



UPDATE ON CROATIA'S ENERGY SECTOR DEVELOPMENTS SINCE 2004

*Restructuring, Interconnections, Regional Energy Activities,
Issues Confronting CERA*

Mičo Klepo, CERA



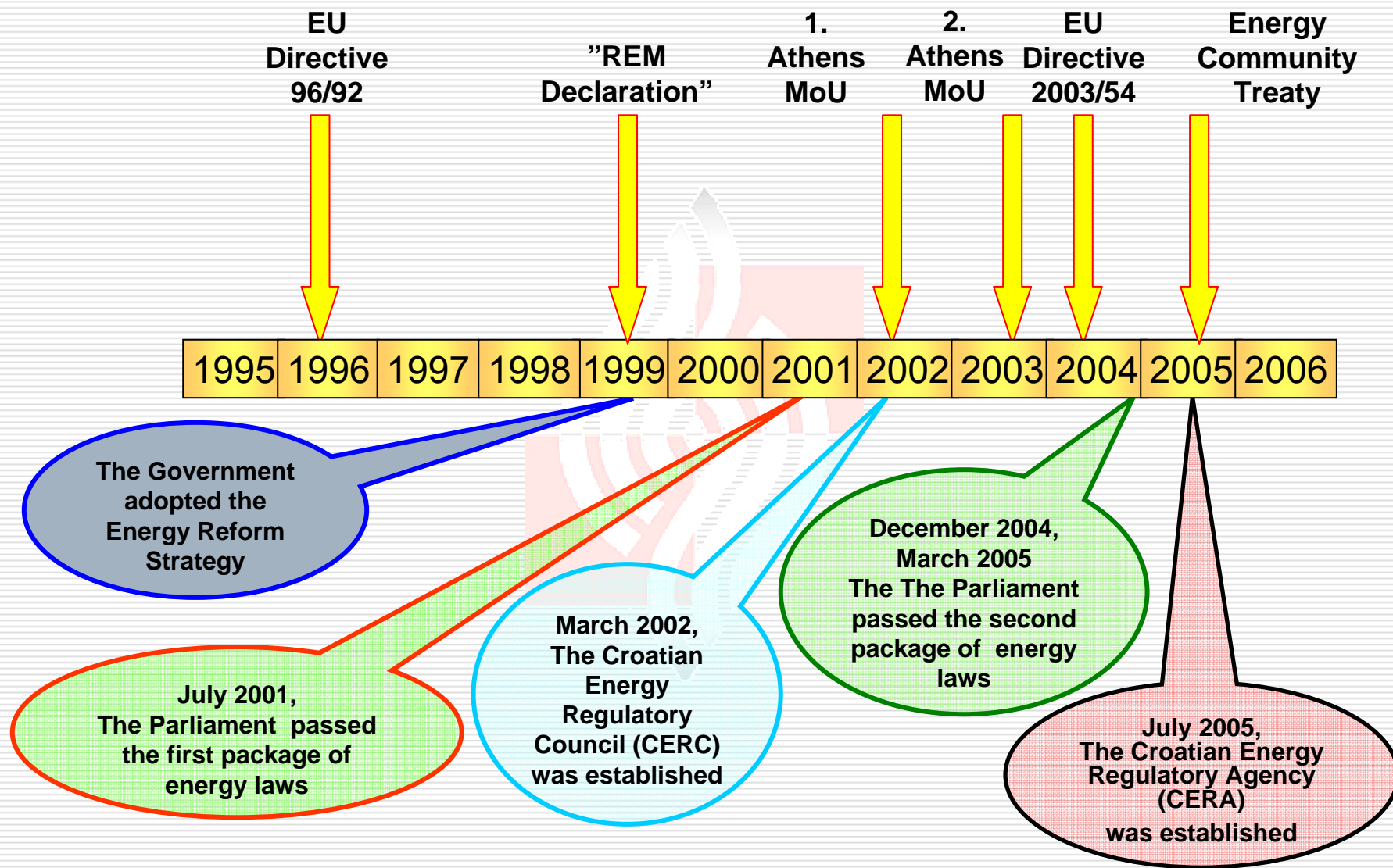


CONTENTS

- **REFORM OVERVIEW**
- **CROATIAN STRATEGIC GOALS**
- **CROATIAN ENERGY SECTOR - MAIN FIGURES**
- **CROATIAN ENERGY SECTOR REFORM**
- **NEW LEGAL FRAMEWORK**
- **CERA ORGANISATION AND WORK**
- **RECONNECTION OF UCTE ZONES**
- **REGIONAL ACTIVITIES AND ENERGY COMMUNITY**
- **RENEWABLE SOURCES**
- **ANTICIPATED KEY ISSUES CONFRONTING CERA**
- **COCLUSIONS**



REFORM OVERVIEW





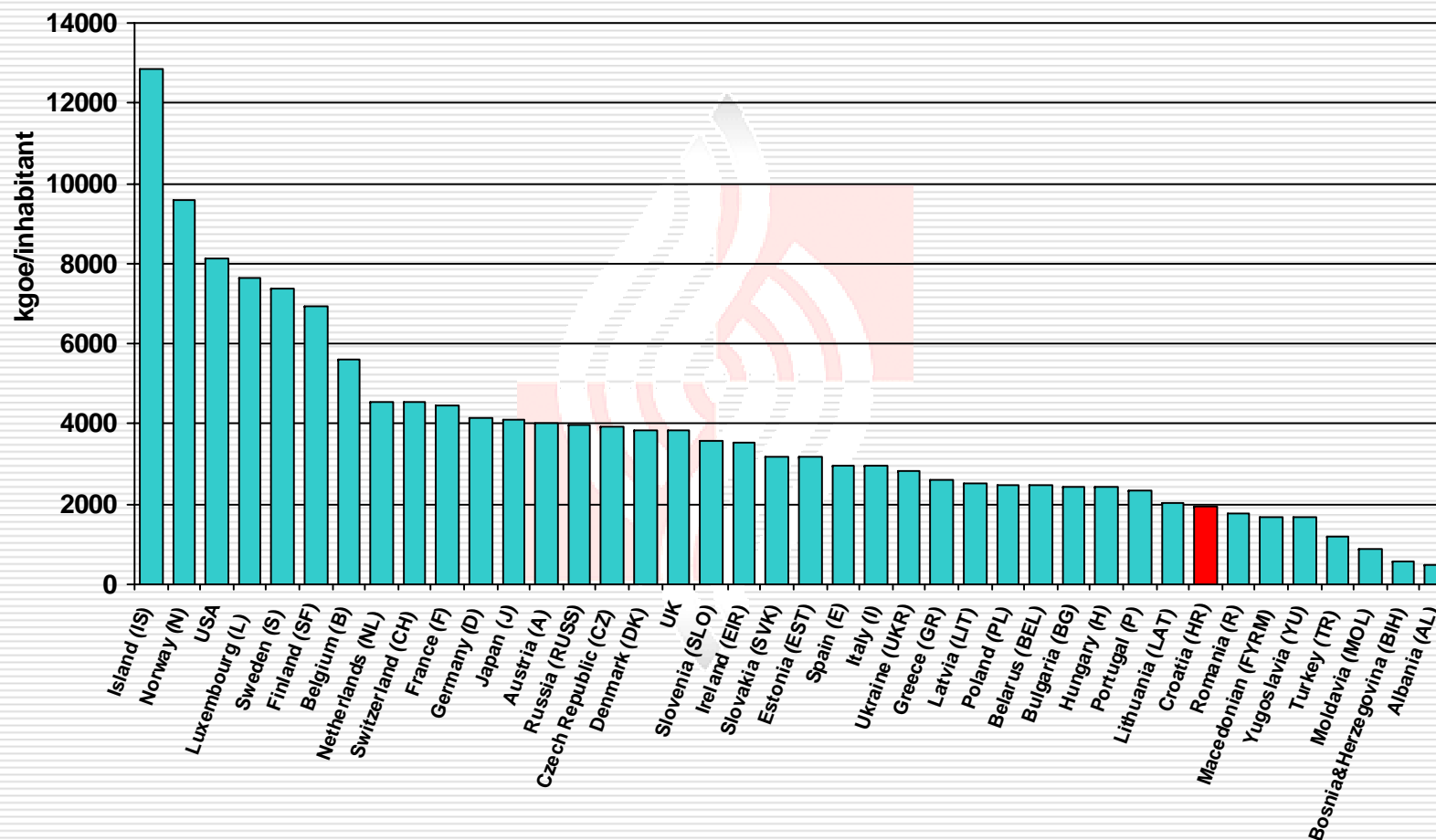
CROATIAN STRATEGIC GOALS

- **security of supply**
- **harmonisation of energy legislation with EU legislation (*EU acquis communautaire*) to develop regulation in accordance European directives & regulations**
- **Croatia became candidate for membership in the EU**
- **the Treaty establishing the Energy Community**
- **regional and EU integration – to take benefits from regional market and inclusion into internal EU electricity and gas market**
- **restructuring of main energy companies**
- **market price mechanisms / public service / tariff systems / regulated price**
- **environmental protection and sustainable development (renewable energy sources, energy efficiency)**
- **compliance with the Kyoto Protocol**



