

Vision of State Energy Policy (SEP)

Josef Votruba
Ministry of Industry and Trade



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- **Present situation in energy sector**
- **Sustainable development of energy sector / mature resources**
- **Expected development**

Ministry of Industry and Trade



- energy policy, legislation, authorisations, reports to EU

Energy Regulatory Office



- licensing, price setting and setting the rules for energy markets

Electricity Market Operator



- processing the supply and demand balance of electricity, organising of short term electricity market, evaluation and settlement of deviations

State Energy Inspection Board



- inspection body in energy sector, imposing of fines

State Energy Policy of the Czech Republic

Independence

- from foreign primary energy sources
- from energy sources from risk areas
- from reliability of deliveries of foreign sources

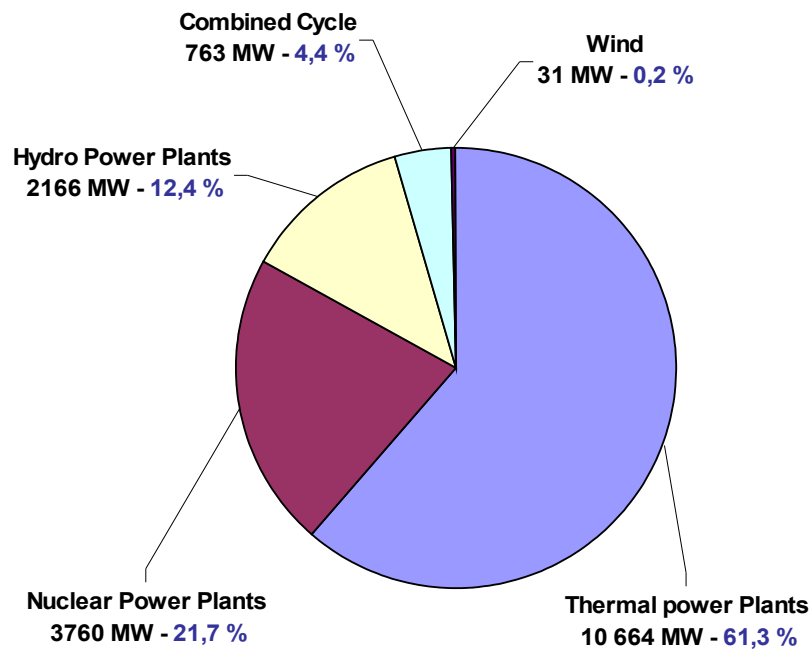
Safety

- Safety of power sources including nuclear safety
- Reliability of deliveries of all types of energy
- Rational decentralisation of all energetic systems

