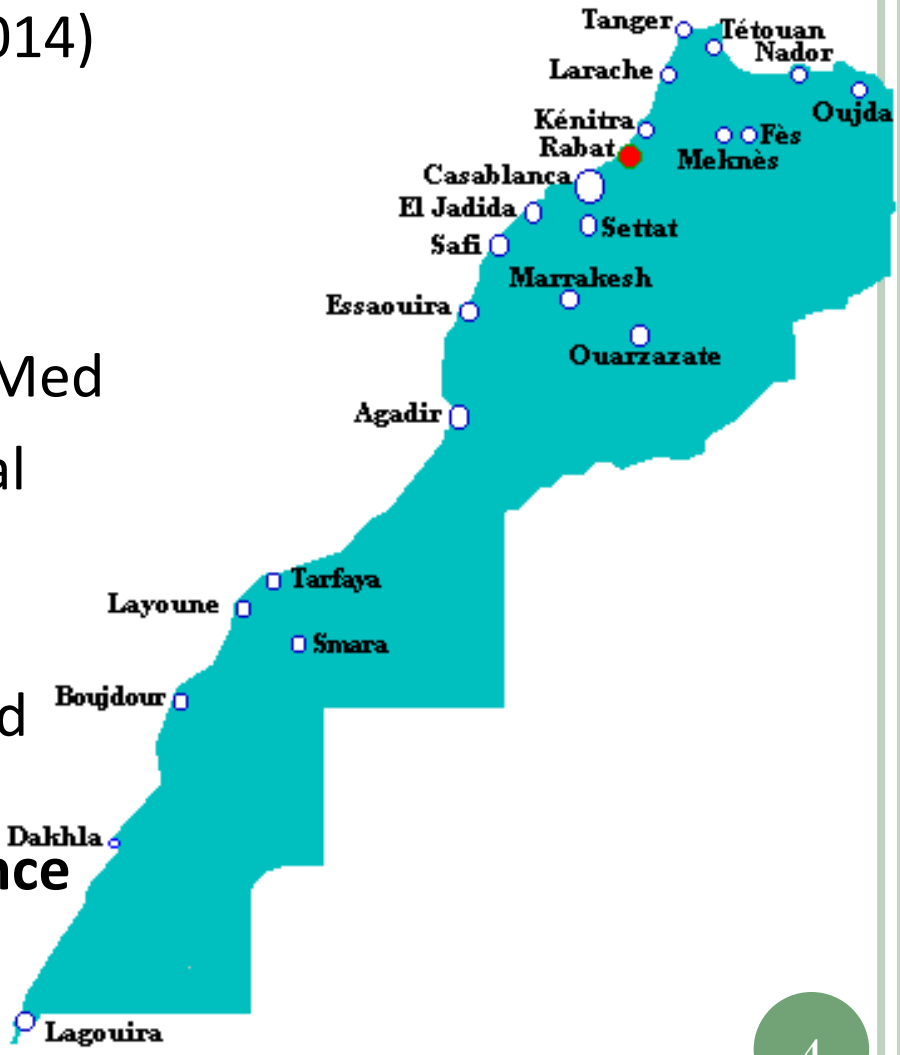
1. NATIONAL CONTEXT

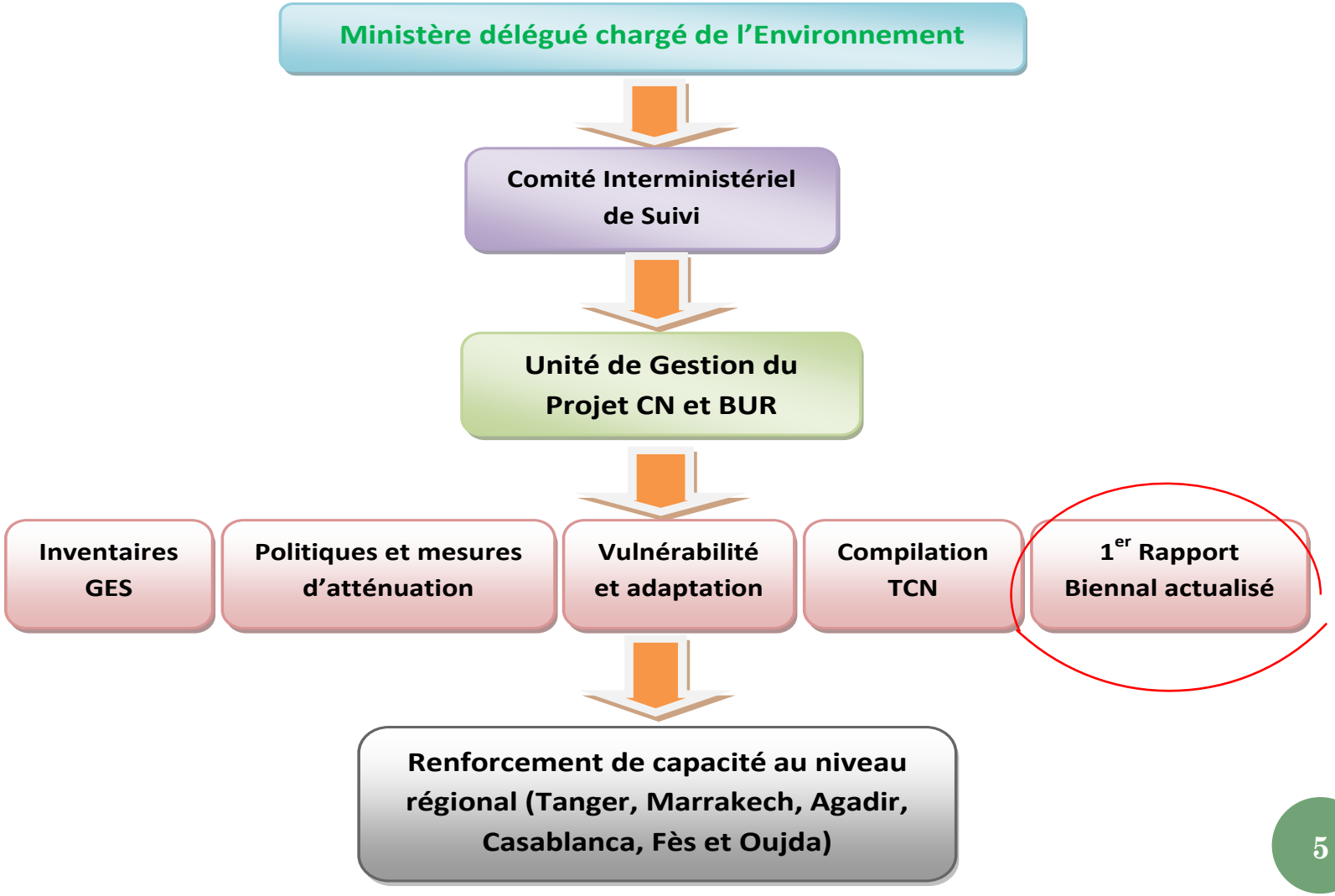
National Context/Relevant facts

- Population : **33,848 millions** (2014) / more than **60% in urban**
- Economic growth / year**: 4,3%** since 2008
- Seaboard (3.446 km) : Atlantic+Med
- Ecosystems vulnerability (Coastal areas – estuaries –phauna end flora; Oasis 44 000 Ha)
- Water-scarce country confronted with dwindling groundwater reserves and a **strong dependence on rain-fed agriculture**
- Temperature increases (+1,8°C) and declining precipitation (1-30%)

(1960-2005)



National Context/ Institutionnal Arrangements



2. GHG Inventory

GHS inventory in Morocco in the Framework of the TNC

- Morocco has already prepared and communicated to the UNFCCC:
  - The inventory for the year of 1994 (FNC)
  - The inventory for the year of 2000 (SNC), and also 2004
  - For the TNC, the inventory covers the years:

    2005, 2006, 2008, 2010 et 2012

- The first BUR is based on the results of the inventory of 2012

RESULTS OF MOROCCAN GHG INVENTORY FOR 2012

- The net anthropogenic net emissions of GHG in Morocco are estimated **100.5 million t CO_2e**
- **Emissions per capita : 3.10 t CO_2e**

- These emissions correspond to the balance of total GHG emissions for the different sources (gross emissions) and the absorption of CO_2 through the vegetation ecosystems.
- The contribution of direct GHG in that emissions is the following