CROATIAN ENERGY SECTOR - MAIN FIGURES (1)

TOTAL ENERGY CONSUMPTION PER CAPITA

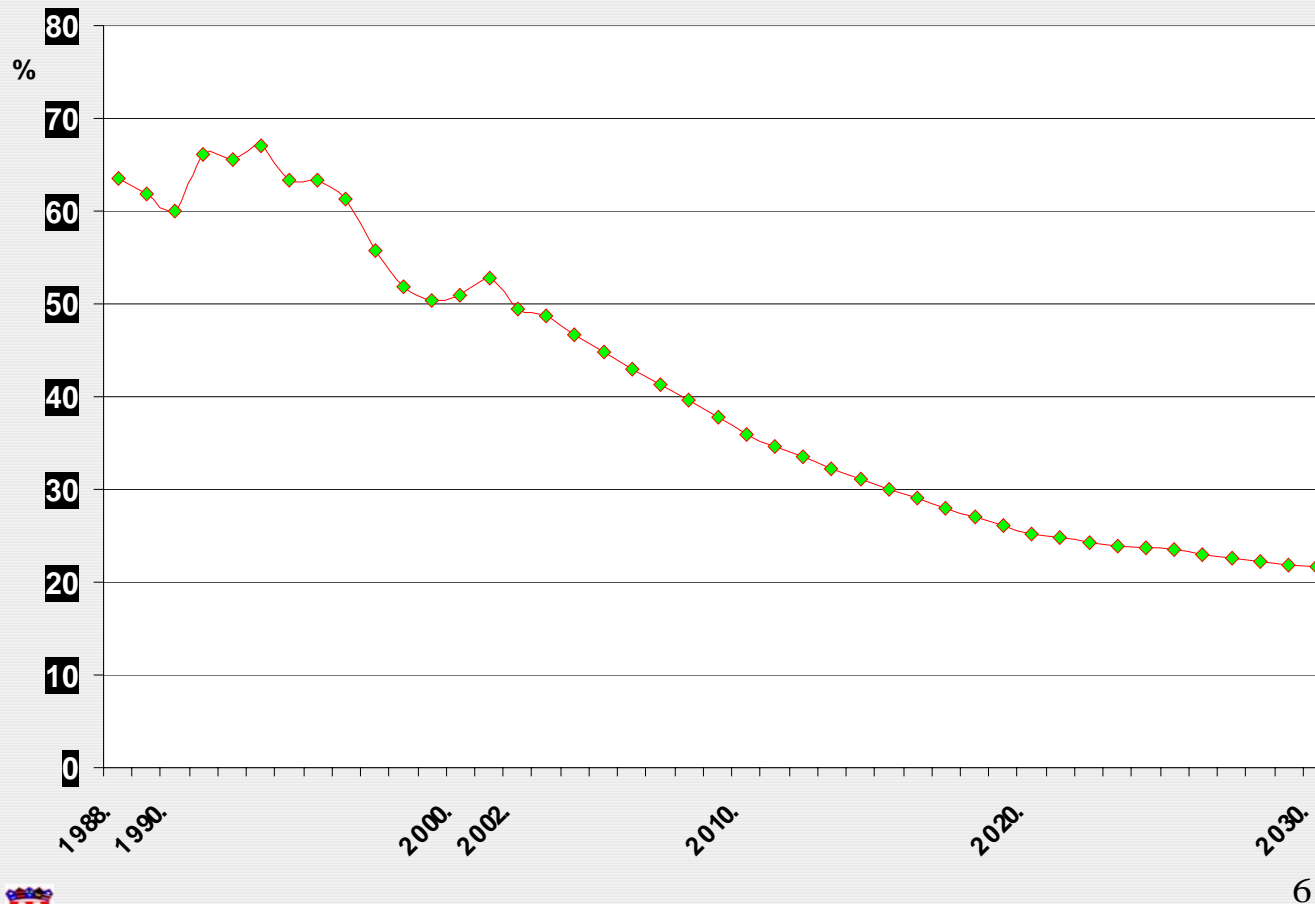




CROATIAN ENERGY SECTOR - MAIN FIGURES (2)

PRIMARY ENERGY SELF SUPPLY IN CROATIA

Slika 24.7. Vlastita opskrbljenost primarnom energijom u Hrvatskoj
Figure 24.7. Primary Energy Self Supply in Croatia

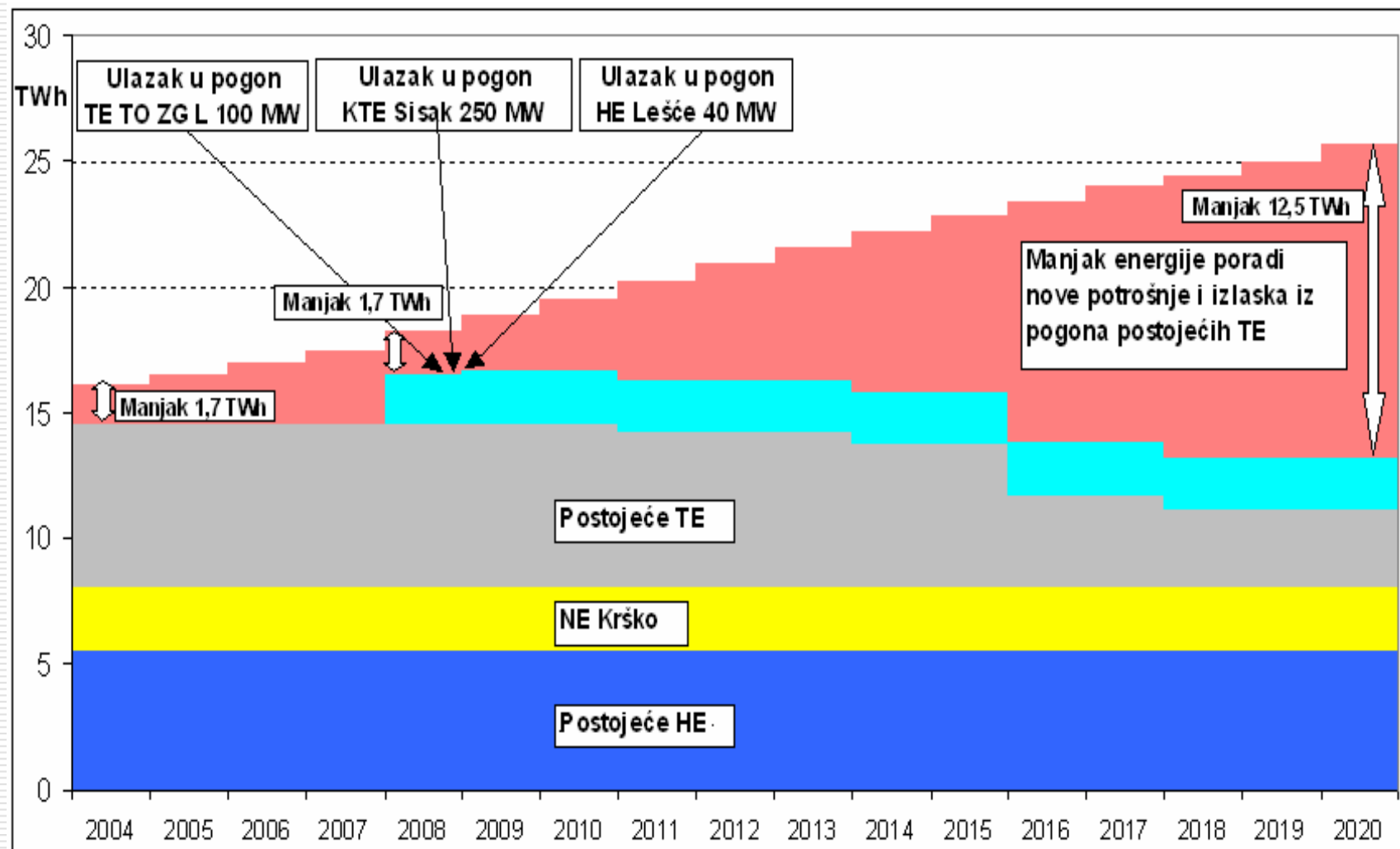


Ministry of Economy, Labour and Entrepreneurship



CROATIAN ENERGY SECTOR - MAIN FIGURES (3)

