Greenhouse Gas Modelling Seminar
Bari (10th – 14th November, 2014)

GHG modelling for Tunisia

National Agency for Energy Conservation

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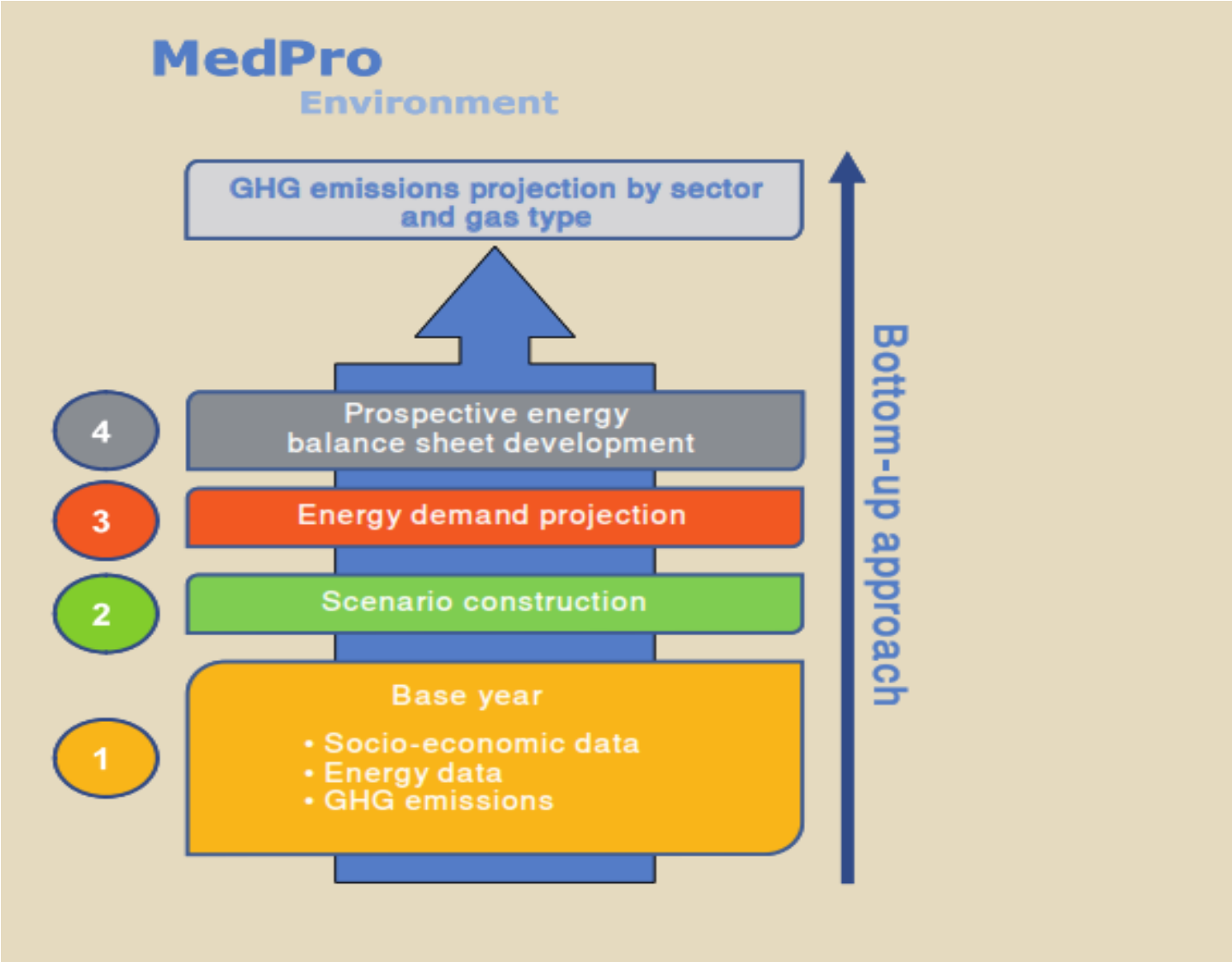
MED-PRO Overview

