



FOSSIL FUELS CONSUMPTION AND CO₂ EMISSIONS IN VIETNAM

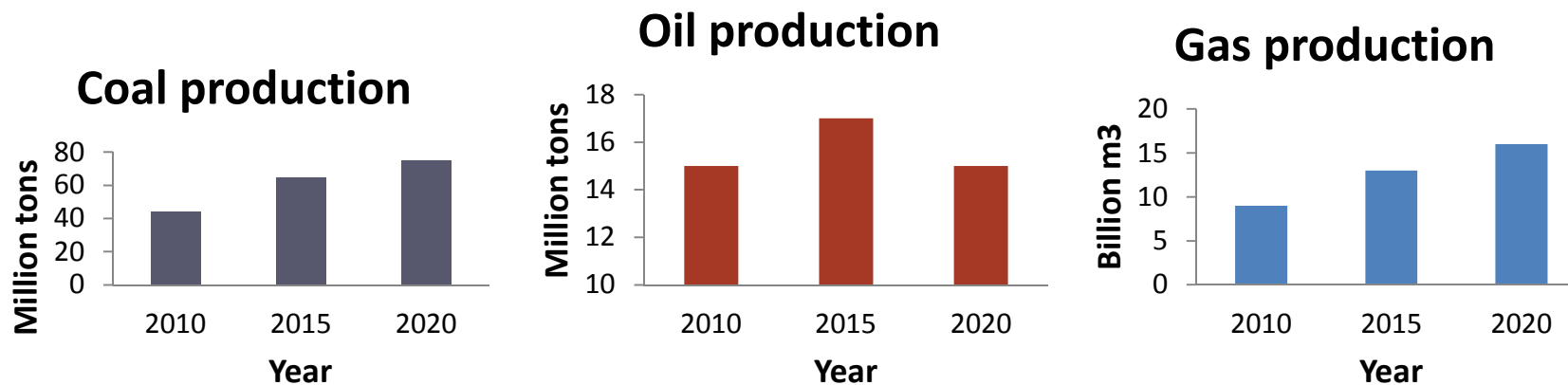
By Ho Huu Hieu

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Production and consumption of fossil fuels in Vietnam:

- ✓ More than 80% of energy comes from fossil fuels including coal, oil and gas.
- ✓ The primary energy production increases by 8% per year on average.

