



# **Feed-in tariffs in Slovenia**

## **Present and future**

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Experiences with feed-in tariffs: lessons from the German  
and the Spanish model for the new member states  
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## Country overview

- Slovenia is located between Austria on the north, Hungary on the east, Croatia on the south and Italy on the west
- Population: 2 millions
- Area: 20,000 square km
- More than 10.000 of forests
  
- Annual consumption of electricity: 12 TWh
- Electricity and gas markets are 100% opened
- Till 1. July 2007 households are still tariff consumers
- Regulated TPA for use of electricity networks
- Price for use of networks (access) is set up and published by independent regulatory body (Agency for Energy)

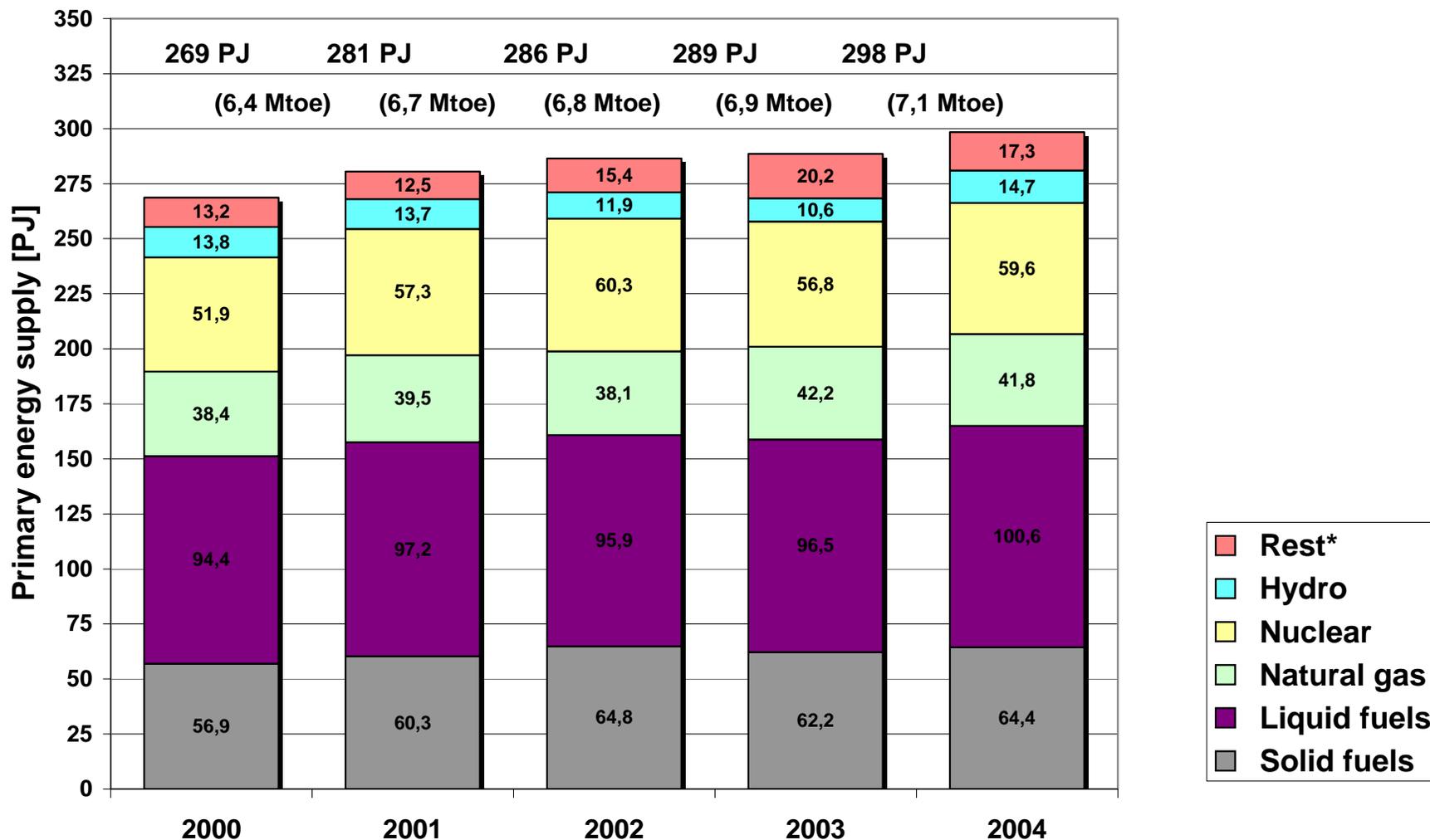


## General overview 2

- Electricity sector is vertically unbundled
  - Transmission company
  - Five distribution companies
  - Few electricity producers
- Transmission company is horizontally unbundled (TSO is the only activity)
- Distributions are not yet horizontally unbundled (Till 1. July of 2007)
- Separated accounts for network and market activities
- All of them are (still) primarily state owned
- All the mines are 100% state owned