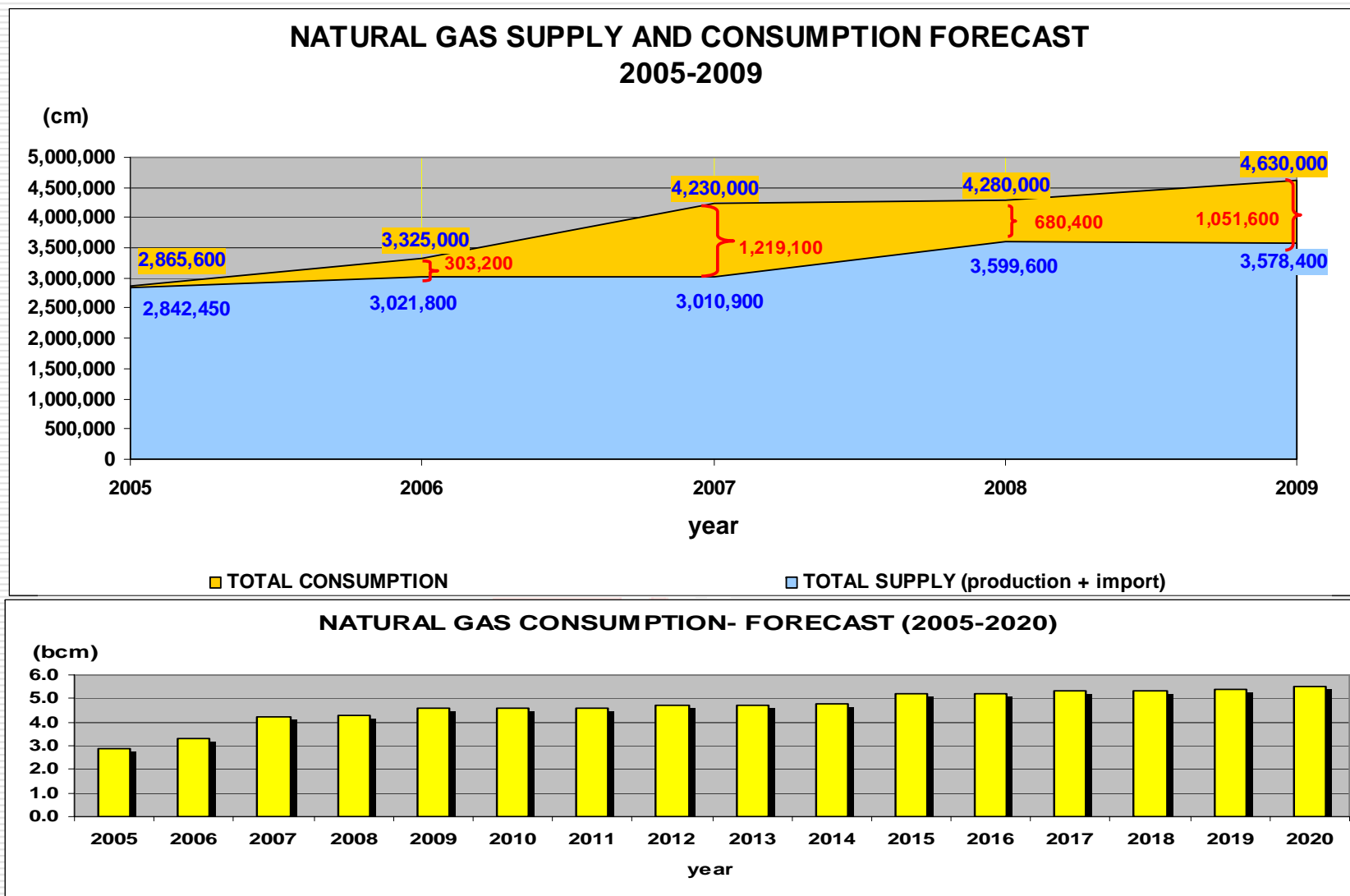
DEVELOPMENT OF GENERATION CAPACITIES / CAPACITY DEFICIT





CROATIAN ENERGY SECTOR - MAIN FIGURES (4)

NATURAL GAS SUPPLY AND CONSUMPTION – FORECAST [2005 - 2020]





CROATIAN ENERGY SECTOR REFORM (1)

New legal framework - laws:

- **December 2004:** the Croatian Parliament passed three new laws: Law on Regulation of Energy Activities, Law on Electricity Market and Amendments to Energy Law
- **March 2005:** the Croatian Parliament passed Law on Heat Production, Distribution and Supply
- **July 2005:** the Croatian Parliament passed Law on Gas Market
- New laws brought many changes in relation to the electricity market, gas market (introduction of two new energy activities: storage and retail supply of gas), as well as the regulatory body's structural changes
- **May 2006:** Law on Oil and Oil Derivatives Market
- **Law on Regulation of Energy Activities:** Croatian Energy Regulatory Council (CERC) transformed into Croatian Energy Regulatory Agency (CERA)



CROATIAN ENERGY SECTOR REFORM (2)

New legal framework – secondary legislation:

- **Rules on the conditions for performing of energy activity**
- **Order on validity term of license for energy activities**
- **General conditions of electricity supply**
- **Grid code**
- **Rules for power network connection charges and increase of connection power**
- **Decision on the amount of power network connection charge and increase of connection power**
- **Tariff system for the services of electric power activities performed as a public service**
- **Tariff system for natural gas transportation, without amount of tariff items**
- **Tariff system for heat production, distribution and supply, without amount of tariff items**



NEW LEGAL FRAMEWORK - ENERGY LAW (1)

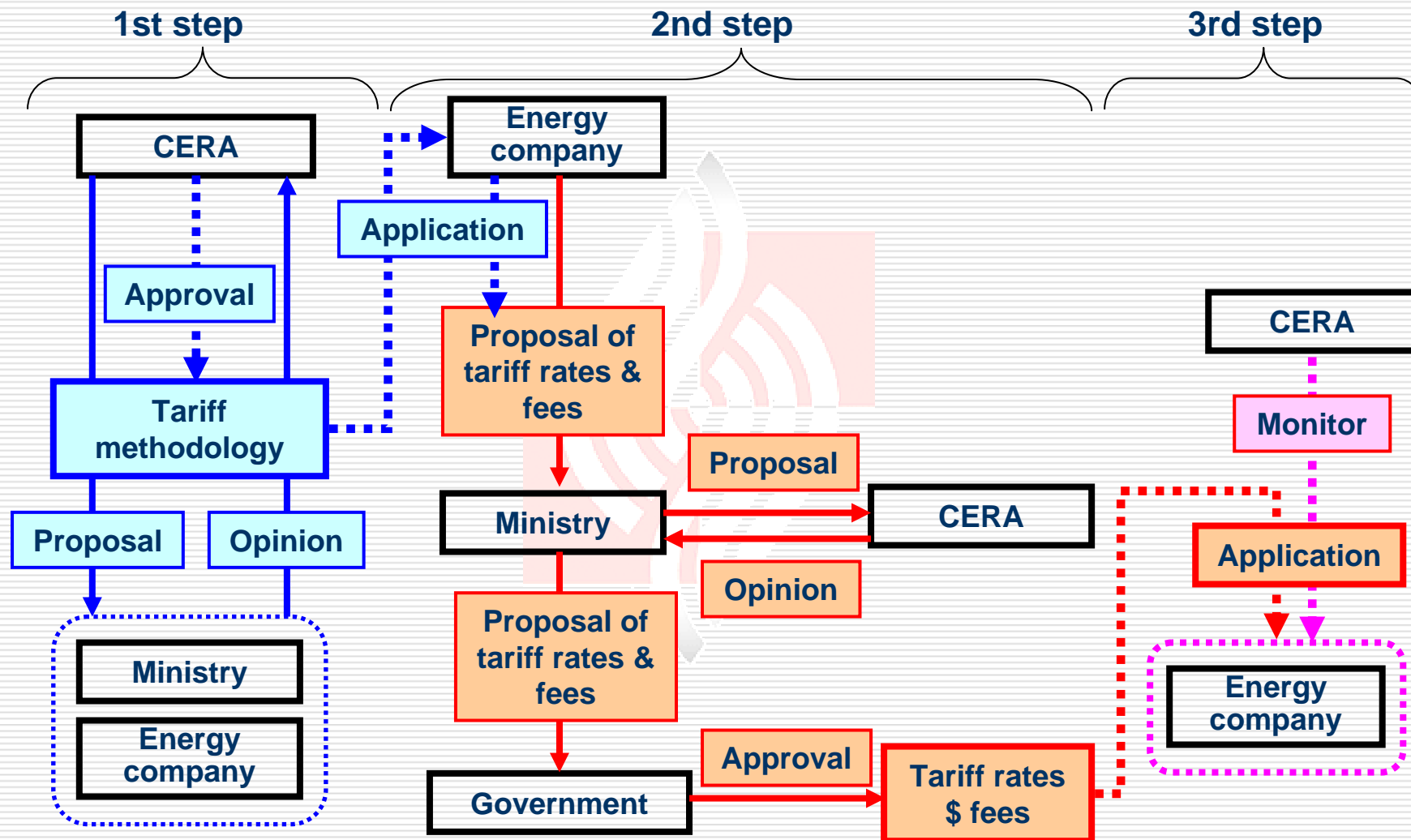
Energy Law as basic energy act defines /regulates:

- principles of energy policy and energy development
- measures for secure and reliable supply of energy
- measures for efficient production and use of energy
- legal framework for sector restructuring and liberalisation
- conditions for 25 energy activities (licences)
- market based and regulated activities
- public services - supply of tariff customers
- transmission, transport and distribution as regulated activities
- rules of business operation and regulation
- promotes energy efficiency, use of renewable sources and environmental protection
- energy prices - regulated or free
- tariff systems and tariff rates
- general supply conditions



NEW LEGAL FRAMEWORK - ENERGY LAW (2)

TARIFF METHODOLOGIES AND RATES:





NEW LEGAL FRAMEWORK - LAW ON ELECTRICITY MARKET (3)

Law on Electricity Market defines / regulates:

- **legal and functional separation of production, transmission, distribution and supply of electricity**
- **construction of new generation capacities:**
 - **free decision of energy undertaking, under authorisation criteria**
 - **public tendering**
- **regulated TPA to network - TSO and DSO as parts of the HEP Group**
- **independent market operator**
- **public service obligation**
- **production and supply of electricity as market activities**
- **supply of last resort**
- **market opening strategy – eligible customer status:**
 - **December, 2004: > 20 GWh, connected to transmission network**
 - **July 1, 2006 for customers with an annual consumption above 9 GWh**
 - **July 1, 2007 for all commercial customers**
 - **July 1, 2008 for all customers**



NEW LEGAL FRAMEWORK - LAW ON ELECTRICITY MARKET (4)

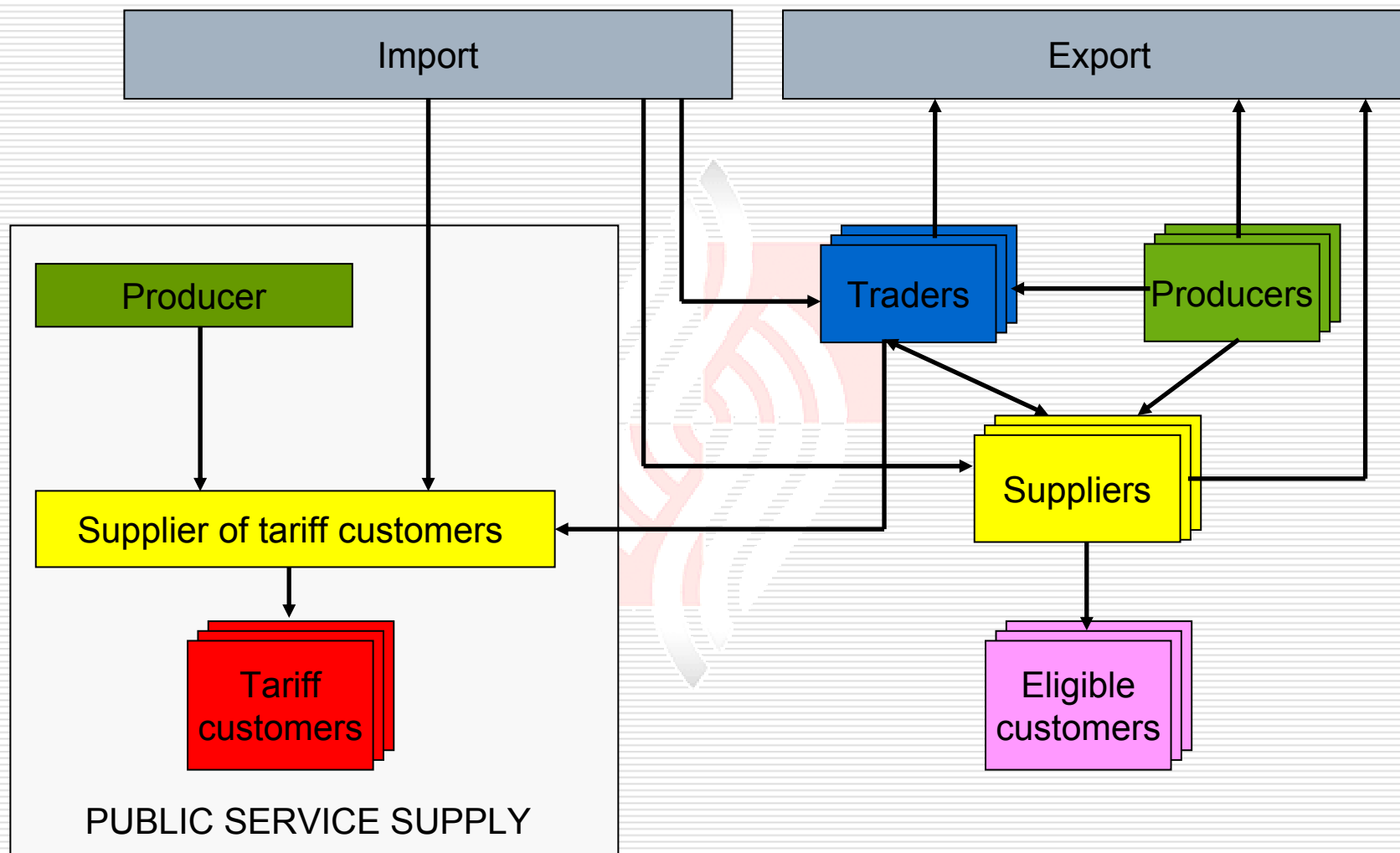
Croatian Energy Market Operator (HROTE) :

- **adopts rules on electricity market operation**
- **electricity market organisation and enhancement**
- **keeps records of all contractual obligations between market participants**
- **keeps records of eligible customers and of eligible producers**
- **gives consent on balancing energy rules to TSO settlement of balancing energy**
- **harmonises contractual schedules - market plan (day ahead)**
- **enters into contracts with suppliers in order to ensure a minimal share of electricity produced from renewable sources and co-generation**
- **enters into contracts with eligible producers**
- **settles, collects and allocates fees for incentives to eligible producers**



NEW LEGAL FRAMEWORK - LAW ON ELECTRICITY MARKET (5)

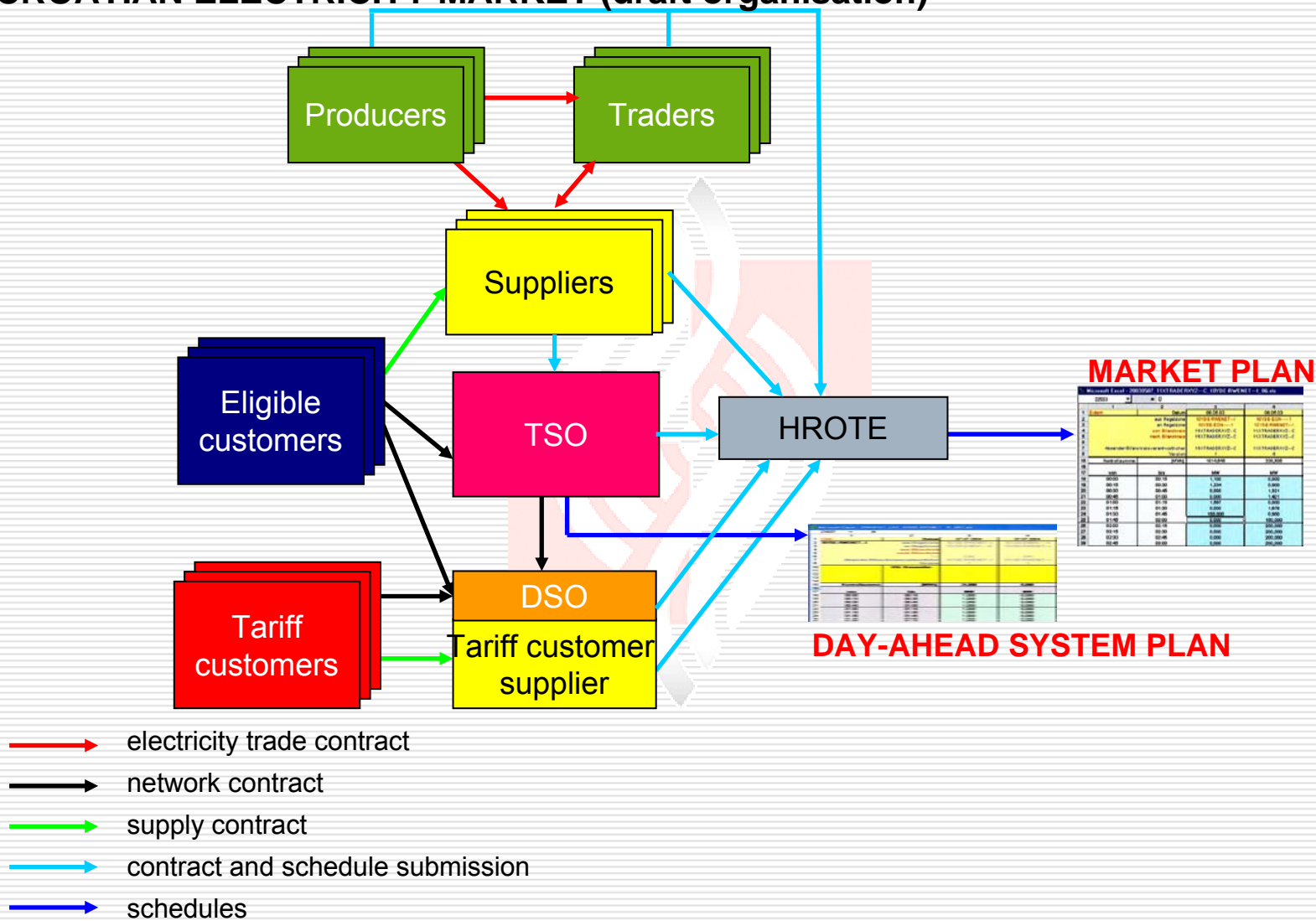
ELECTRICITY MARKET PARTICIPANTS (relations, contracts etc.)