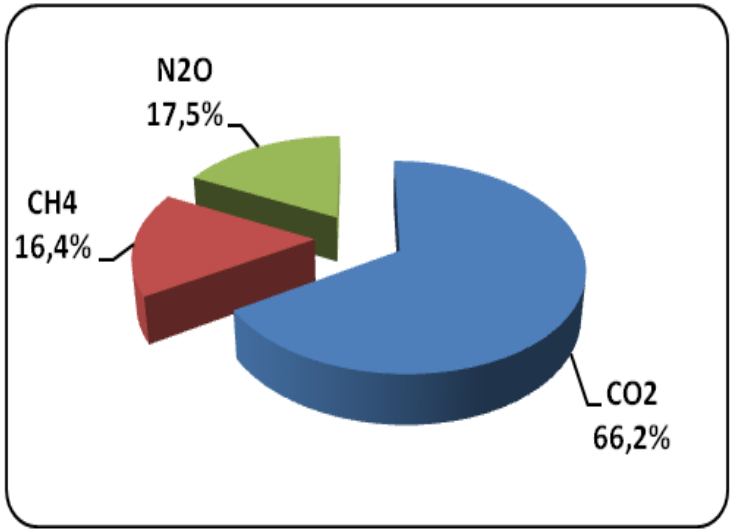
CO_2 : 66 538 Gg

CH_4 : 16 452 Gg

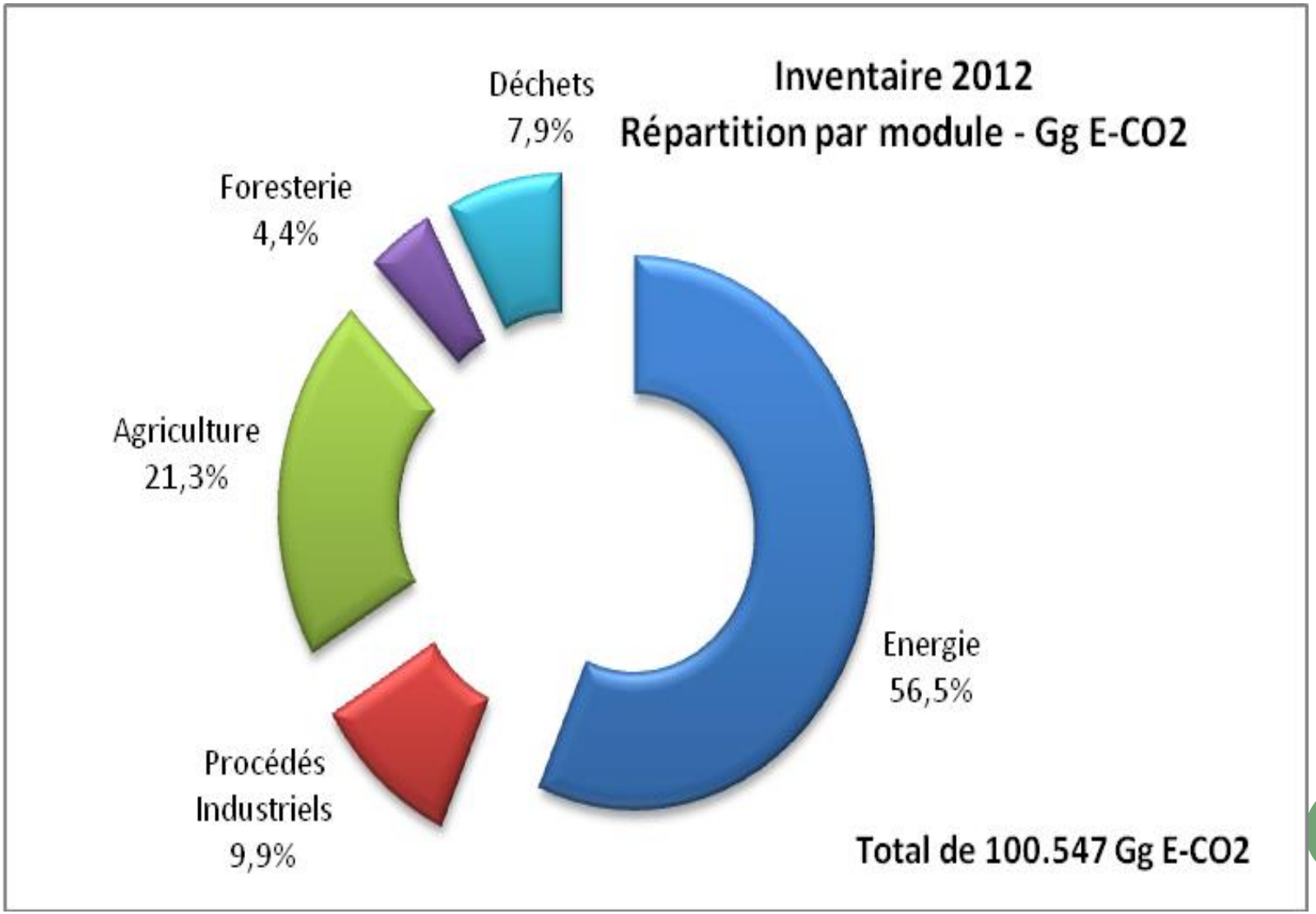
