

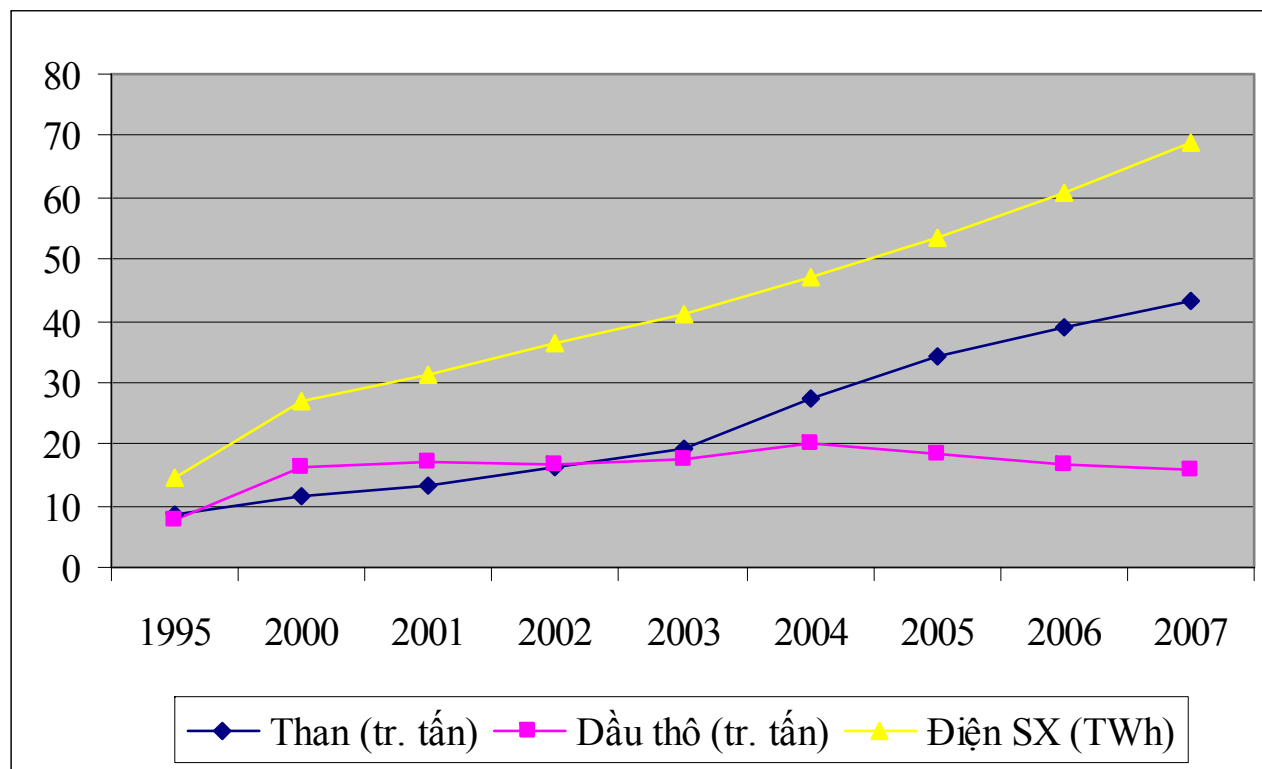
**GREATER MEKONG SUBREGION**  
**Subregional Energy Sector Forum**