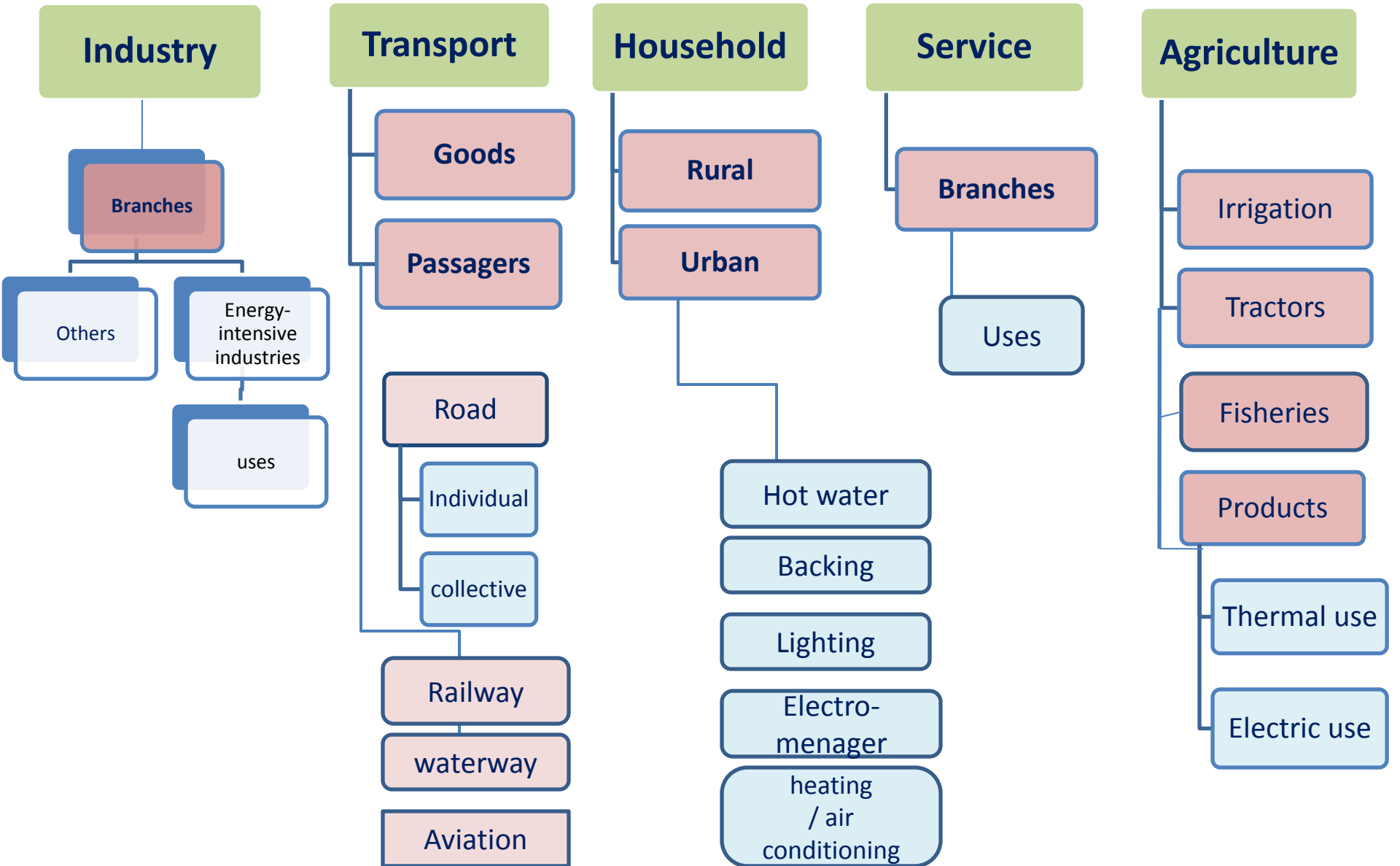
General introduction

- Forecasting / simulation model of the final energy demand in the medium and long term based on a techno-economic approach;
- Disintegration of the total demand in a "bottom up" approach; it is divided into several homogeneous modules, corresponding to the sub-sectors;
- Prospective energy CO2 emissions by sector and type of gas according to the methodology of the IPCC.

Med pro environment model



Final demand by sectors



Data needs

- ✓ Energy balance and sectoral energy consumption
- ✓ National statistics; indicators of socio-economic needs and production activities
- ✓ Technical documentation and survey results for the definition of specific energy needs

Approach work

Socio-economic scenarios

Demographic scenario:

(growth rate of population, urbanization rate,…)

Economic scenario:

(growth rate of GDP, share of major sectors in GDP,...)