N_2O : 17 556 Gg

- Sequestrations CO_2 :

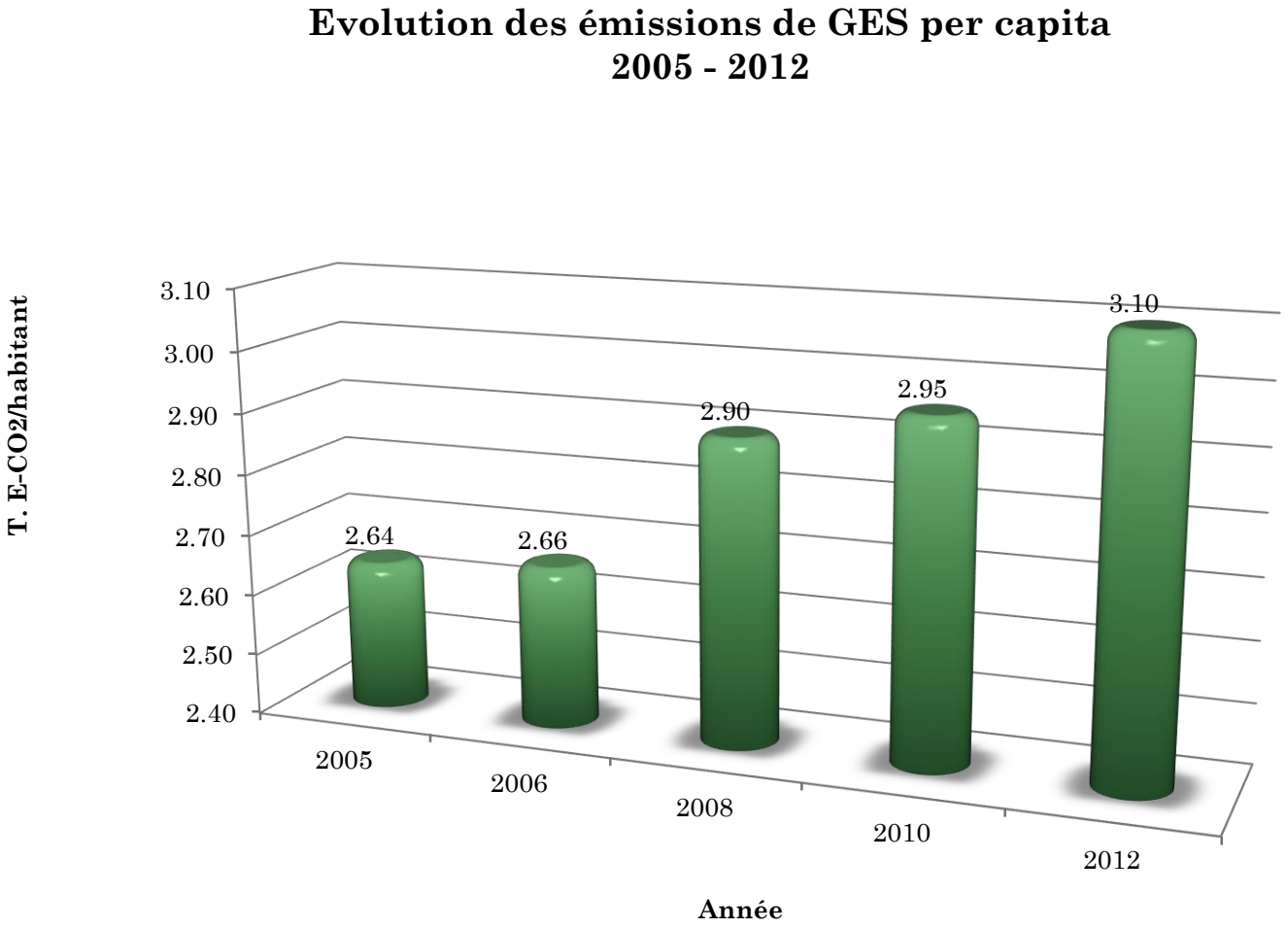
5 103,50 Gg (4,8%)