**DEVELOPMENT**  
**IN VIETNAM ENERGY SECTOR**

*HỘI CHÀO MỪNG CỘNG HÒA VIỆT NAM 22/11/2008* *22ND NOVEMBER 2008*

# I

# ENERGY PRODUCTION PERIOD 1995-2007



## Growth Rate 1995-2007:

- Coal Production 14,6 %
- Electricity 13,8 %
- Crude oil 6,3 %

## 2007

- Coal: 43,2 Mill.tons
- Elect. Power 69,1 TWh
- Crude oil: 15.9

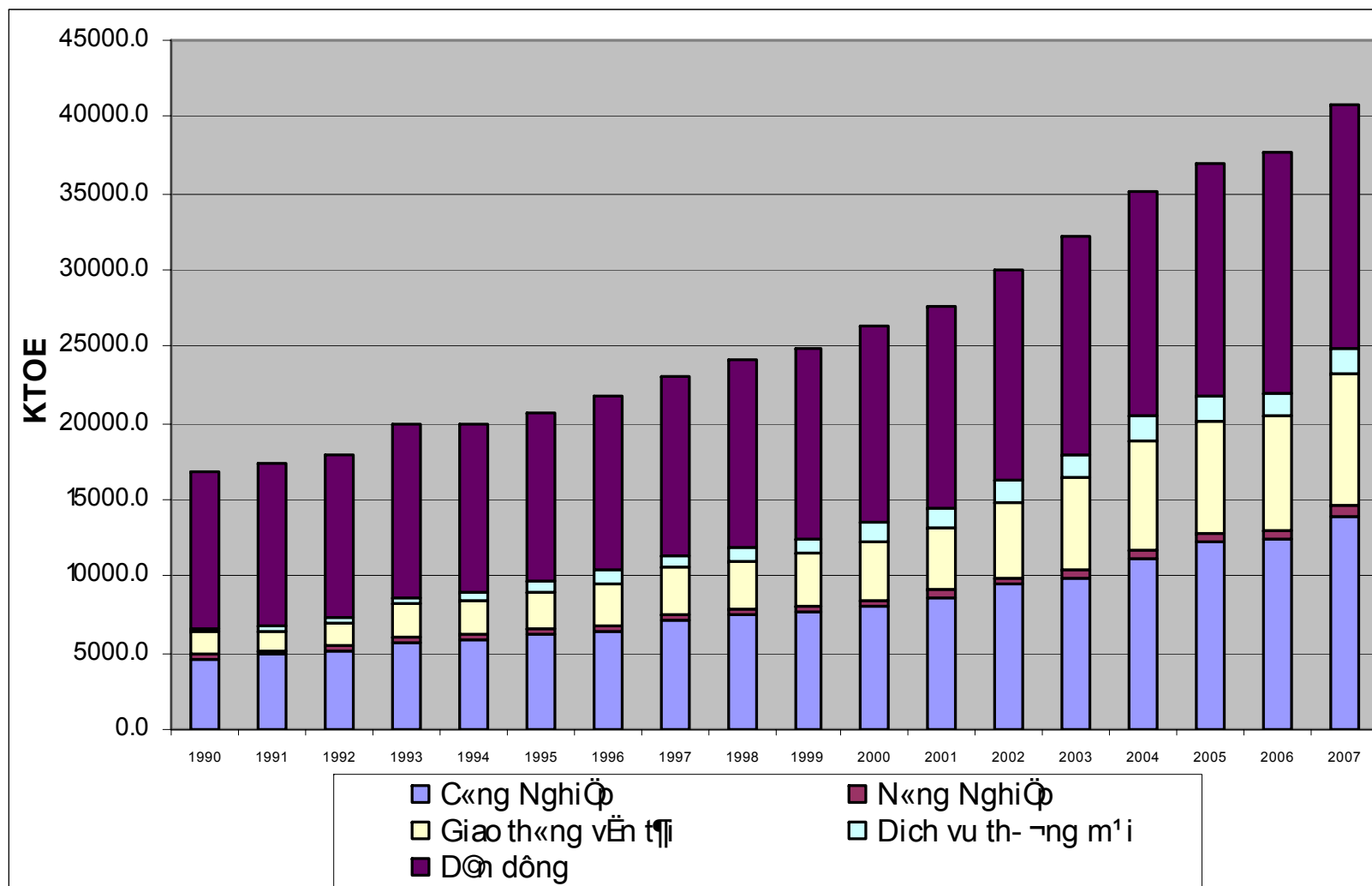
**I****FINAL ENERGY CONSUMPTION 1990-2007**

Unit: KTOE

<b>Năm</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Coal</b>	1324	2603	3223	3743	4017	4337	4851	5351	5528	6090
<b>Petroleum</b>	2479	4247	6920	7427	8884	10235	11888	12254	12317	14016
<b>Gas</b>	5.0	21.2	19.4	18	18	18	270	515	310	543
<b>Electricity</b>	532	963	1927	2223	2600	3002	3405	4051	4630	5256
<b>Non-Commercial</b>	12421	12872	14191	14297	14399	14694	14734	14780	14841	14848
<b>Total</b>	<b>16760</b>	<b>20707</b>	<b>26280</b>	<b>27708</b>	<b>29918</b>	<b>32286</b>	<b>35148</b>	<b>36951</b>	<b>37627</b>	<b>40752</b>

