

# Tariff Design and Restructuring Process

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Commissioner  
Croatian Energy Regulatory Council

Partnership Program – CERC & PSC, March 29 – April 2, USA

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## LEGAL FRAMEWORK

### Law on regulation of energy activities

#### Article 1

CERC has been established as an independent legal entity for carry out, among others, activities related to regulation of energy prices to be set on the basis of tariff systems

### Energy Law (Article 28)

- Tariff systems shall be passed by the Croatian Government upon the proposal by energy undertakings on whose services the tariffs will be applied, based upon the opinion obtained from the Ministry and CERC.
- CERC shall monitor application of tariff systems.

### Law on electricity market (Article 12)

CERC shall set electricity transmission fees and distribution fees upon the proposal of the energy undertaking carrying out transmission or distribution of electricity respectively.

### Law on oil and oil derivatives market (Article 4)

Tariffs for transportation of oil via oil pipelines and transportation of oil derivatives via product lines shall be passed by CERC on the proposal of the energy undertaking.

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## REGULATED PRICES

- Law on energy (Art 26) defines 12 energy activities (out of 22) for which prices are set by TS:

### ELECTRICITY

- generation of electricity, apart from electricity generation for eligible customers;
- transmission of electricity;
- distribution of electricity;
- retail supply of electricity, apart from retail supply of electricity for eligible customers;
- operation and control of electricity system,
- organization of electricity market;

### GAS

- supply of gas, apart from supply for eligible customers;
- gas distribution;
- gas transportation;

### HEAT

- heat generation, apart from heat generation for eligible customers,
- heat distribution,
- heat supply, apart from heat supply for eligible customers.

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## EU DIRECTIVES

- Directive 2003/54/EC concerning common rules for the internal market in **electricity** (Art 23)
- Directive 2003/55/EC concerning common rules for the internal market in **natural gas** (Art 25)

The **regulatory authorities** shall be responsible for fixing or approving, prior to their entry into force, **at least the methodologies** used to calculate or establish the terms and conditions for:

- Connection and access to national networks, including **transmission and distribution tariffs**. These tariffs, or methodologies, shall allow the necessary investments in the networks to be carried out in a manner allowing these investments to ensure the viability of the networks
- The provision of **balancing services**

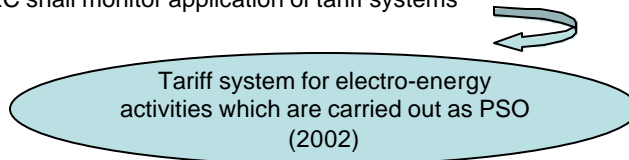
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## ELECTRICITY MARKET

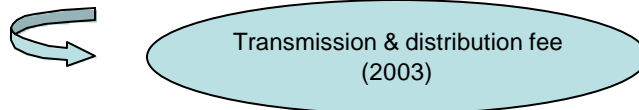
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## ACTIVITIES IN ELECTRICITY SECTOR

### Public service obligations

- Electricity generation for tariff customers **CERC**
- Electricity transmission
- Electricity distribution
- Supply of the electricity to tariff customers
- Organisation of electricity market
- Operation of the electricity system

### Market-based activities

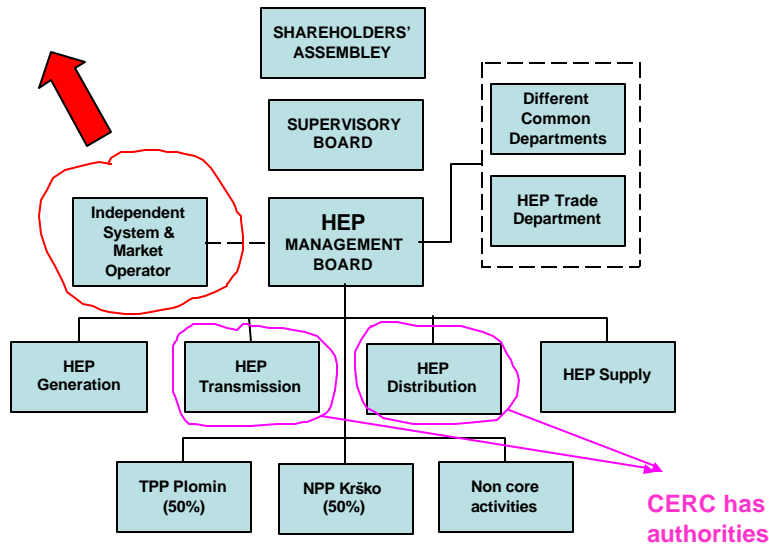
- Generation for eligible customers
- Retail supply of electricity for eligible customers