NEW LEGAL FRAMEWORK - LAW ON ELECTRICITY MARKET (6)

CROATIAN ELECTRICITY MARKET (draft organisation)





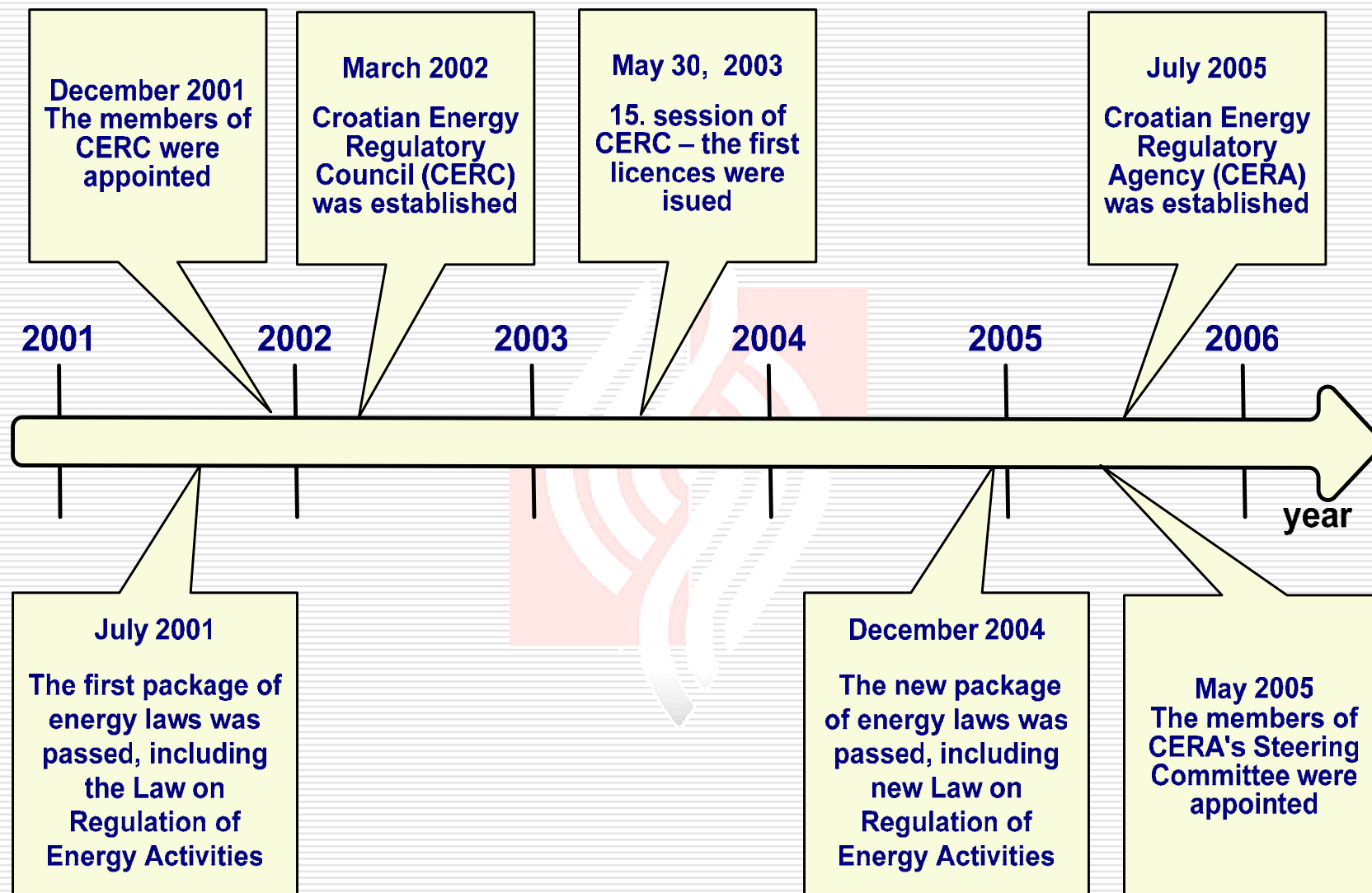
NEW LEGAL FRAMEWORK - LAW ON REG. ENERGY ACTIV. (7)

Law on Regulation of Energy Activities defines / regulates:

- **establishment of an energy regulatory agency (CERA) as independent and autonomous institution with public authorities**
- **regulation objectives: regulated network access, establishment of electricity market and competition, protection of customers and energy undertakings**
- **CERA as wholly independent from energy industry with own budget and with own staff**
- **activities, jurisdiction and organisation of CERA**
- **scope of activities of CERA:**
 - **issuing licenses for the carrying out of energy activities**
 - **adopting the methodology of tariff systems, without tariff rates or fees**
 - **giving opinions to the Ministry and to the Government**
 - **supervising the application of all tariff systems and prescribed fees**
 - **passing regulations in the energy sector for which CERA is authorised under laws regulating carrying out of certain energy activities, and giving opinions or approvals on rules and regulations in the energy sector**
 - **supervising quality of services provided by energy undertakings**
 - **publishing information and data on energy efficiency and use of energy**
 - **participating in energy policy design**



CERA ORGANISATION AND WORK - HISTORY (1)



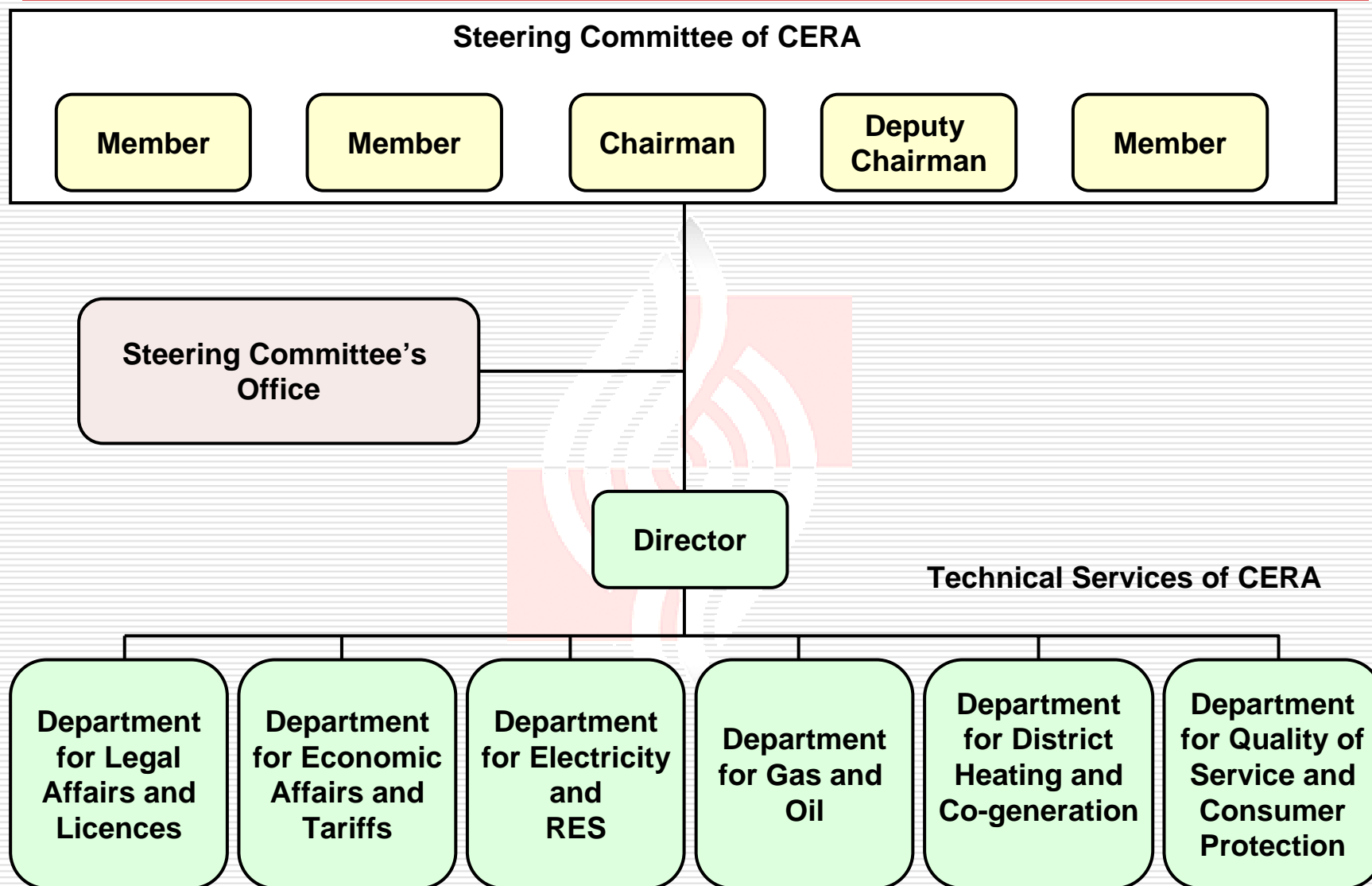


CERA ORGANISATION AND WORK (2)