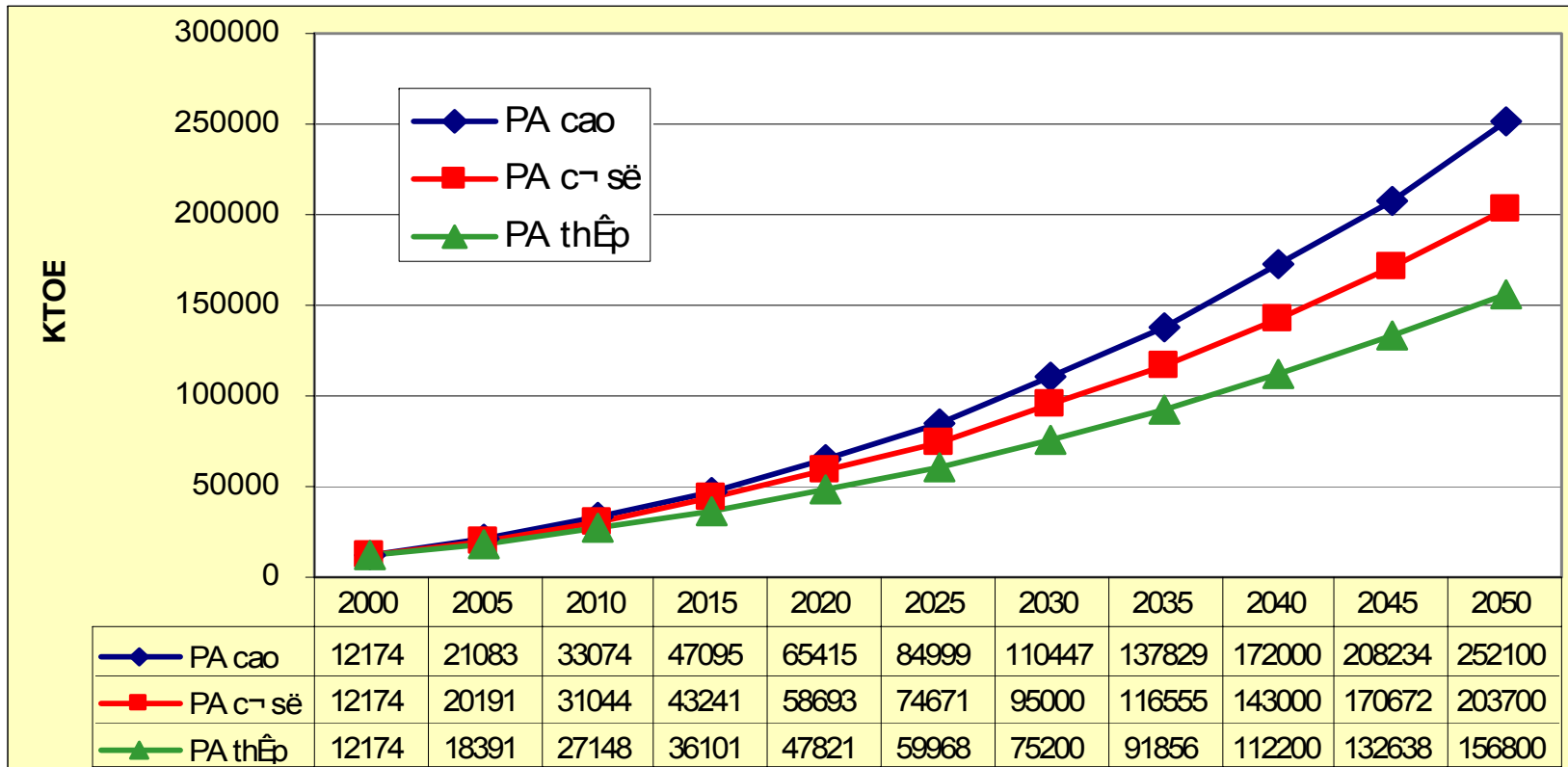
# I

# FINAL ENERGY CONSUMPTION 1990-2007



# II

# ENERGY DEMAND FORECAST



**Growth rate 2000 – 2007: 11%**

	<u>2001-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-</u>
<u>2050</u>				
- High case	8.8%	5,4 %	4,5%	3,9%
- Base case	8.2%	4,9 %	4,2%	3,6%
- Low case	7.1%	4,6 %	4,1%	3,4%

## II

# PRIMARY ENERGY SUPPLY CAPABILITY

### Up to 2025

- **Coal:** ~80 90 MT/ann
- **Crude oil:** 18-21 MT/ann.
- **Gas:** 16,5 BCM/ann..
- **Hydropower:** 60 TWh/ann.