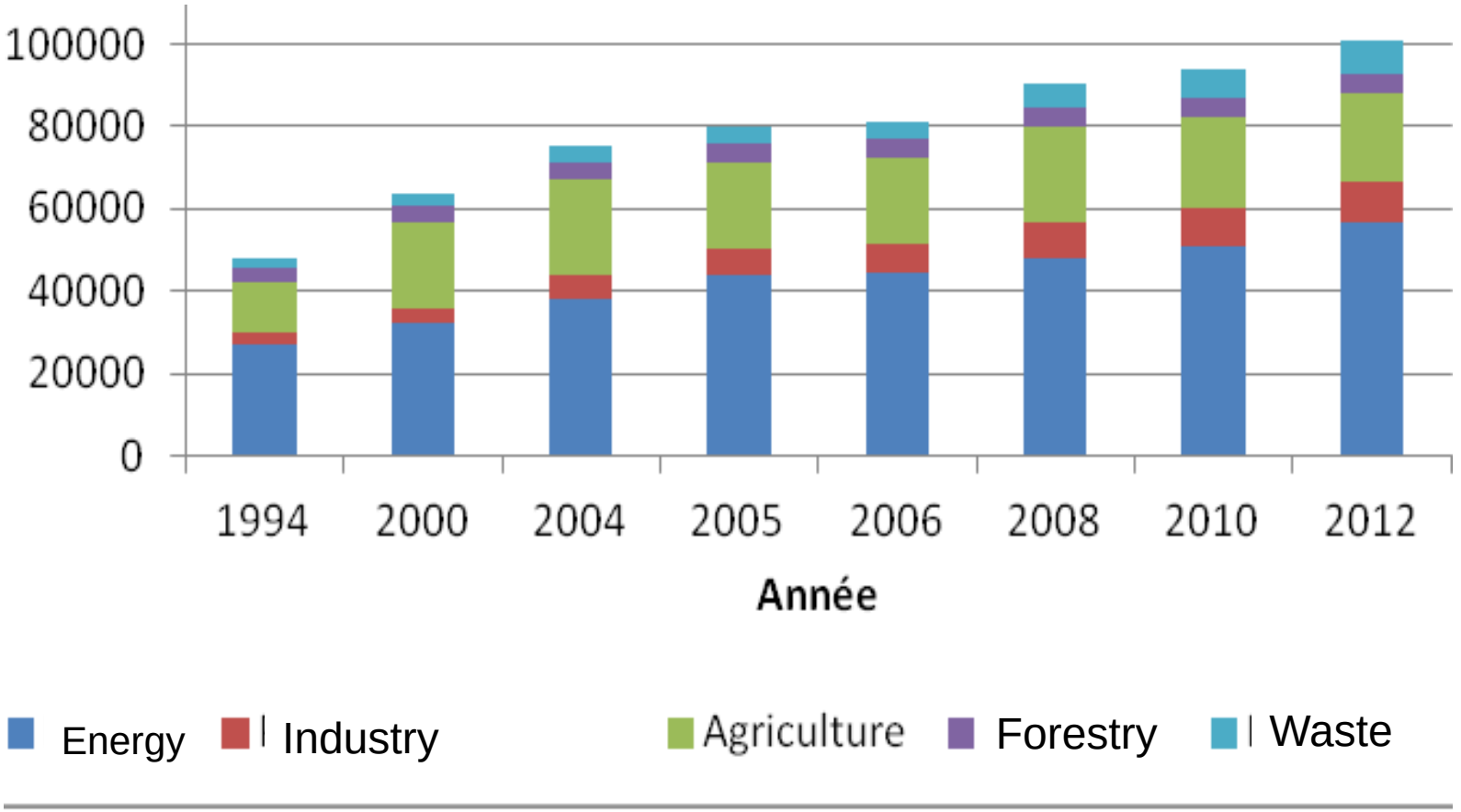
GLOBAL RESULTS OF EMISSION BY SECTOR FOR 2012