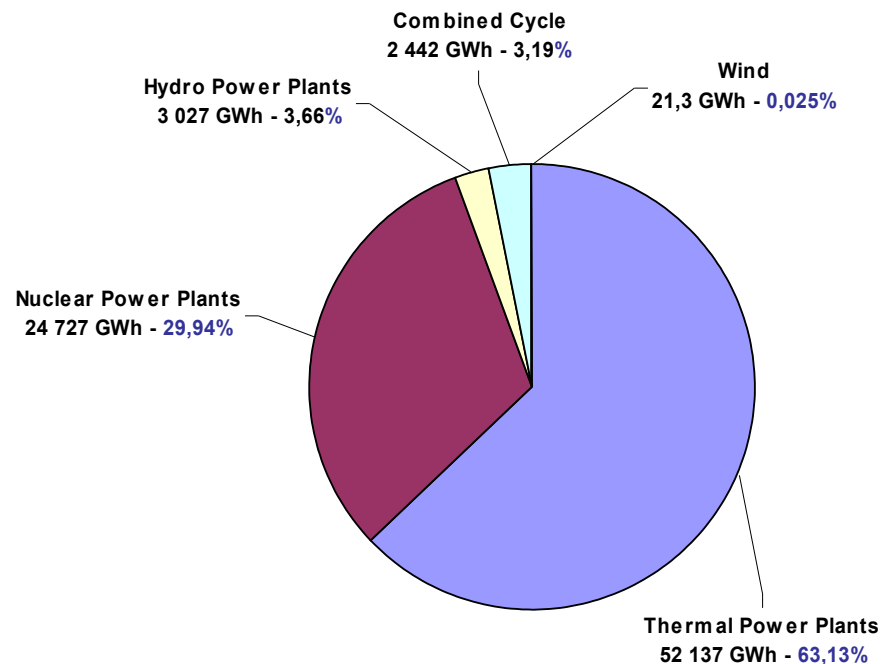
Sustainable Development

- Environmental protection
- Economic and social development

Electricity – Installed Capacity vs generation in 2005



Total: 17 412 MWe



Total: 82 578 GWh

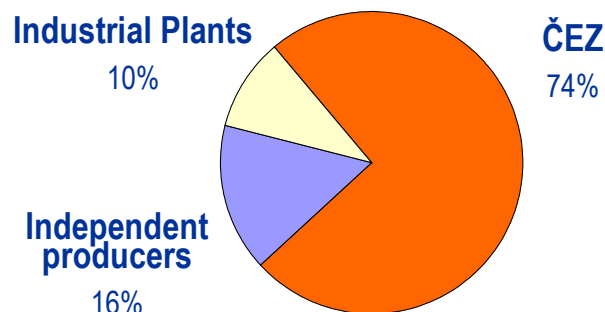
Electricity Generation

Current Situation

Net generation	82,58 TWh
Net export	16,2 TWh
Transit	6,0 TWh

TOTAL INSTALLED CAPACITY
17 412 MW

Market share



ČEZ – Largest Generator

12 135 MW

66,7% state owned

13 Thermal Power Plants

6 506 MW

2 Nuclear Power plants

3 760 MW

7 Large Hydro Power Plants

715 MW

2 Pumped Storage Hydro

1 145 MW

Approx. 50 Independent Producers – mainly CHP plants

3 099 MW

Approx. 50 Industrial Plants – CHP plants

1 806 MW

Approx. 50 Small Hydro Power Plants

282 MW

Wind Farms

38 MW

Production of electricity from RES

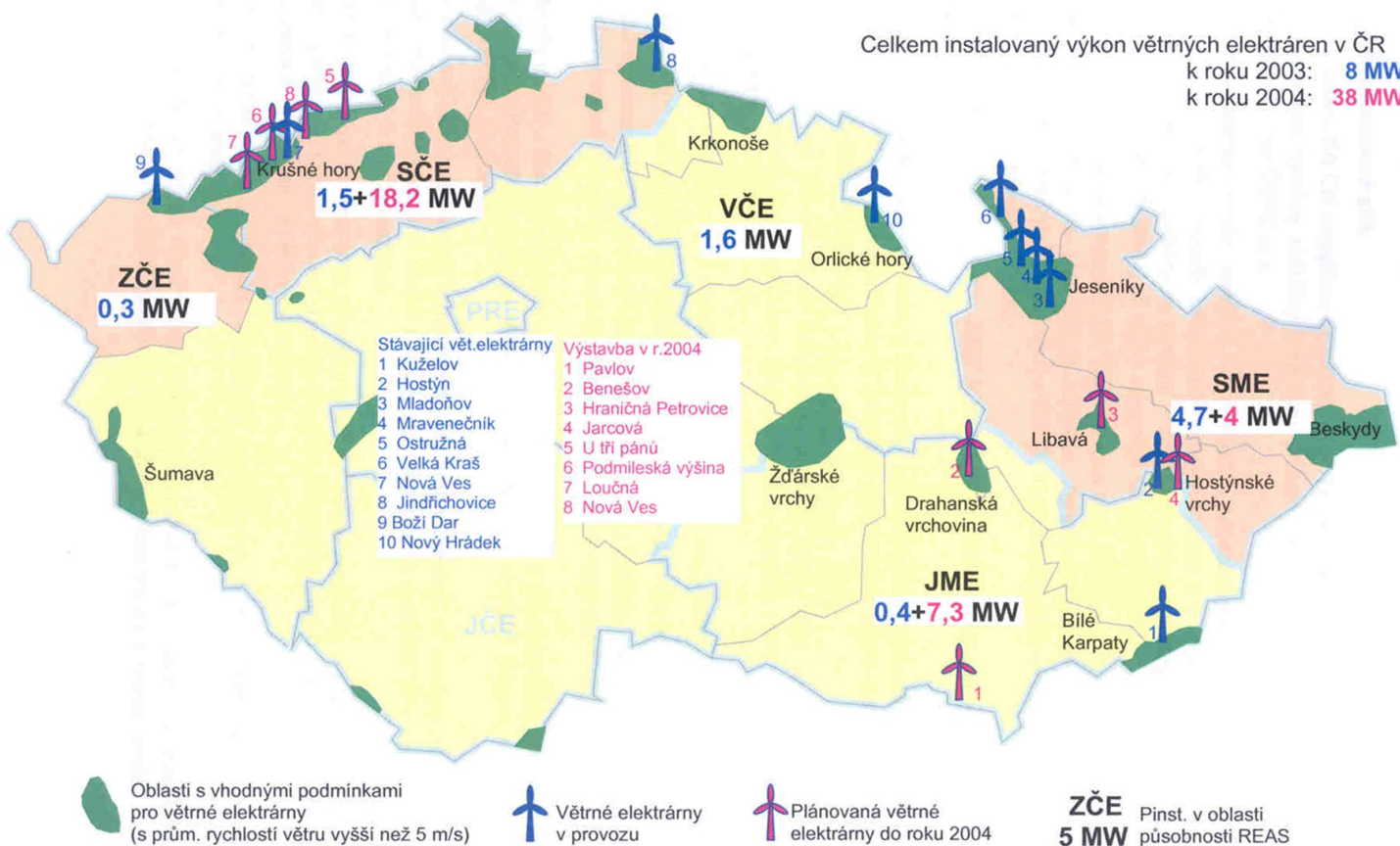
(GWh)	2003	2004	2005*
Water	1 383	2 019	2 383
Biomass	373	593	560
Biogas	108	139	160
Wind	4	9	21
Sun	-	-	-
Waste (Municipal)	9,6	10	10
RES Sum	1 878	2 771	3 134
Consumption btto	67 071	68 589	69 945
Share of RES	2,8%	4,04%	4,48%