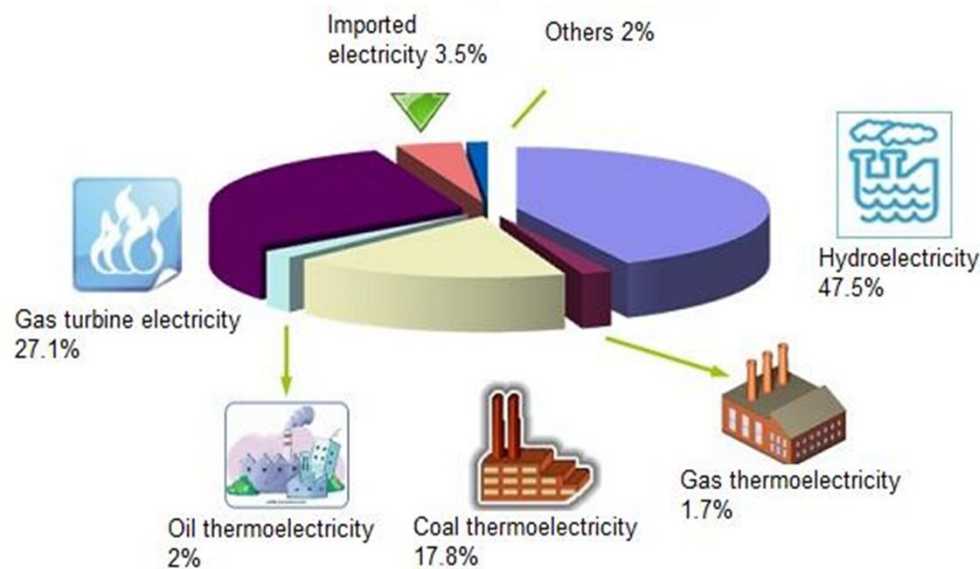
Future trend in fossil fuels production



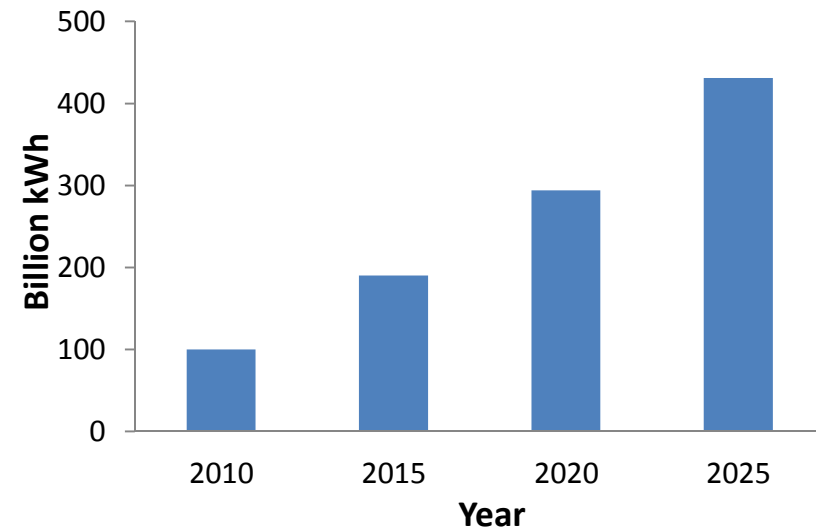
Electricity production in Vietnam:

- There are about 35 electric power plants with the total capacity of 26,475 MW

The rate of different types of electricity (in 2012)