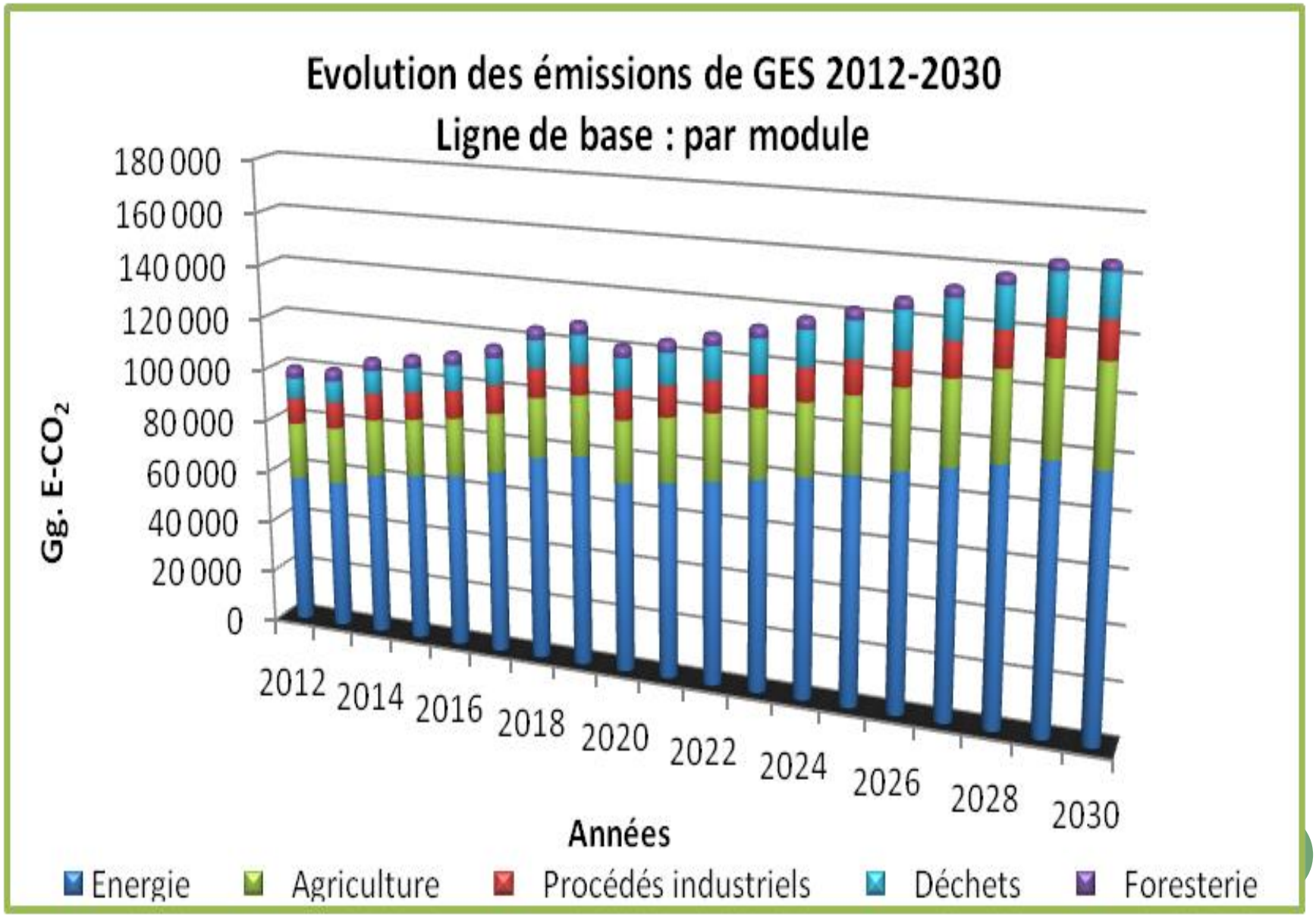


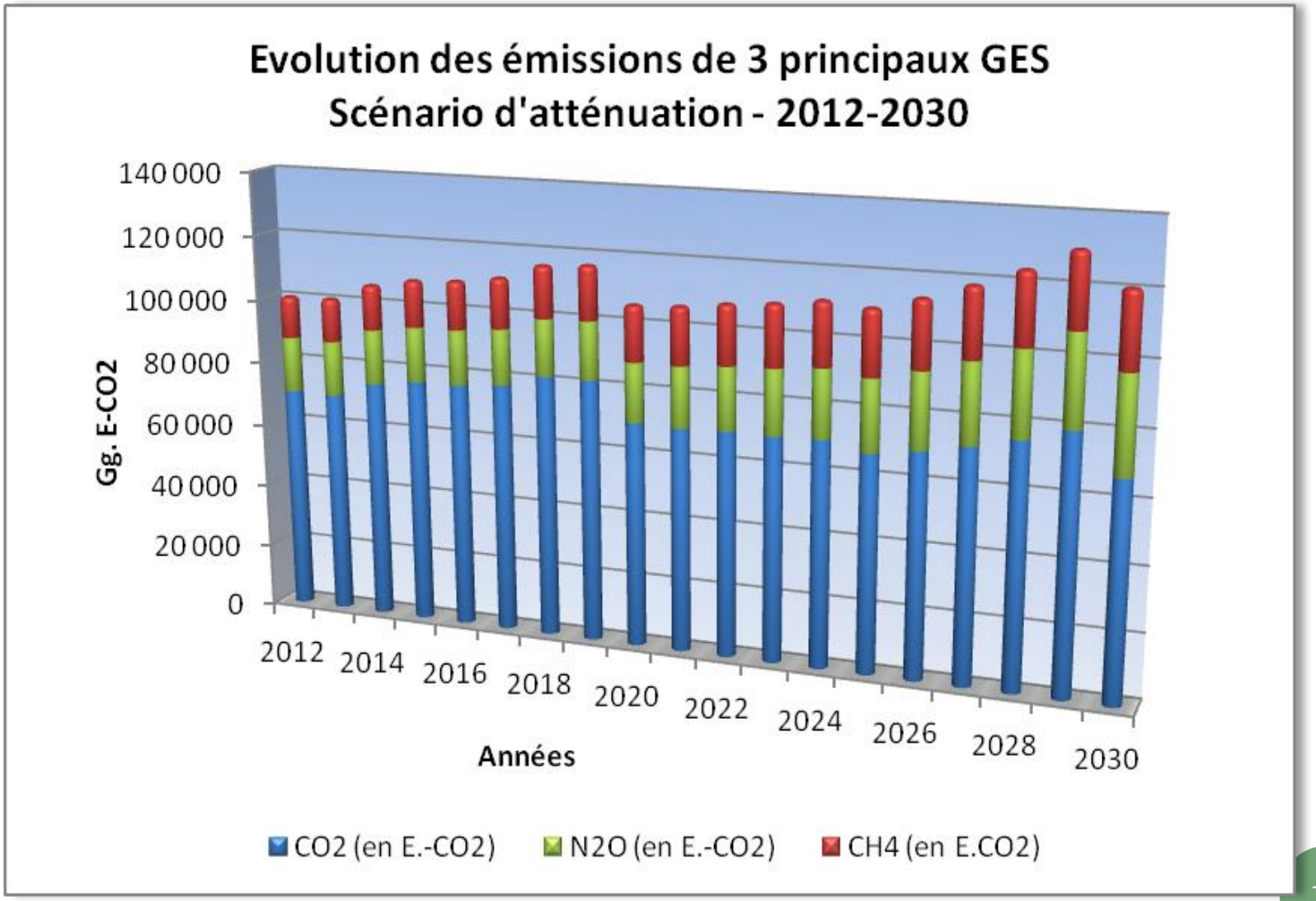
EMISSION PER CAPITA - TREND