*) expected results

Renewable electricity

Wind – Actual situation

Actual and planned wind farms in the Czech Republic



Sustainable development in energy sector =

fossil fuels modern technology +

nuclear energy +

renewable energy resources +

energy efficiency

- **The key factors for development of NPP**
 - Growth of consumption
 - Governmental limits for brown coal extraction
 - RES are not able to cover the growth
 - NPP are considered as a domestic resource
 - Suitable sites/locations and infrastructure
 - Tradition / project planning, technology, highly skilled personal

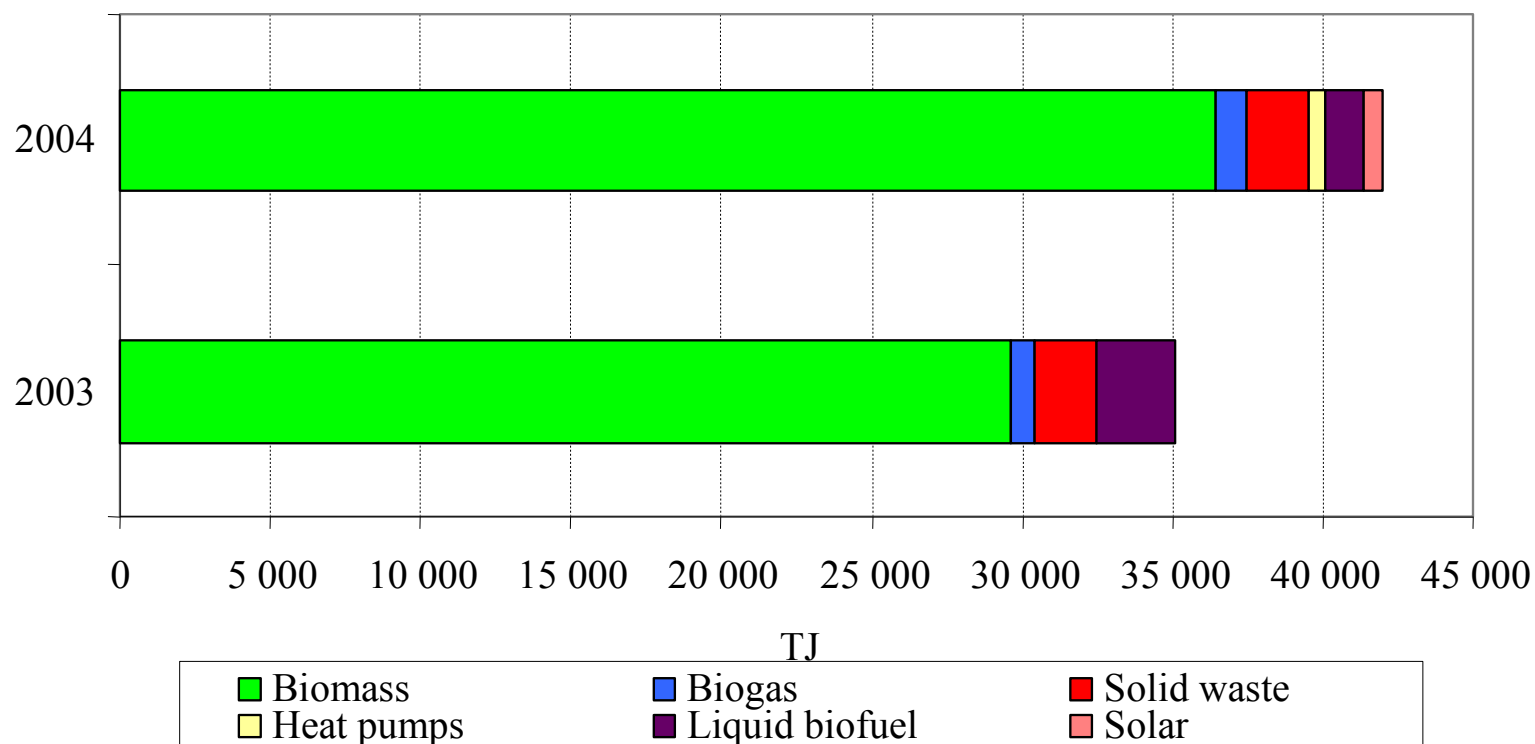
- **Two more NPP units 600 MW or 1500 MW each under discussion**