- **May 2005:** the Croatian Parliament upon proposal of the Government appointed five Commissioner (members of Steering Committee)
- **July 2005:** CERA's Steering Committee upon the prior approval of the Government passed Statute of CERA
- **July 2005:** CERA was registered at the Commercial Court in Zagreb
- Manager of CERA's technical services department was appointed by CERA's Steering Committee
- **2005 and 2006:**
 - work on organisation of CERA's technical service department
 - further work on transparency, independence, financial stabilisation, jurisdiction, accountability of CERA
 - continuation of licensing process
 - several projects launched - methodologies for tariff systems
 - opinions on tariff rates and fees
 - international / regional activities, co-operation, workshops, education



CERA ORGANISATION AND WORK (3)





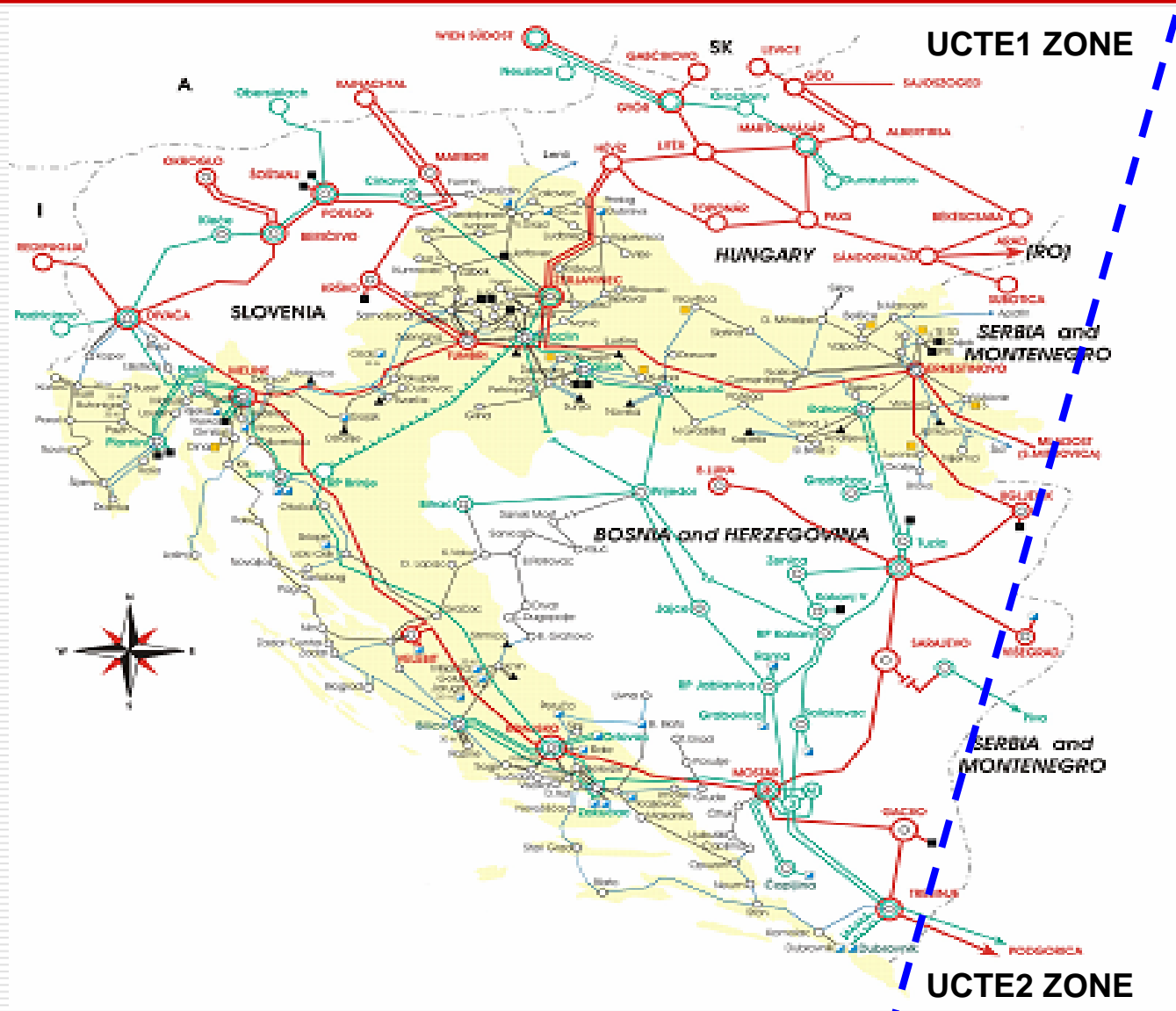
RECONNECTION OF UCTE ZONES (1)

October 2004: Reconnection of the UCTE1 and UCTE2 Zones:

- **destruction of transmission network and other infrastructure (400 kV TS Ernestinovo) during the war**
- **operation of reconnection the UCTE Zones (south and east Europe) was co-ordinated from Zagreb**
- **event of great significance and priority for Croatia, countries of the southeast European region and whole Europe**
 - **significant increase of cross-border line capacity**
 - **number of technical, economic and other positive consequences**
 - **powerful encouragement for co-operation of countries in region**
 - **volume of electricity exchange and trade in region significantly increased**
 - **decrease of electricity transmission losses, increase of power system safety and stability**
 - **increase of electricity quality parameters and decrease of needs for total reserves in electricity generation and transmission systems**
 - **boosting growth of economy in general**
- **prerequisite for establishment of the SEE regional electricity market**