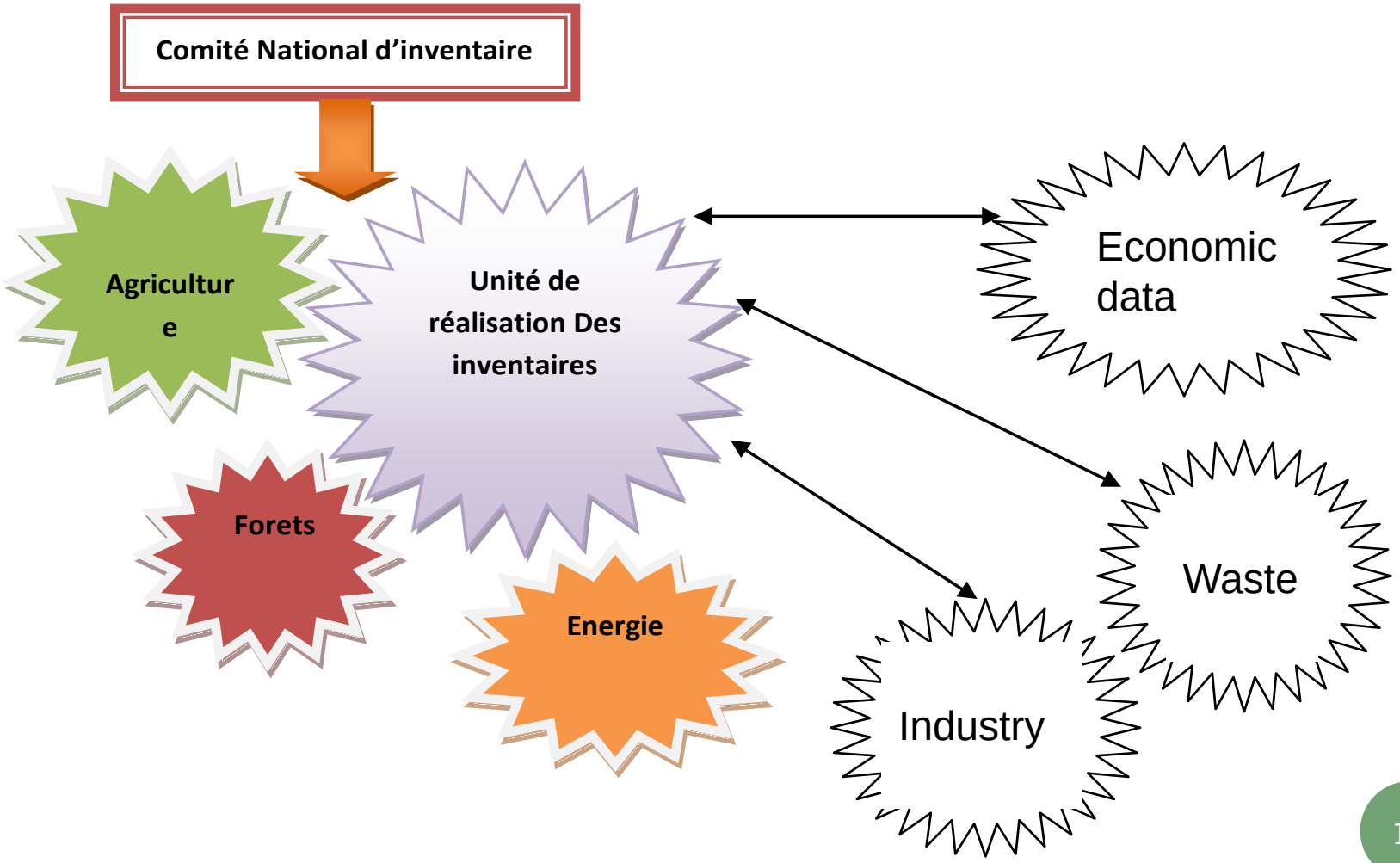
Analyss of trends of emissions per sector between 1994 and 2012