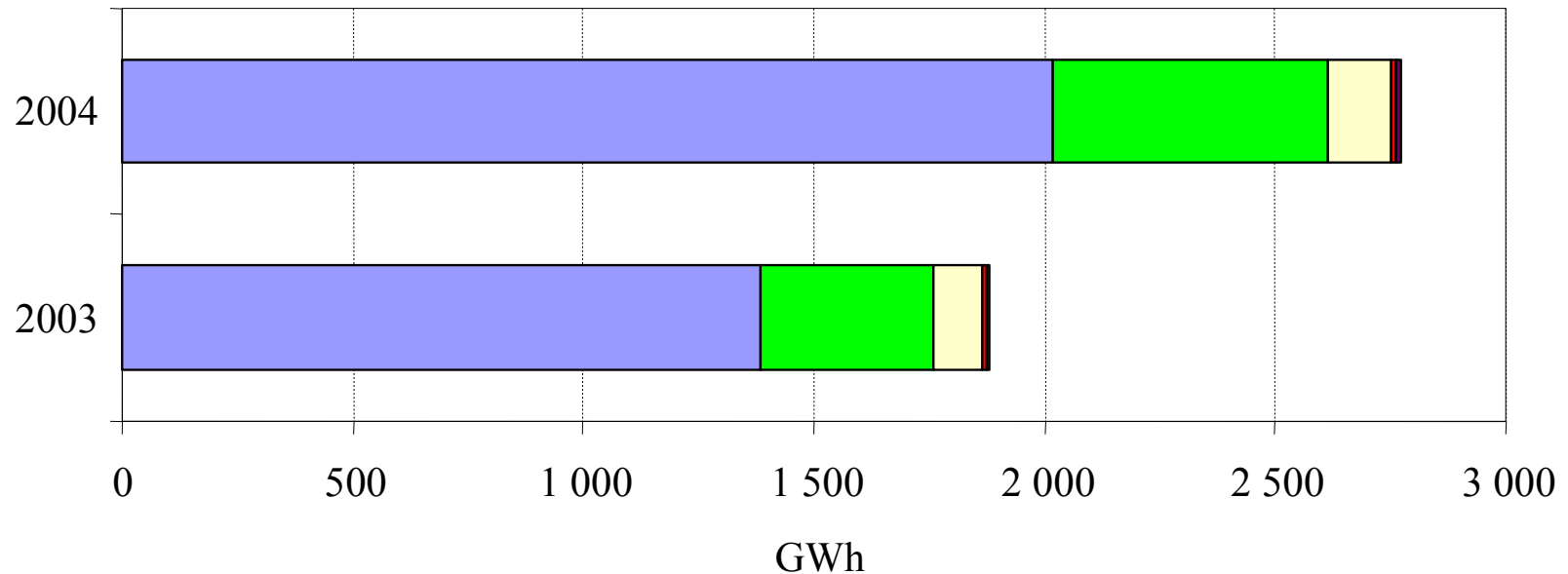
SEP Evaluation

Renewable Energy Resources (RES)