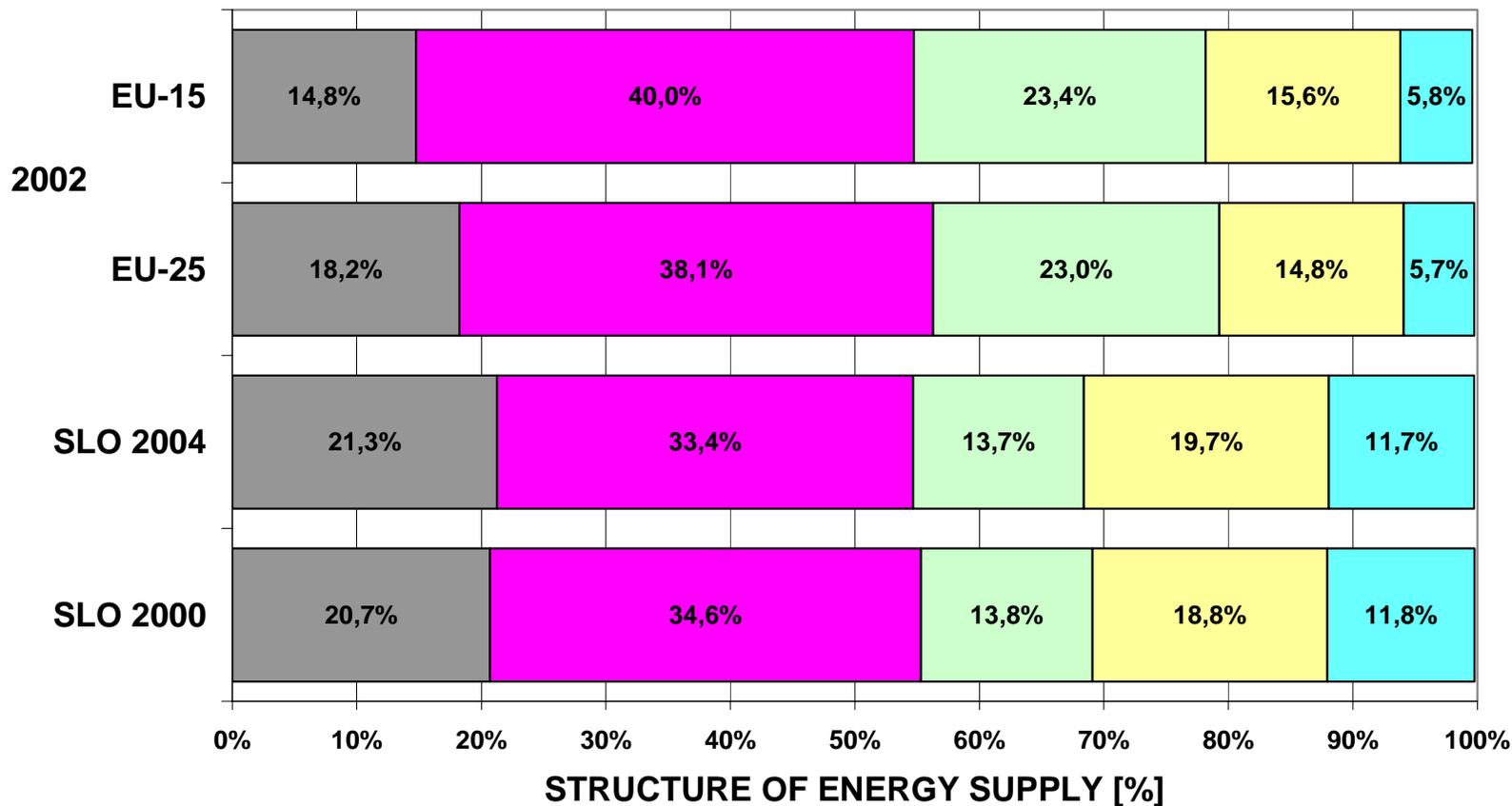
# Primary energy use



**Dependence of imported energy: 75 %**



# Structur of energy supply



■ Solid fuels

■ Liquid fuels

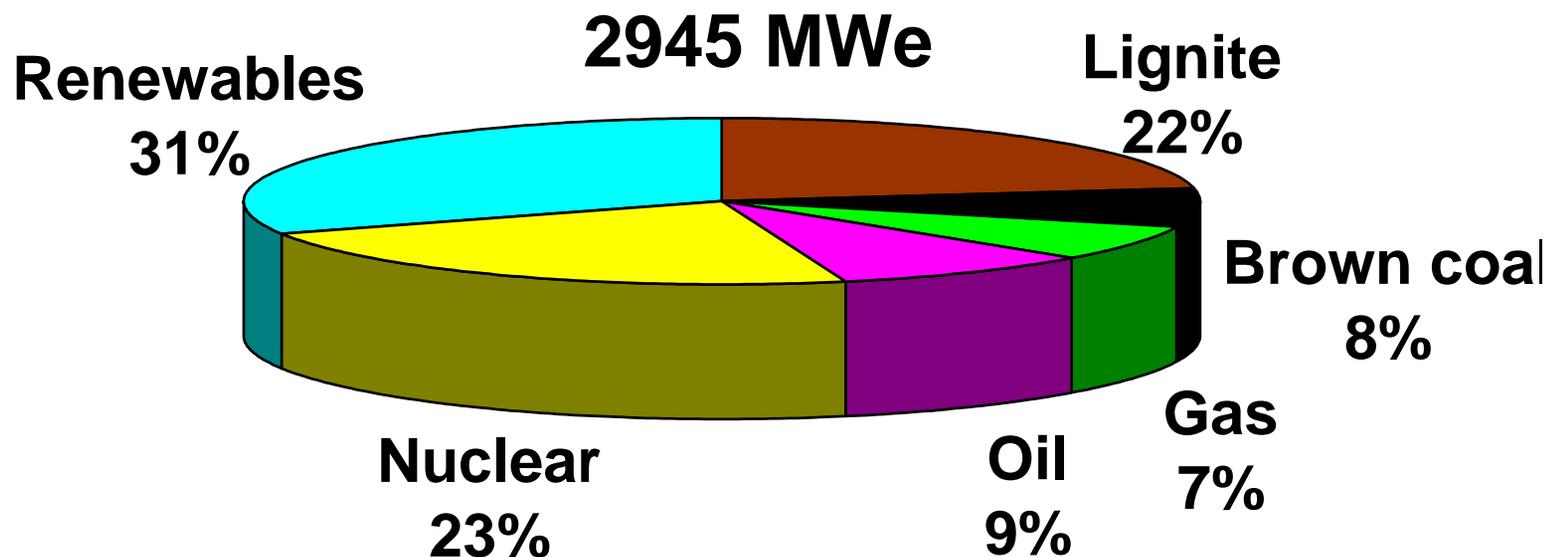
■ Natural gas

■ Nuclear

■ Renewables



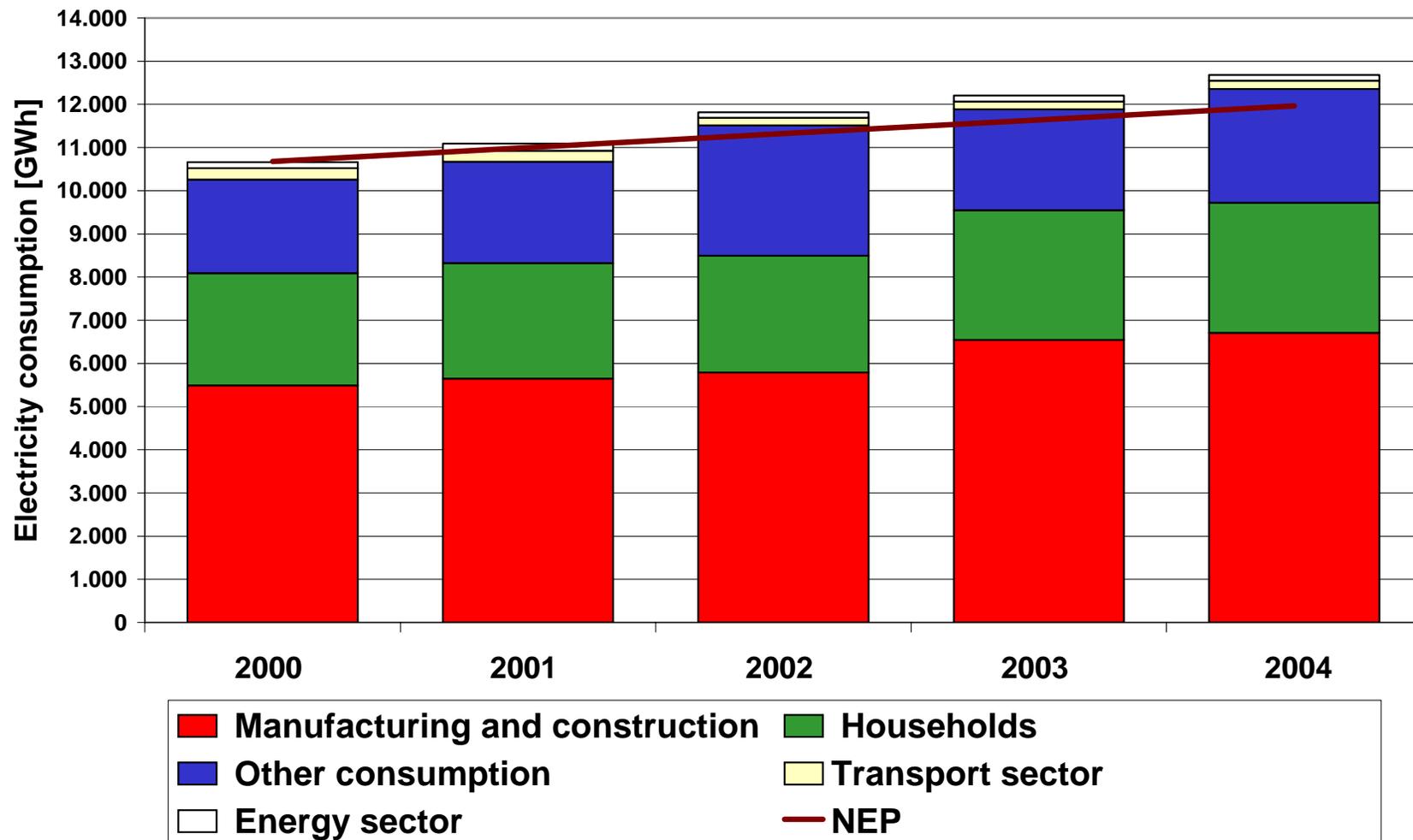
# Installed capacity: ~ 2950 MWe



*(50% of NPP owned by Croatia)*



# Electricity consumption growth





## Feed-in tariffs for RES & CHP

- Network operators (TSO & DSOs) are responsible for purchase of all electricity offered by QP at the price determined by the Government
- Uniform price or binom tariff (day/night, seasons)
- Premium – varied by technology and primary source:
  - 100% for independent electricity sell
  - 30% for own electricity use
- Industrial CHP:
  - Fixed price for surplus electricity sell only (not for units > 1MWe)
- Special treatment for biggest Ljubljana CHP plant
  - fixed price/premium defined by the government



# **Resolution on National energy program - targets**

## **1. EFFICIENCY**

- Increasing energy efficiency in industry for 10 % till 2010
- Increasing energy efficiency in public sector for 20 % till 2010
- Increasing energy efficiency in transport and traffic for 20 % till 2010
- Doubling the share of electricity from CHP till 2010

## **2. RENEWABLES**

- Increasing the share of renewables in primary energy consumption on 12 % till 2010
- Increasing the share of renewables for heat on 25 % till 2010