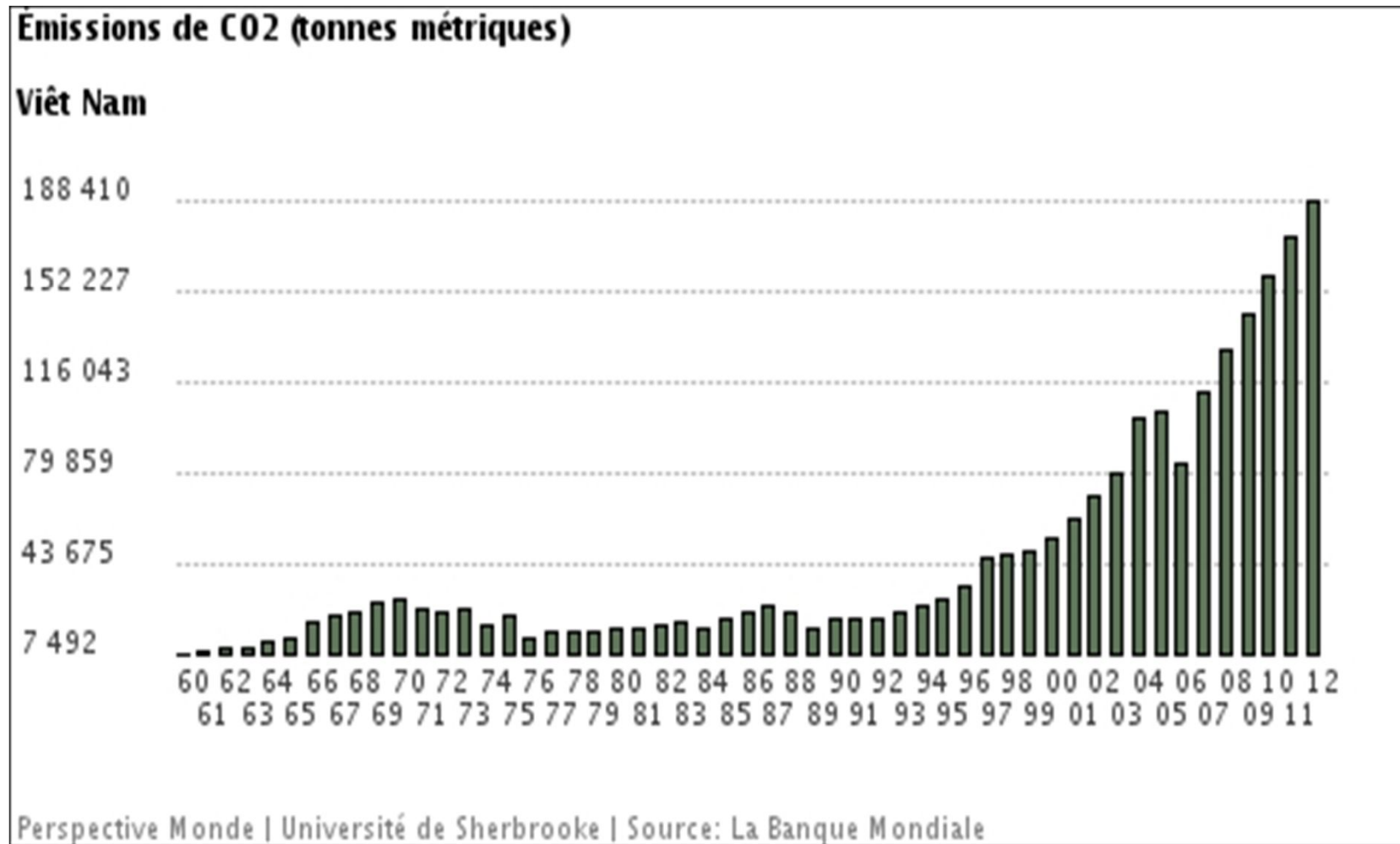
Electricity production