RES heat supply



RES Electricity production

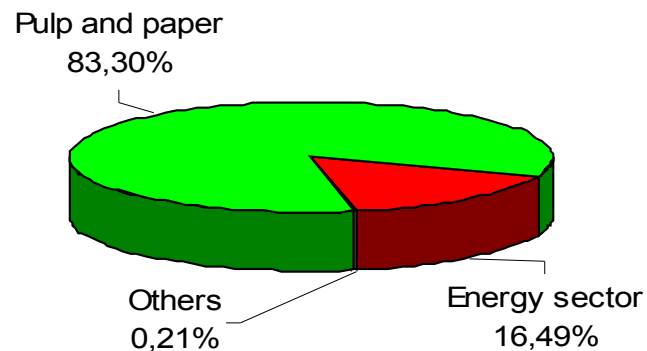
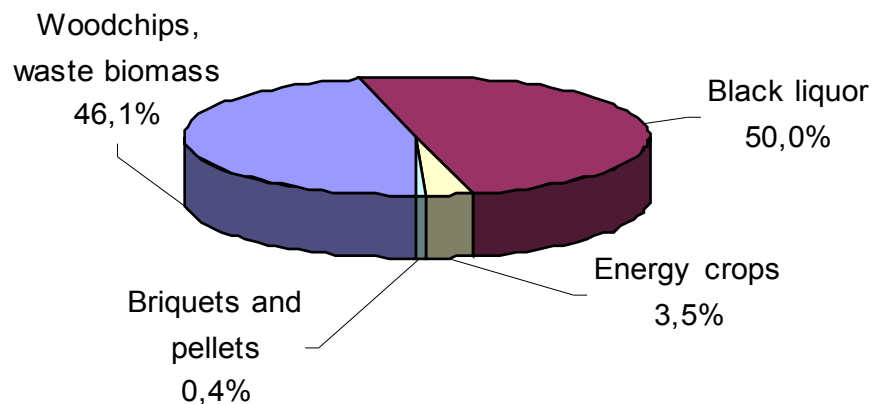


Water Power St. Biomass Biogas
Solid Waste Wind Power St. Photovoltaics

Biomass in 2004

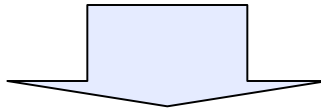
Energy use

Biomass type	For electricity generation [t]	For heat generation [t]	Total [t]
Woodchips, sawdust	243 834	864 912	1 108 747
Firewood	—	36 794	36 794
Energy crops	11 590	11 498	23 087
Briquets and pellets	1 227	2 251	3 478
Black liquor	157 203	862 042	1 019 245
Total	413 854	1 777 497	2 191 351
Est. household consumption			1 500 000
Export of energy used biomass			322 955
Total energy used biomass			4 014 306



- **Growing orientation on energy savings**
- **Buildings**
 - Energy certificate of buildings
 - Inspection of boilers and aircondition units
 - Energy audits systém - press on high quality
- **Home appliances**
 - Ekodesign – life cycle
 - Energy labeling system
- **Energy Industry**
 - Energy services and energy efficiency

- **Electricity consumption growth - decoupling**
- **RES are not able to cover the growth**
- **Existing Limits for brown coal extraction**