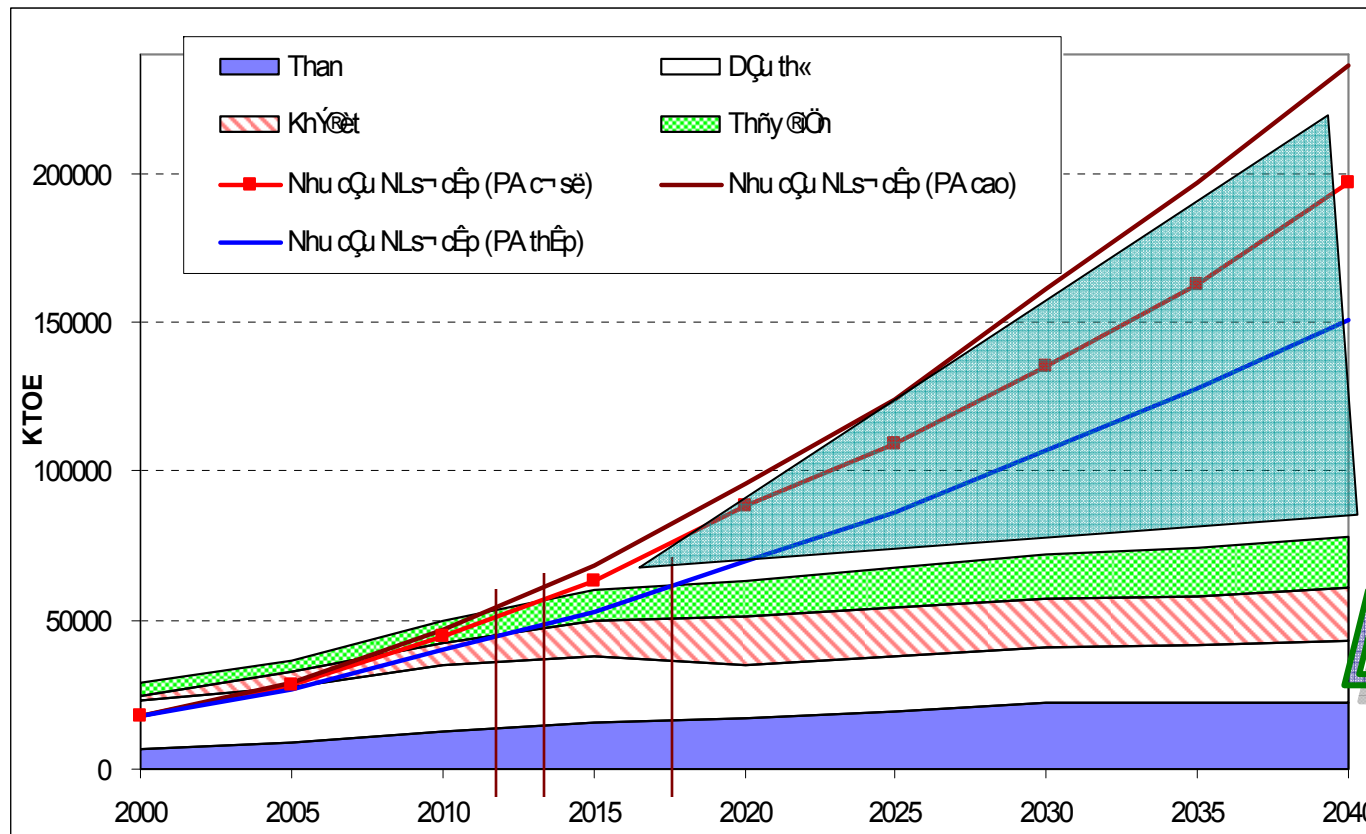
### ... to 2030

- **Coal:** >100 MT/ann.
- **Crude oil:** 18-22 MT/ann.
- **Gas:** 18 - 20 BCM/ann..
- **Hydropower:** 70 - 80 TWh/ann.

### Renewable energy for power generation

	2007		Potential to 2025		Potential to 2030	
	MW	GWh	MW	TWh	MW	TWh
Small HPPs	410	851	2300-2700	11,3 - 13,7	9500	30,5
Win	0.8	0	800-1000			
Solar	0,8	NA	4-6			
Biomass	150	NA	250-400			
Geothermal	0	0	200			
<b>Total</b>	<b>560</b>	<b>~900</b>	<b>3554-4306</b>			

# ENERGY DEMAND – SUPPLY BALANCE



*Deficit*

- Energy Saving/Efficiency
- Import (fuel/energy)
- Renewable
- Nuclear PP

# ENERGY PLANNING

- Diversifying
  - ***Energy type (wind, solar, renewable)***
  - ***Investment sources.***
- Refineries (1,2 &3)
- Commercial Energy Efficiency program/ SME Energy Efficiency program;
- National DSM program
- Promoting exploration/ production of Coal & Gas;
- Promoting Renewable Energy Development (10-13% total Energy consumption in 2025)
- Import (fuel/energy)
- Power interconnection/Trade
- Gas pipeline interconnection (TAGP)
- Nuclear PP

*Thank you*