**Government**

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## HEP Group - Electricity Utility



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## TARIFF SYSTEM - MAIN ELEMENTS

Consumers' categories:

**High voltage consumers** (110 kV included and up)  
tariff model - white

**Medium voltage consumers** (from 1kV to 110 kV)  
tariff model - white

**Low voltage consumers – residential**  
tariff models – blue, white, orange, black

**Low voltage consumers – non residential**  
tariff models – blue, white, orange, black

**Low voltage consumers – public lightning**  
tariff model - white

Tariff model – white

seasonal:

- HS: Jan, Feb, Mar, Oct, Nov, Dec,
- LS (other months)

daily:

- HT (winter 7am to 9pm, summer 8am to 10pm)
- LT (the rest of a day)

calculation elements:

- demand charge (kn/kW)
- energy charge (kn/kWh)
- reactive en. charge (kn/kVArh)
- fixed monthly charge

Tariff model (residential) – white

daily:

- HT (winter 7am to 9pm, summer 8am to 10pm)
- LT (the rest of a day)

calculation elements:

- energy charge (kn/kWh)
- fixed monthly charge

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## TRANSMISSION AND DISTRIBUTION FEE

- Precondition for setting fees: 3-year period plans for development and construction of T & D networks prepared by energy undertakings, and approved by CERC
  - Methodology and criteria for approving network development plans (in preparation)
- CERC according to its Charter passed “Rulebook on methods and criteria for defining transmission and distribution fees”
  - No clear methodology defined
  - ‘Cost plus’ methodology (still discussions on asset base, RoR...)
    - Precondition clear unbundling (generation, transmission, distribution, supply)
- Valid fees are set based on valid all inclusive Tariff system and development plans upon which tariff system was set

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## RULEBOOK ON METHODS AND CRITERIA FOR DEFINING TRANSMISSION AND DISTRIBUTION FEE – SOME ELEMENTS

### Possible fees' structure

- Customer charge
- Capacity charge
- Energy charge

### Proposal of the fees to be submitted to CERC

- 1st Oct each year

### Using of network fee components

- Transmission fee
- Distribution fee
- Ancillary services' fee
- Part for covering technical losses
- Additional fees:
  - CERC charge
  - ISMO charge
  - Stranded costs' charge
  - Incentive for eligible producers, etc.

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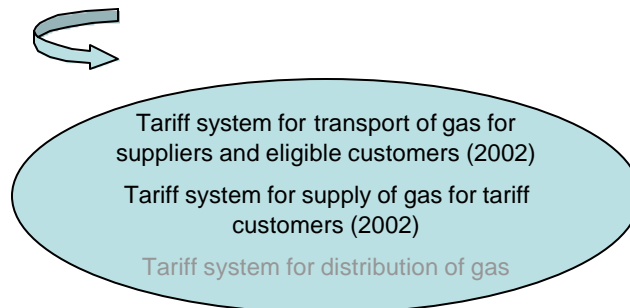
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## CONCLUSIONS – ELECTRICITY SECTOR

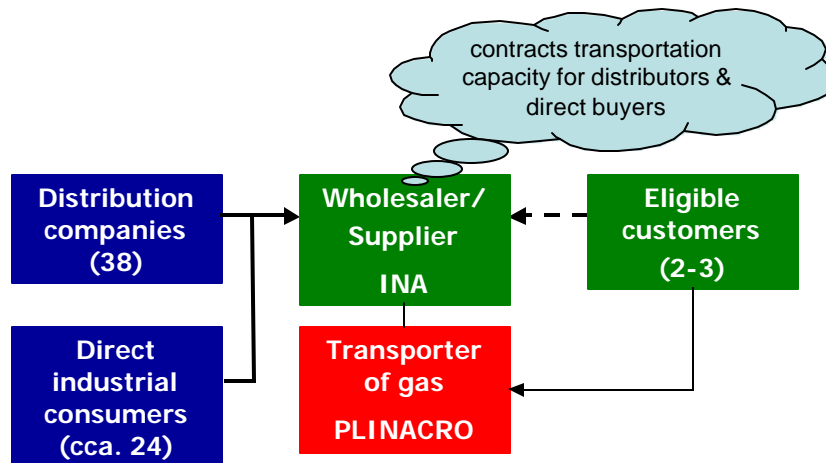
- ➔ Revision of the energy laws and harmonization with new EU Directives
- ➔ Clear definition of CERC authorities regarding tariff settings/approving of methodologies
  - Relationship: license' holders – government - regulator
- ➔ Complete restructuring of the utility in line with the law
  - legal unbundling/ unbundling of the assets, liabilities etc.
- ➔ Definition and application of one of the methodologies for setting transmission and distribution fee
  - Cost plus methodology is most likely to be applied