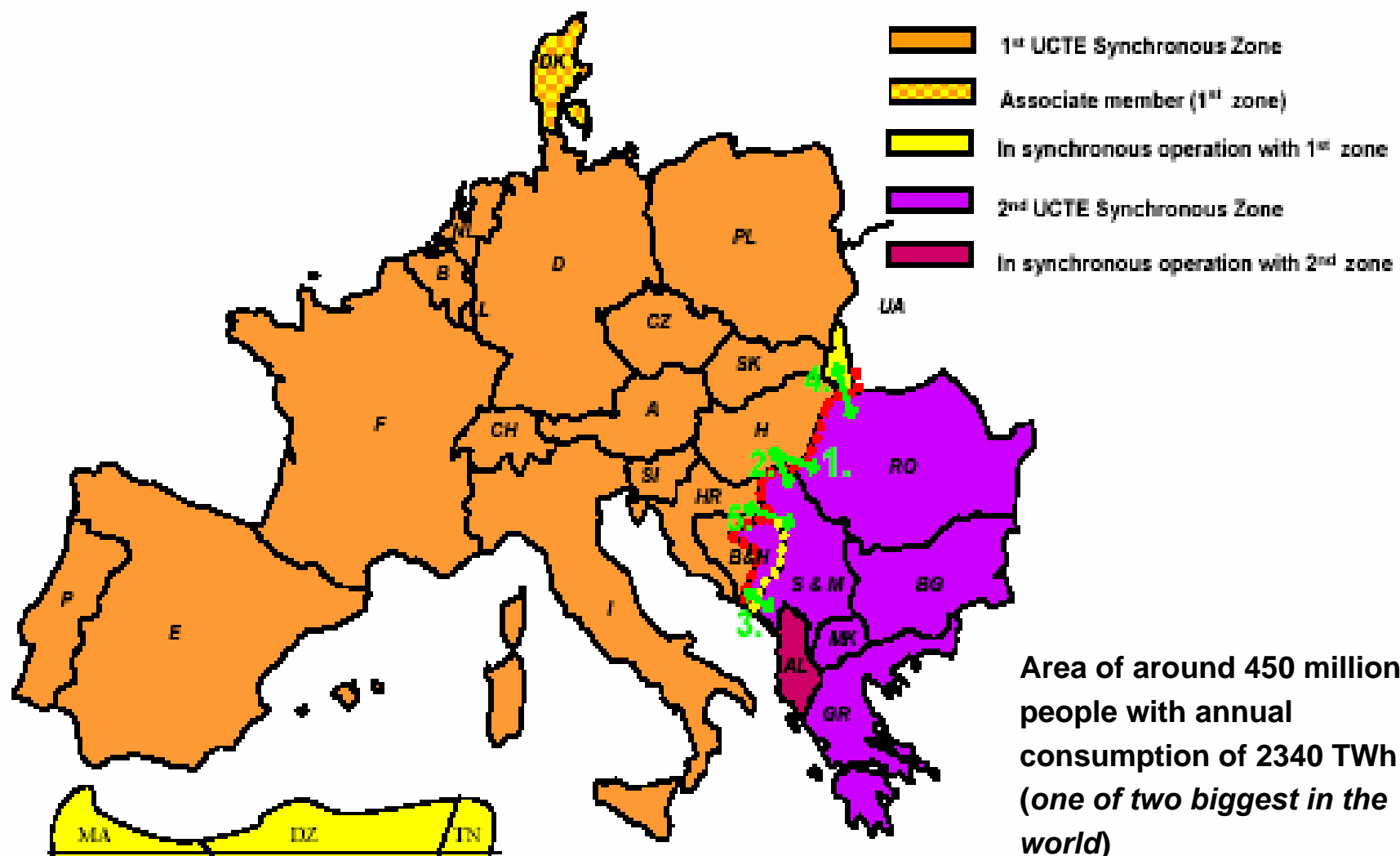


RECONNECTION OF UCTE ZONES (2)





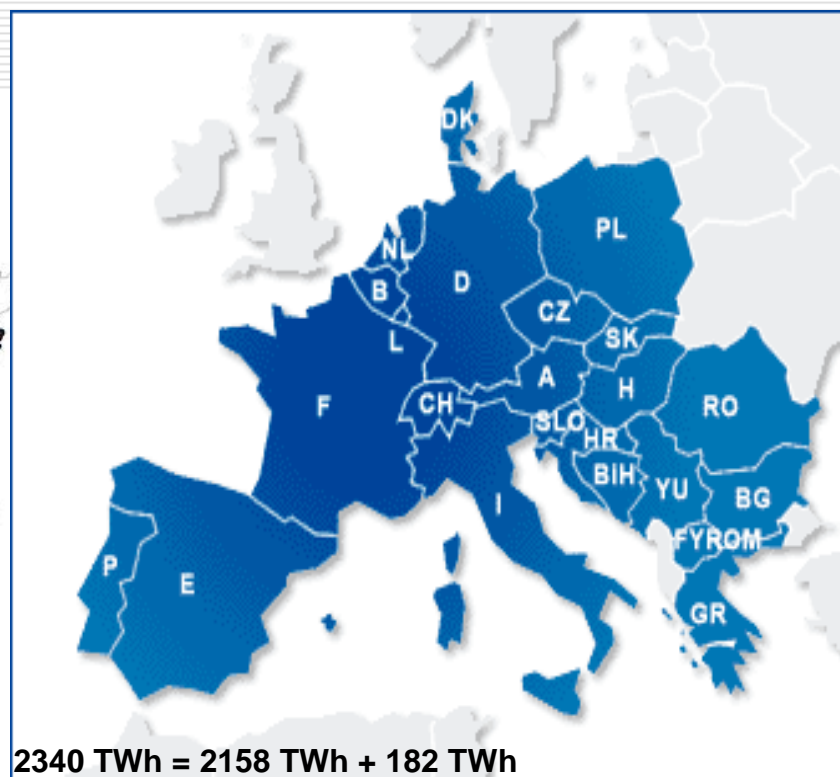
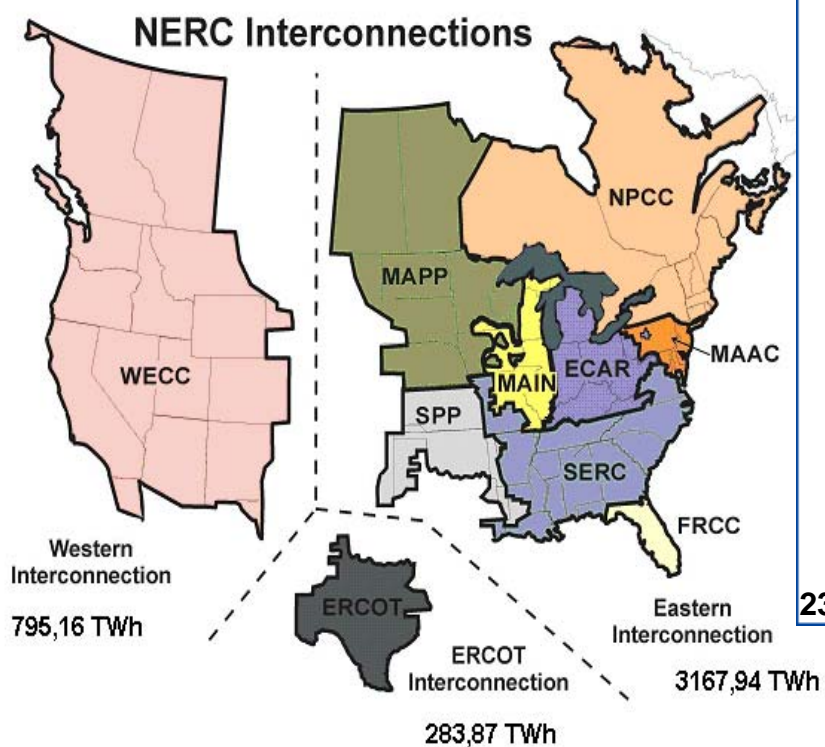
RECONNECTION OF UCTE ZONES (3)





RECONNECTION OF UCTE ZONES (4)

UCTE ZONE vs. NERC (electricity demand in 2003)





REGIONAL ACTIVITIES AND ENERGY COMMUNITY (1)

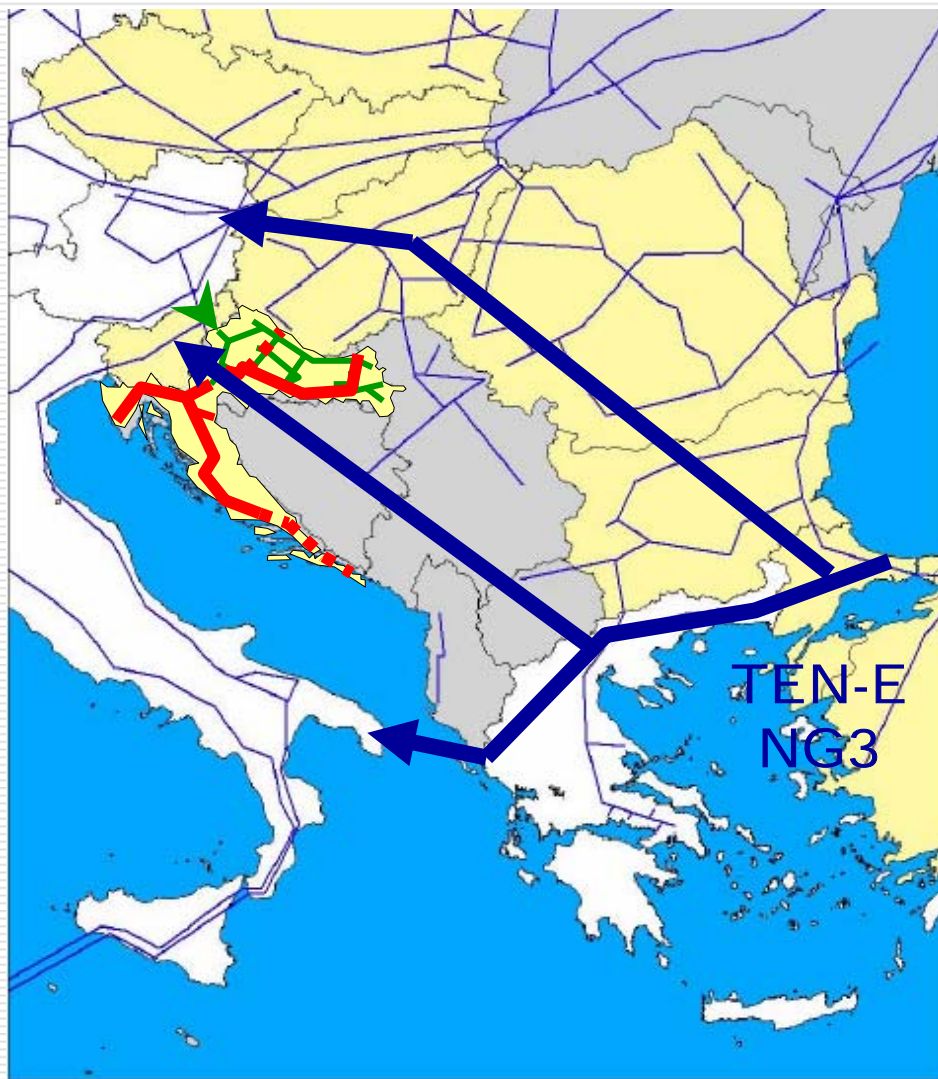
2002 and 2003: Croatia signed 1st and 2nd Memorandum of Understanding