Evolution des émissions de GES 2012-2030
Ligne de base : par module
180 000
160 000
140 000
120 000
100 000
80 000
60 000
40 000
20 000
0
Gg. E-CO2
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
Années
Energie
Agriculture
Procédés industriels
Déchets
Foresterie


Evolution des émissions de 3 principaux GES
Scénario d'atténuation - 2012-2030
140 000
120 000
100 000
80 000
60 000
40 000
20 000
0
Gg. E-CO2
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
Années
CO2 (en E.-CO2)
N2O (en E.-CO2)
CH4 (en E.CO2)

INSTITUTIONAL SCHEME OF THE NATIONAL SYSTEM FOR THE INVENTORY OF GHG EMISSIONS



3. MITIGATION ACTIONS AND EFFECT

Mitigation Options

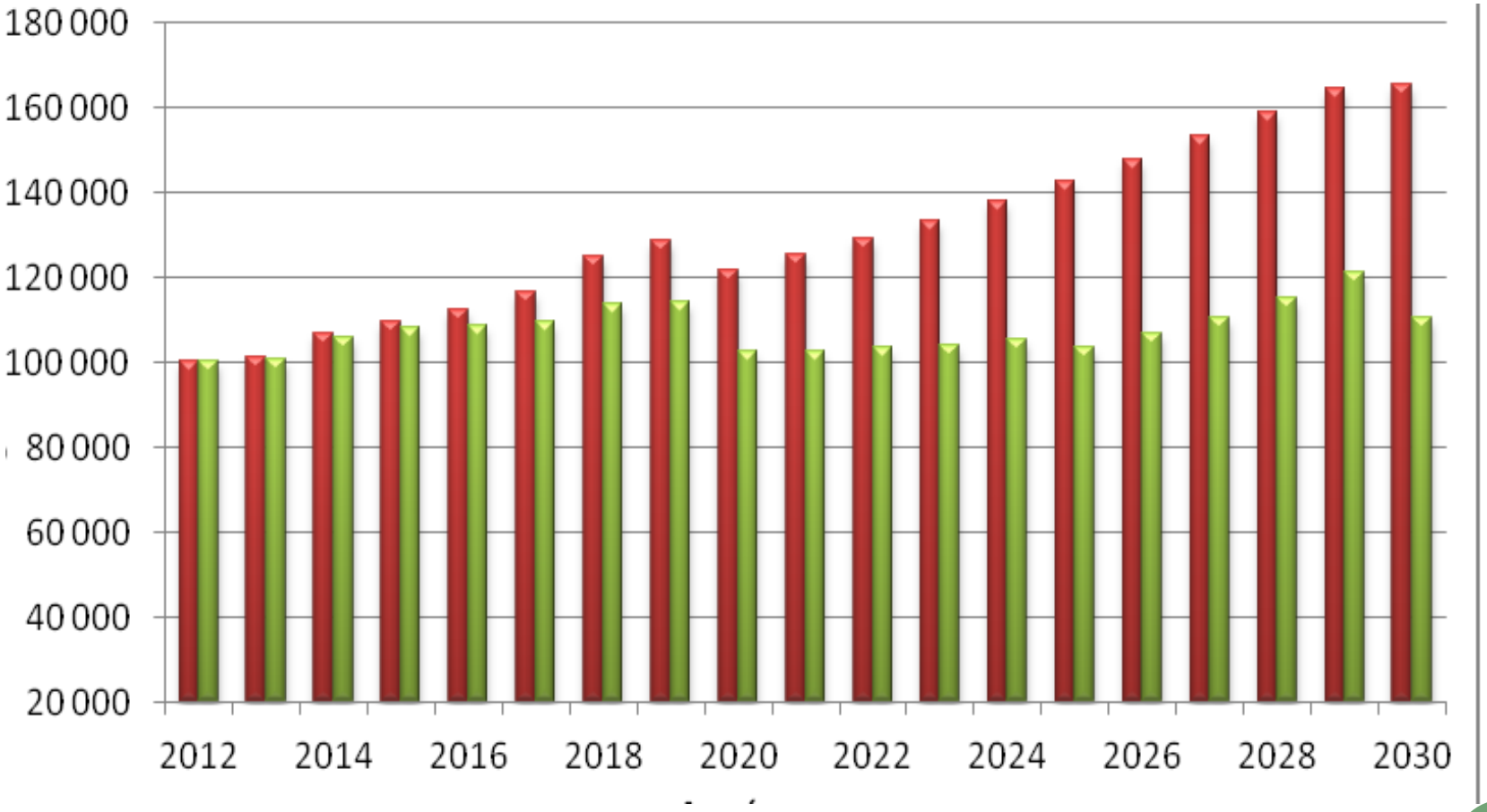
- **Adopted methodology for the definition of mitigation measures**
  - Emphasis was placed on measures that could mitigate GHG emissions while enabling Morocco to meet its challenges of economic growth and social development.
  - The main objective of the mitigation measures identified is to ensure the integration of GHG reduction requirements into all Moroccan development programs.
  - The suggested measures are based both on current national programs and on new projects resulting from consultation with the various operators.