Energy and CO2 emissions scenarios

Baseline scenario (Business as usual scenario)

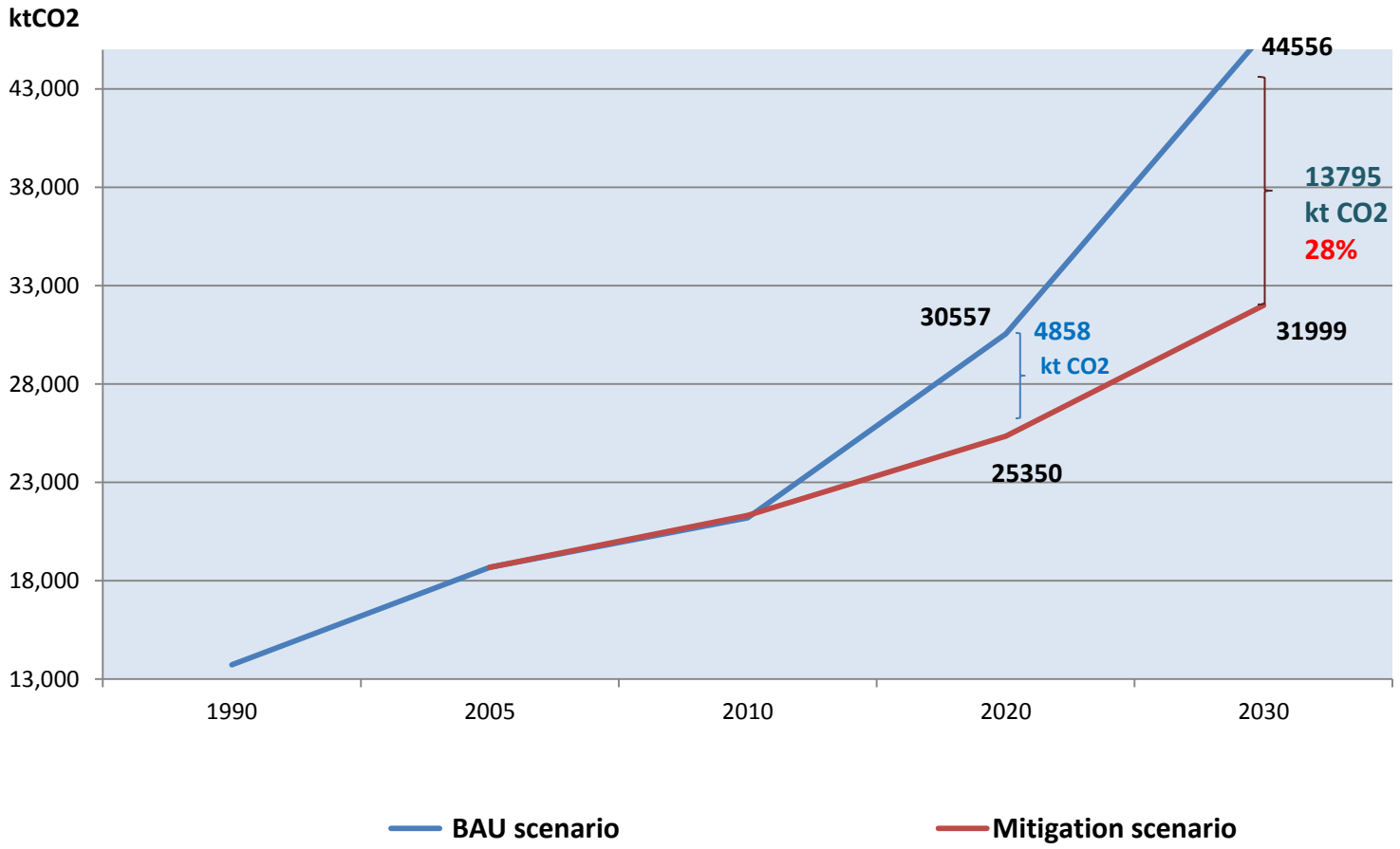
Mitigation scenario

Prioritization of variables and fixing of assumptions

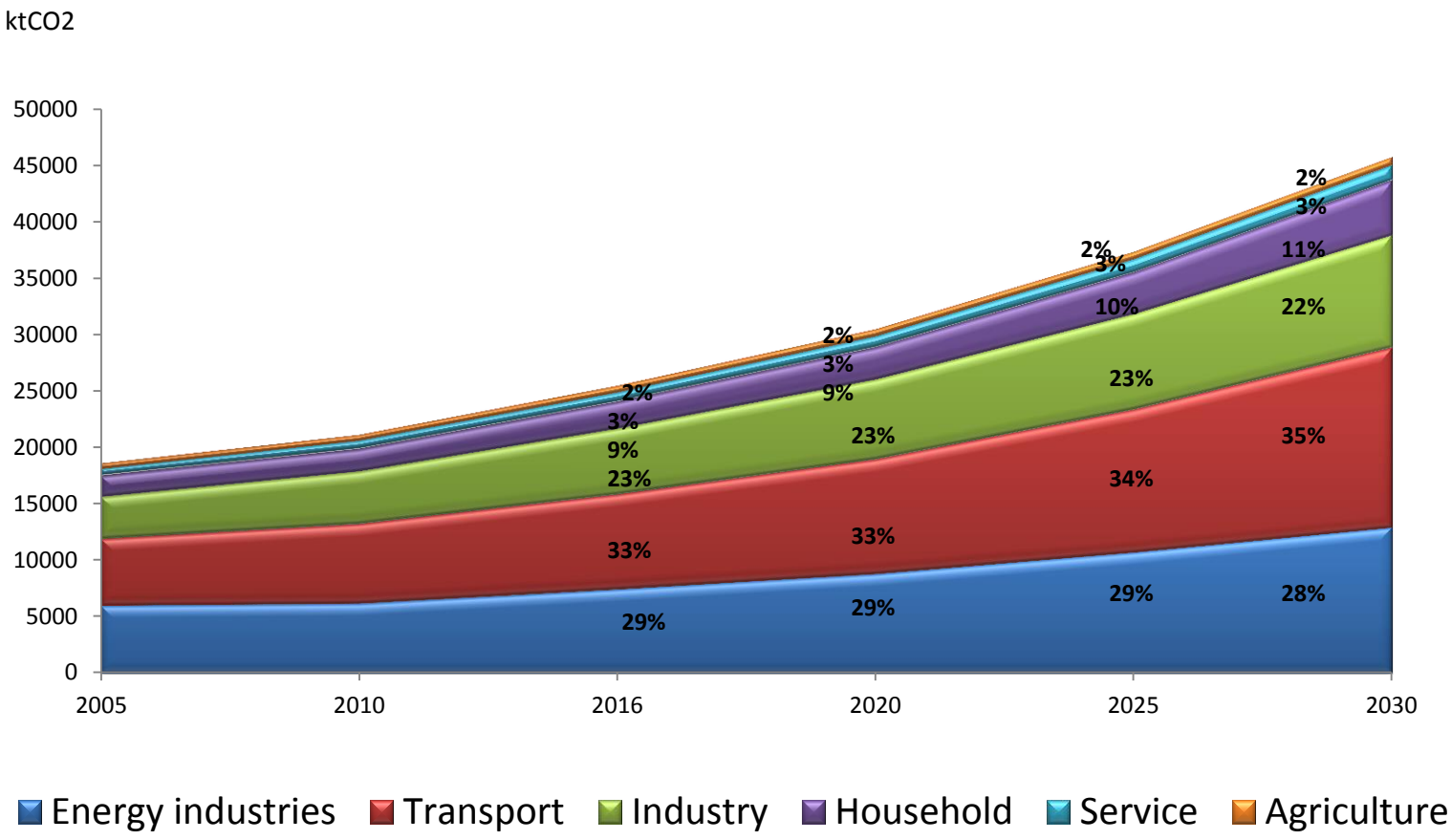
International environment	• Economic growth in the major regions of the world • Oil prices on the international market
Macro-economic and demographic development	• GDP growth and structure by sector • Changes in population and urbanization rate
Sectoral policies and development	• Industrial Strategy • Transport policy • Production of products with high added value
Energy policies	• Gaz Nat development, the future of renewables, • Policy objectives of Energy conservation
Sectoral energy demand	• Dissemination of efficient technologies • Specific consumption

Med-Pro Environnement results: the case of Tunisia

Emission trends



CO2 emissions due to combustion by sector in the BAU scenario



CO2 emissions due to combustion by sector in the mitigation scenario