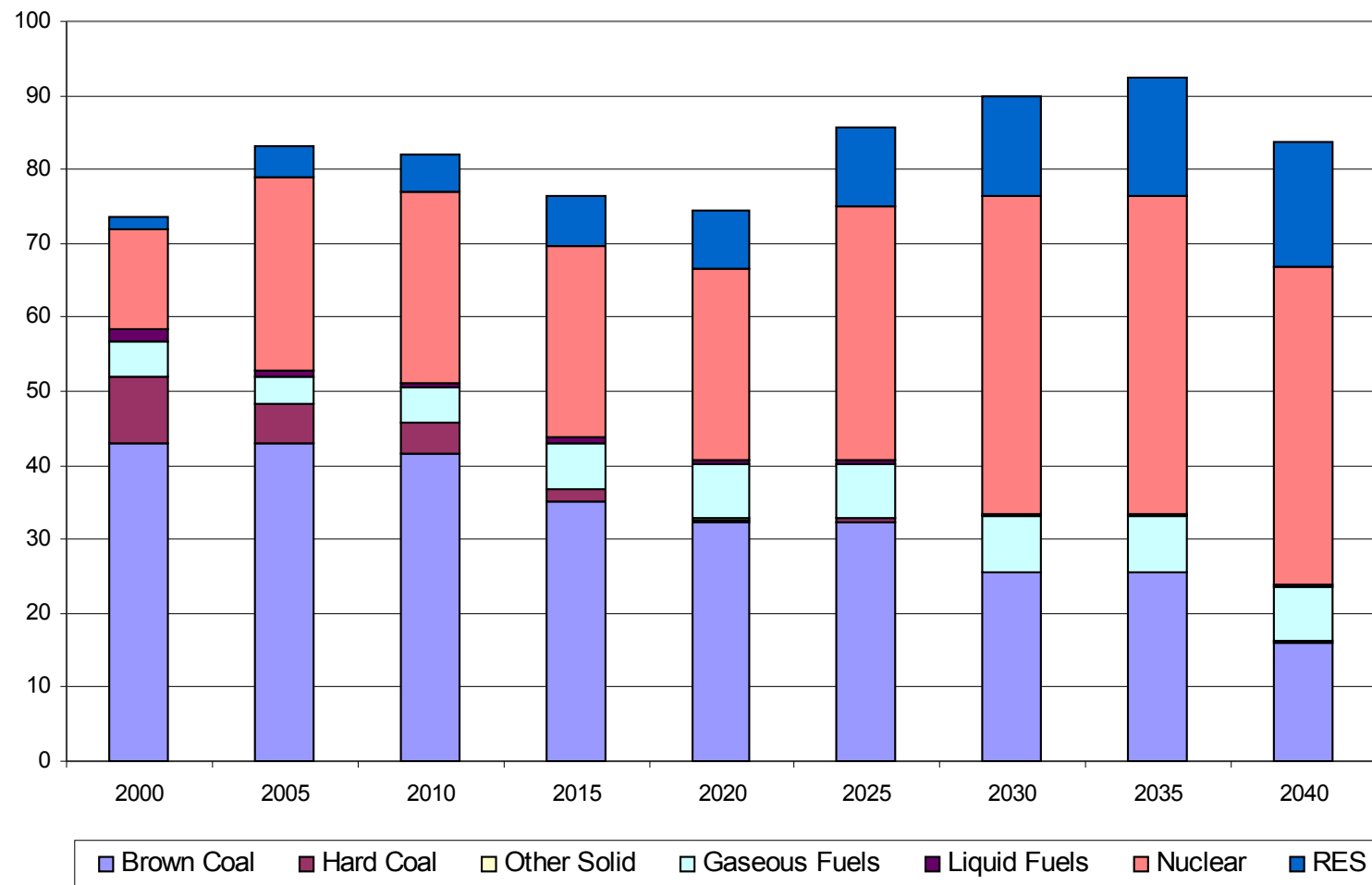


Principal decision

Limits and coal fired power plants versus nuclear energy

Energy philosophy

Expected development [TWh]



Outlook in Power Sector

2000 - 2030

Share on energy resources consumption	2000	2005	2030
Solid Fuels	52,4%	42,5%	30,5%
Brown Coal	36,6%	29,3%	20,8%
Hard Coal	15,8%	13,2%	9,7%
Gas	18,9%	21,6%	20,6%
Liquid Fuels	18,6%	15,7%	11,9%
Nuclear	8,9%	16,5%	20,9%
Renewables	2,6%	5,4%	15,7%
Share on electricity production	2000	2005	2030
Solid Fuels	70,5%	55,5%	36,8%
Brown Coal	58,4%	48,9%	31,9%
Bituminous Coal	12,1%	6,6%	4,9%
Gas	6,4%	4,7%	7,2%
Liquid Fuels	2,2%	1,1%	0,4%
Nuclear	18,4%	33,3%	38,6%
Renewables	2,3%	5,3%	16,9%

Thanks for your attention

Ing. Josef Votruba
Senior officer
odbor ekologické energetiky
Ministerstvo průmyslu a obchodu
Na Františku 32
110 15 PRAHA 1

kontakt

Tel.: 224 853 247
E-mail: votruba@mpo.cz

www.mpo.cz