- Croatian experts contributed to the Athens Process (fora, working groups and projects) and preparation of the Energy Community in South-East Europe
 - ministers, PHLG and regulators
 - SETSO
 - REBIS Project / GIS Project
 - collaboration with donors (USAID, SEETEC, WB, EC...)
- **October 2005: Adhering Parties:** Croatia, Albania, Bulgaria, Bosnia and Herzegovina, Macedonia, Montenegro, Romania, Serbia, UNMIK Kosovo and the European Community signed the Treaty establishing the Energy Community
- ratification and entry into force can be expected very soon
- the Treaty will give to parties strong political cover necessary for difficult decisions they may face
- Croatian full support to the Energy Community and the Single European Energy Market



REGIONAL ACTIVITIES AND ENERGY COMMUNITY (2)

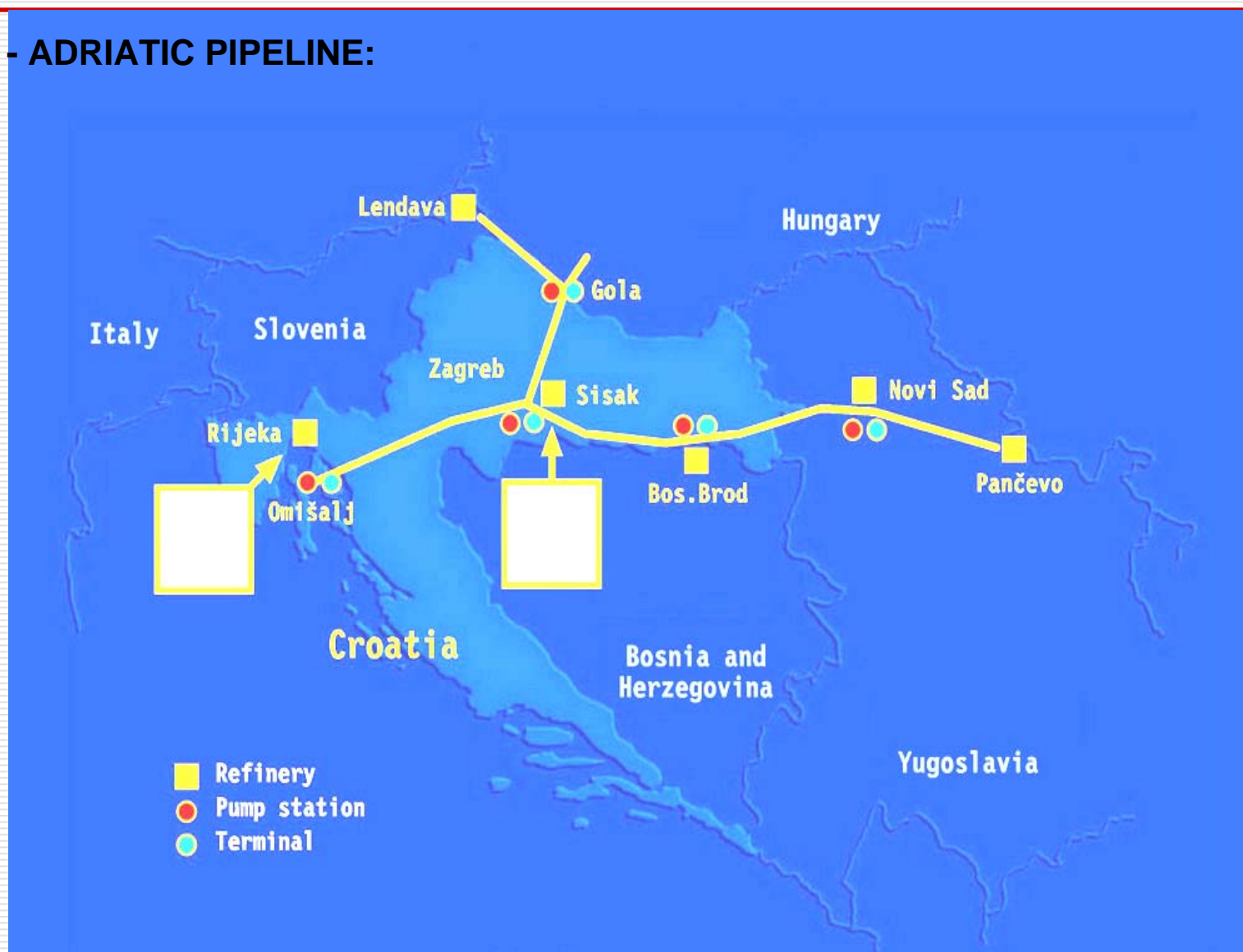
TRANS EUROPEAN NETWORKS - GAS:





REGIONAL ACTIVITIES AND ENERGY COMMUNITY (3)

JANAF - ADRIATIC PIPELINE:





RENEWABLE SOURCES

- use of renewable sources (RES) is Croatian interest
- RES concept development and implementation documents:
 - energy sector development strategy
 - implementation program
 - national energy programs
- time horizon by 2010 – 4,5 %
- defining minimum RES use stimulation target or quota:
 - share in consumption breakdown
 - installed capacity in MW
 - eligible producer and incentive producers status
- who is in charge?
 - method for collecting incentives and appointment of financial mechanism - the Ministry, the Government
 - realisation - CERA and Market Operator
 - obligation of reporting on and documenting fulfilment of CERA's requirements
- realised projects: wind, waste, biomass, hydro
- key secondary legislation to be passed soon



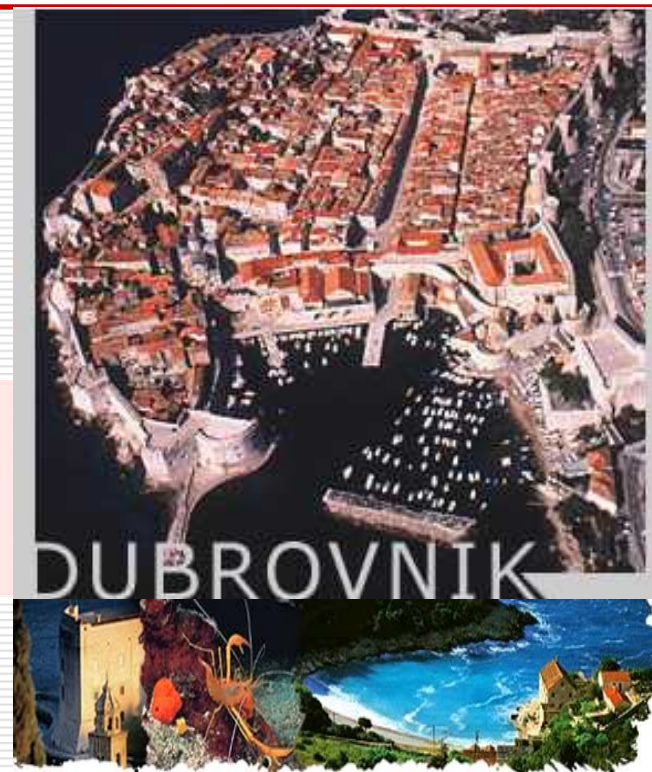
ANTICIPATED KEY ISSUES CONFRONTING CERA

- **full creation of legal and regulatory framework**
- **insurance of objectivity, transparency and non-discrimination in carrying out energy activities**
- **development of basic market structure and ensuring efficient energy market and market competition**
- **definition of public obligation**
- **in-time adoption and implementation of laws and secondary regulations**
- **development of tariff / connection charges / methodologies**
- **implementation of principles of regulated access to the networks / systems**
- **protection of consumers and energy undertakings**
- **realisation of status of privileged buyers**
- **activities related to establishment of the Energy Community**
- **further work on organisation, financial stabilisation, education, transparency, independence, jurisdiction, accountability of CERA**



CONCLUSIONS

- **strategy for electricity market opening is approved and under implementation**
- **further work on building / organisation / strengthening:**
 - **of institutions / operators / undertakings / consumer protection organisations**
 - **preparing clear roadmap for implementation (secondary legislation)**
 - **progress step by step combined with benchmarking**
- **time frame**
 - **development of most secondary legislation (end of 2006)**
 - **full implementation in 2006/2007**
- **goal to have transparent function of energy market and to ensure full compliance with the EU Directives and the Energy Community Treaty**
- **Croatian Power Sector restructuring under way**
- **the Government fully supports the idea of establishing an integrated market in natural gas and electricity in the SE Europe and its integration in the internal European market**



Thank you for your kind attention!

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