## GAS MARKET

- ➔ **Energy Law** (Article 28)
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  - CERC shall monitor application of tariff systems



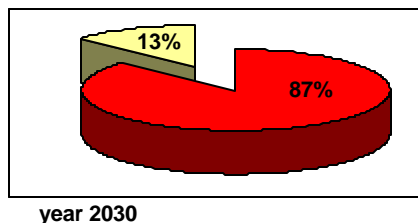
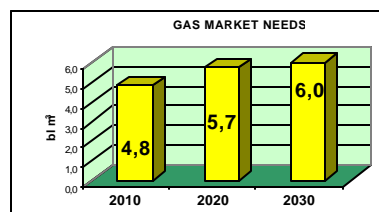
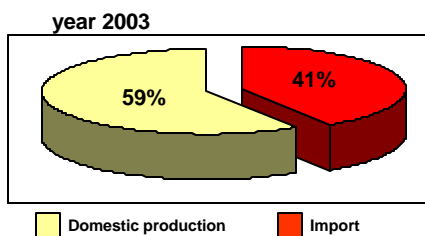
## STRUCTURE OF GAS MARKET (Contracts)



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## GAS MARKET - SOME FIGURES



**PLINACRO:** Plan for development, construction and modernization of gas transportation system in Croatia 2002 - 2011

approved by Ministry of Economy in 2002 for the period year 2002 - 2006

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## TS FOR SUPPLY OF GAS

### Main points:

- For tariff buyers: distributors & direct buyers;
- Price is based on:
  - Pondered value (in US\$) of imported gas & domestic gas and
  - Supplier's profit;
- Price can be changed quarterly;
- Price can be changed if the difference in value of old price and newly calculated price is bigger than stated in TS (0,02 kn/m<sup>3</sup>);
- Role of CERC:
  - Price cannot be applied if CERC establishes that it is not calculated according to the provisions of TS,
  - Checks calculation/defines price each quarter.

**CERC**



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## TS FOR TRANSPORT OF GAS

### Aims

- Clear signals to the consumers (each consumer should cover costs it causes in the transport system)
- Ensuring resources for secure operation and further development of transport system according to the Development strategy of the transport system until 2011

### Main characteristics

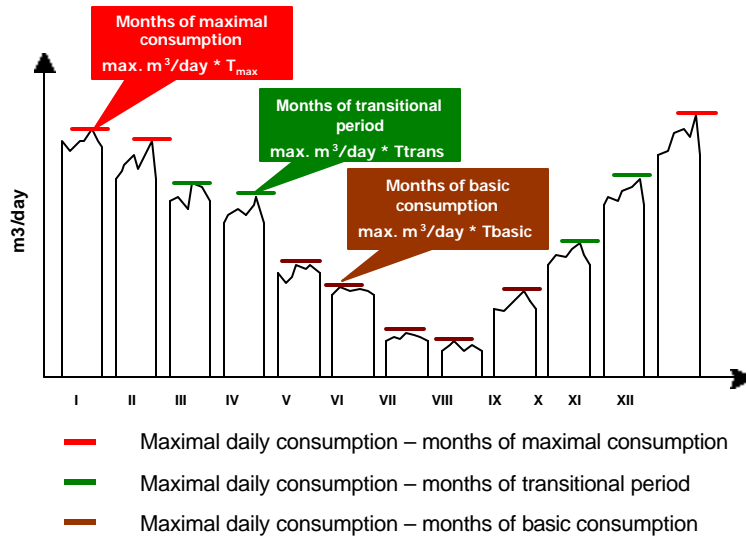
- Total annual costs (investments, operating costs, depreciation) are covered through capacity demand,
- Settlement of capacity engaged each month (max. m<sup>3</sup>/day)
- Three periods throughout a year → three different tariffs [kn/(max. m<sup>3</sup>/day)] according to the load level
- Tariffs are equal for the same consumer types

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## SETTLEMENT OF COSTS - EXAMPLE



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## TS FOR DISTRIBUTION OF GAS

- Law on local community economies
  - Distribution of gas - communal activity
  - Local governments set prices for distribution of gas
- Energy law
  - Provisions on tariff system for distribution of gas have not being put into practice

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## CONCLUSIONS – GAS SECTOR

- ✦ In some respects more advanced regarding restructuring than electricity sector
- ✦ Necessity to pass Tariff system for distribution of gas
  - Question is how many of them
- ✦ Revision of Tariff system for supply of gas
- ✦ Clearer definition of CERC authorities regarding Tariff system for transport of gas
  - Provision of EU Directive on internal market of gas
  - Preparation of guidelines

Thank you for your attention

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