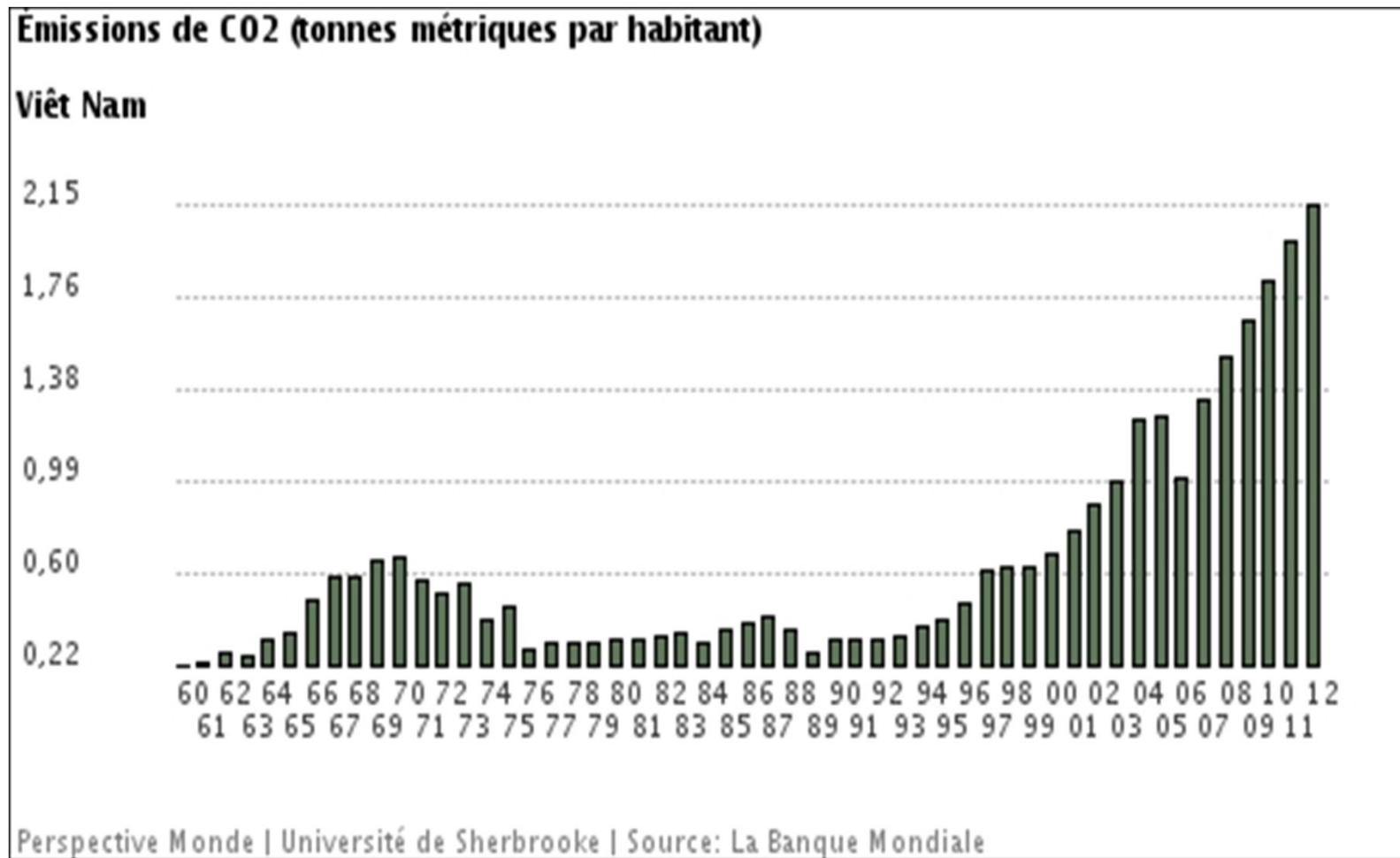
Efficiency of energy utilization in Vietnam:

- The efficiency of energy utilization in coal, oil and gas thermoelectric power plants is 28-32% which is 10% lower than developed countries.
- The amount of consumed energy for 1 product unit is much higher than developed countries.
- This is due to the lack of solutions for saving energy and backward technology

CO₂ emission with time in Vietnam:



CO₂ emission per capita with time in Vietnam:



Necessity of Carbon Capture and Storage (CCS) in Vietnam:

- Amount of CO₂ emission in Vietnam is very small if compared with developed countries.
- Vietnam is not among the countries which are required to decrease CO₂ emission (according to the Kyoto Protocol).
- However, Vietnamese government is strongly encouraging and supporting the studies to decrease CO₂ emission.



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PROJECT

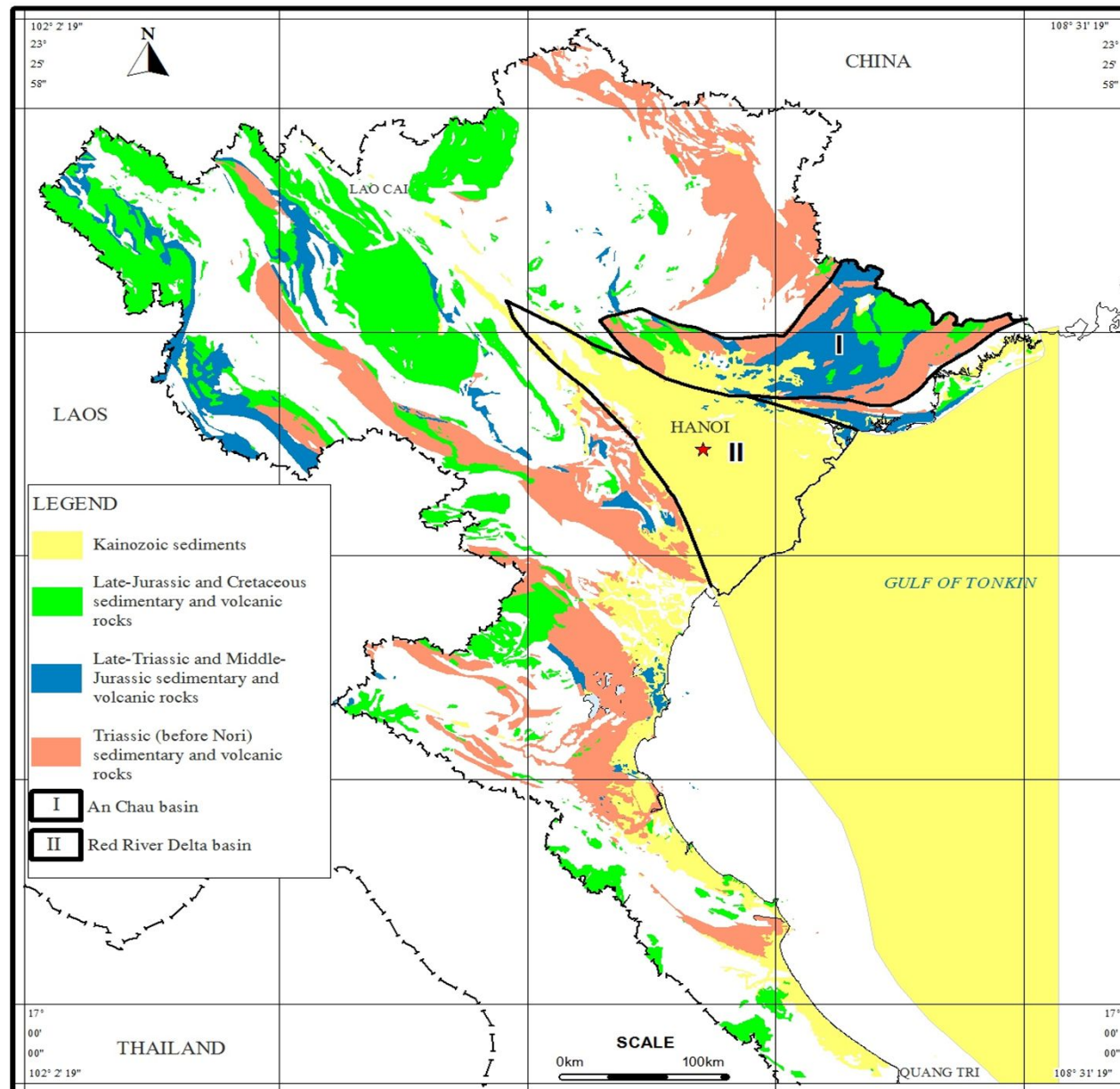
SCIENTIFIC AND PRACTICAL STUDIES TOWARD
POTENTIAL AND TECHNOLOGICAL SOLUTIONS FOR
CO₂ STORAGE IN GEOLOGICAL FORMATIONS IN
NORTHERN VIETNAM

Head of Project: Dr. Ho Huu Hieu

A. Objectives of the project

- ✓ To establish scientific basics and criteria for determining geological formation/structure for CO₂ storage.
- ✓ To zone and forecast the potential for CO₂ geological storage in Northern Vietnam.
- ✓ To propose the solutions for CO₂ storage in geological formation/structure in Northern Vietnam.
- ✓ To model a particular geological formation/structure (e.g. an oil or gas field or an unminable coalbed or an deep brine aquifer) in Northern Vietnam.

B. Study area



C. Tasks:

- 1) Collect and synthesize previous studies in the world to establish scientific basics and criteria for determining the geological formation/structure for CO₂ storage.
- 2) Assess and zone the potential for CO₂ storage in geological formation/structure in Northern Vietnam.
- 3) Assess and determine in detail the potential sites for CO₂ geological storage in the Red River Delta and An Chau basins.
- 4) Propose the solutions for CO₂ storage in geological formation/structure in Northern Vietnam
- 5) Construct 2D&3D models to illustrate the structure and process of CO₂ storage in a particular site in Northern Vietnam.



B. Appeal

To carry out successfully the project, the co-operation with CCOP and other international scientists in training specialists are necessary



**THANK YOU VERY MUCH FOR YOUR
ATTENTION !**