MITIGATION OPTIONS ENERGY – NON ENERGY

- The basic investment for the implementation of **energy** measures is **49.94 billion US $**
- The mitigation potential is **51.6 million t CO_2/year.**
- The basic investment for the implementation of **non-energy** measures is **5.09 billion US $**
- The potential mitigation is **19.5 million t CO_2/year.**

Total: **55 billions US $ / 71 million T CO2e**

Mitigation measures…Baseline vs Mitigation



Mitigation Measures and Policies

- Contribution of the NAMAs to the mitigation of GHG emissions
  - NAMA Buildings
  - NAMA Agriculture
  - NAMA Household Waste
  - NAMA solar pumping
  - NAMA solar roofs PV in BT
- CDM portfolio
- Impact of the application of the Thermal Building Regulation in Morocco on the mitigation of GHG emissions
- Assessment of the GHG mitigation potential of the Green Morocco Plan

Needs and gaps concerning human, regulatory and institutional Capacity-Building

6 cross-cutting modes of intervention :

- Strengthening the legal and institutional framework
- Improvement of the expertise and the observation
- Regional variations of the policies of combatting global warming
- Prevention and reduction of climate risks
- Awareness-raising, empowerment of actors and capacity-building
- Promoting research, innovation and transfer of technologies

Needs and Gaps in Financing,Monitoring and Assessment Capacity-Building

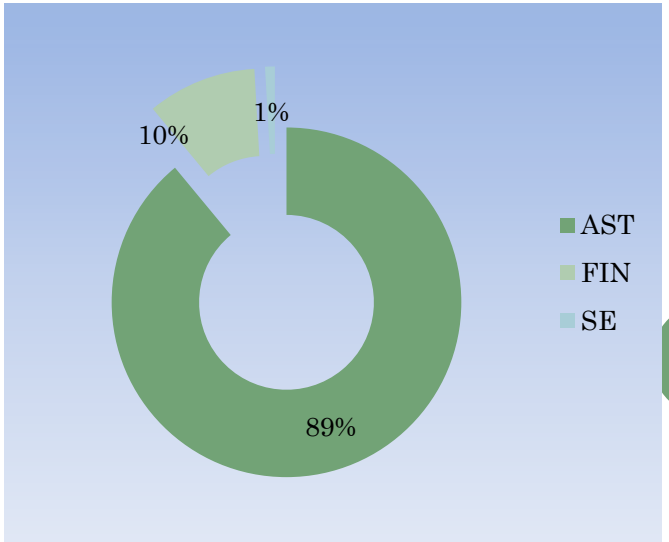
5 interventions considered :

- institutional
- financial engineering
- technical assistance
- capacity-building
- Monitoring and assessment

Needs and Gaps in CB: Global Action Plan

- Action plan for the implementation of CB measures related to different aspects
- Timelines used in the budget estimate and the financial arrangement of the CB actions:
  - Annual,
  - short term (ST) under 3 years,
  - medium term (MT) - 3 to 6 years,
  - long term (LT) - 6 to 15 years.

Global Budget
111.7 million US $



Financing Needs...

- Morocco proposed a **range of mitigation and adaptation measures** communicated through TNC, PIV and INDC
- The sectors that have been selected are those with real potential for **Morocco's transition to green growth** (water, renewable energy and energy efficiency, forestry, agriculture, cities, transport, waste management, etc.).
- Morocco counts on the mobilisation of resources of the **Green Climate Fund (GCF)** to contribute to the financing of its GHG emission mitigation and adaptation projects
- These resources should make it possible to mobilize even greater amounts **from the private sector through leverage** and towards countries offering an attractive policy and investment environment as is the case for Morocco.

5. MRV

MRV OF THE NAMAS …

EX. of The Waste NAMA

The MRV system proposed in the framework of this NAMA is stated as follows :

- MRV of GHG emissions ;
- MRV of sustainable development cobenefits ;
- MRV of GHG emissions.

Process ongoing for other NAMAs

SNI-GES System

Experience and lessons learned in participating in the ICA process

Part II: Experience and lessons learned in participating in the ICA process

1. The BUR preparation and domestic coordination

a. Development of the BUR1 in parallel with the TNC.

b. The TNC&BUR1 process has raised the level of coordination among the various partners.

c. Was the basis for the preparation of Morocco's NDC,

2. The value addition of the TA of BURs by the TTE

a. The TA of the BUR1 of Morocco pointed out some gaps

b. Emphasize some details to be presented to ensure more transparency

c. Respect data Tables as indicated in UNFCCC reporting guidlines of BURs

d. The quality of BUR 2 will thus be considerably improved.

Thank You

شكرا لكم