- **Increasing the share of RES for electricity on 33,6 % till 2010**



## **Qualified production of electricity**

- Producers who generate electricity in individual production facilities with
  - higher-than-average actually achieved efficiency in the cogeneration of electricity and heat, or
  - who use renewable energy sources
- The other definitions from the field of renewables and cogeneration are the same than in EU directives 77/2001/EC and 8/2004/EC.



## Decree on Qualified producers

- Prescribes types of qualified producers on the basis of the primary energy source
- Divides qualified power plants regarding to the nominal electric power (micro: up to 36 kW, small: from 36 up to 1 MW, medium: from 1 MW up to 10 MW and large: above 10 MW)
- Sets conditions for the acquiring the status



## **Electricity purchasing obligation**

- Transmission and distribution system operators are responsible for the purchase of all electricity from:
  - Qualified electricity producers connected to the transmission networks,
  - Producers using domestic fuels (coal) in amount of 15% of the primary energy necessary for the generation of the electricity.
- The price should be determined by the Government.
- The system operators must ensure the sale of thus purchased electricity in a transparent and non-discriminatory manner in accordance with the provisions of Energy Act.



## Price and premium

- QP may sell all or part of produced electricity on the market
- in such case they are eligible for the payment of the premium (system operators shall pay the premium)
- The premium represents the difference between the feed-in price and the average annual market price of electricity .
- Premium is determined by the Government



## Covering of costs

- The system operators must ensure the sale of such purchased electricity in a transparent and non-discriminatory manner in accordance with open electricity market rules.
- All costs incurred upon the system operator due to such purchase and sale or the payment of the premium shall be covered from the price for the use of networks.
- Price of the use of networks consists of network fee (set by Agency) and additions (set by Government)



## Who pays?

- Price for the use of network is price paid by all consumers of electricity from the public grid, calculated partly:
  - per kW per month
  - per kWh
- Autoproducers are not paying
- Customers supplied from private networks (and not using public network) are not paying



## **Decree on Purchase and prices**

- The electricity network operator is obliged to sign contract with QP on purchasing electricity from QP for the period up to ten years.
- The purchase price and the premium are fixed for the first five years, and are reduced for 5 % in next five years and for 10 % from the tenth year of operation.
- The prices and premiums are reduced also in the case that QP is connected to high voltage network.



**Thank you for your attention!**