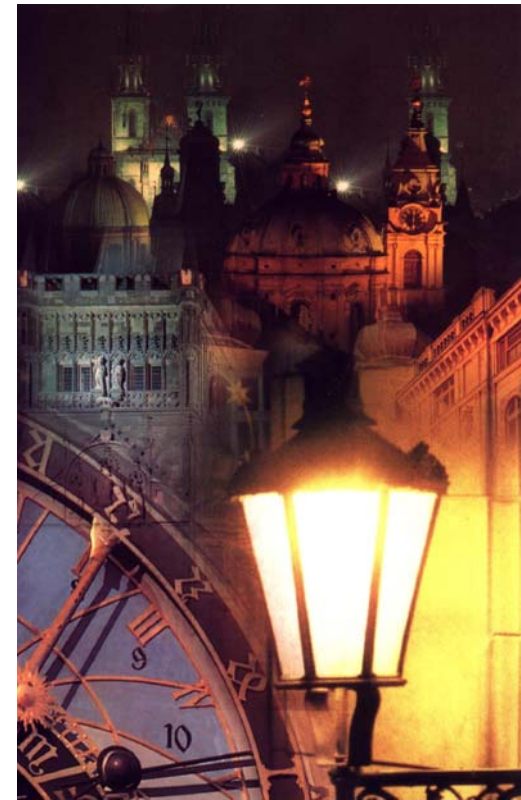


# **Support of the Renewable Electricity in the Czech Republic**

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Electricity Department

# Content

- **Energy Regulatory Office**
- **The main principles of renewable energy support in CR**
- **RES-E development**
- **Level of prices in European context**
- **Some problems resulting from RES-E development**



# Energy regulatory office

- Established in 2001 as a state administration body
- Main duties stated in the Energy Act
  - Support of competition – creating market rules
  - Regulation in areas without competition
    - Transmission, distribution, system services
  - Issuing own decrees
    - Licensing
    - Market rules (Electricity, Gas)
    - Conditions for connection to grids
    - Quality of supply
    - Etc.
  - Dealing with international issues
  - **Support of RES and CHP**



## Act No. 180/2005 Coll. on renewable energy support

- renewable energy producers have priority access right to electricity grid
- producers can choose between two types of support

### Fixed feed in tariff

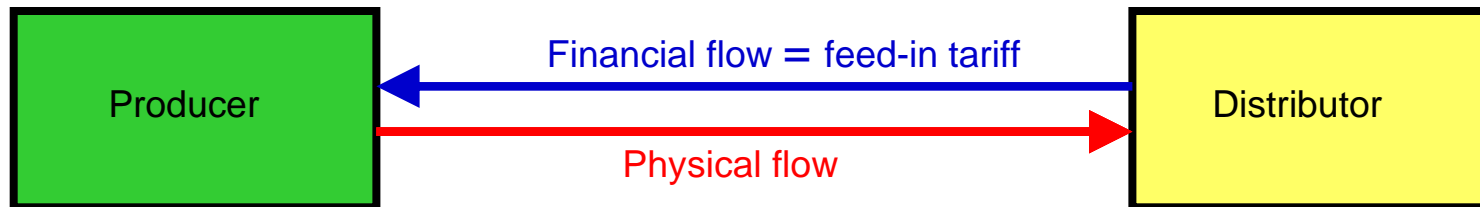
- buyer is a distribution or a transmission company
- 15 years payback period of investments is guaranteed
- price adjustments related to inflation
- not apply to electricity from combined fossil fuel and biomass combustion

### Green bonuses

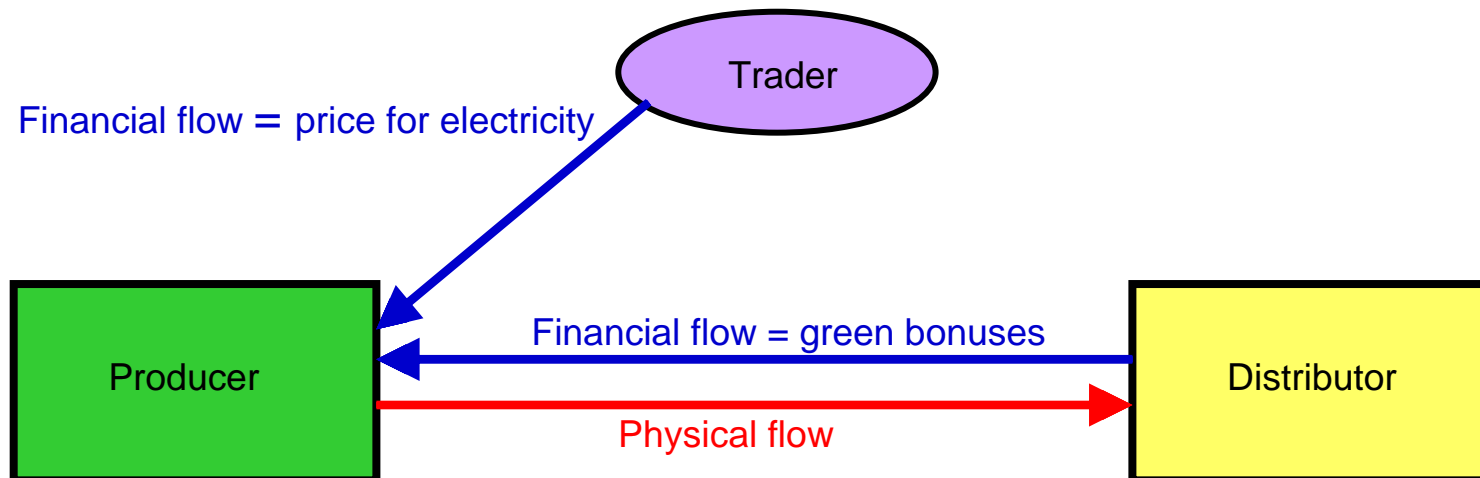
- buyer is a trader or a customer
- distribution or transmission company pays green bonus to producer
- no long- term price guarantees
- higher risk for producer but higher profit possible

# Feed-in tariffs x green bonuses

**Feed-in tariffs :  $\text{Income} = \text{Feed-in tariff}$**



**Green Bonuse:  $\text{Income} = \text{price for electricity} + \text{green bonus}$**



# Main support scheme for RES-E

## Other Legal Provisions I

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### **Decree No. 475/2005 Coll., (revision in 2007)**

- sets procedures and timeframes for producers to choose between feed-in tariff and bonus
- contains main typical technical and economical parameters as an input for price calculations:
  - Specific investment costs of technologies per kW
  - Utilization period at maximum capacity of the unit
  - Typical lifetime of each technology
  - Last revision of parameters in 2007 for new installations

### **Decree No. 150/2007 Coll., about price regulation procedures**

- prices for RES-E are adjusted annually according to the inflation from 2% up to 4%
- Prices are guaranteed for typical lifetime of each technology

# Main support scheme for RES-E

## Other Legal Provisions II

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### **Decree No. 541/2005 Coll., on market rules**

- producers are obliged to report on electricity produced to obtain feed-in tariff or bonus
- includes monthly sheet for producers

### **Decree No. 482/2007 Coll., about types of biomass**

- distinguishes three basic types of biomass

### **Decree No. 502/2005 Coll., about procedures concerning combined biomass and fossil fuel combustion**

- procedures of reporting about fuels and their parameters
- formulas for calculation of „green“ part of electricity

# Main support scheme for RES-E

## Price decisions

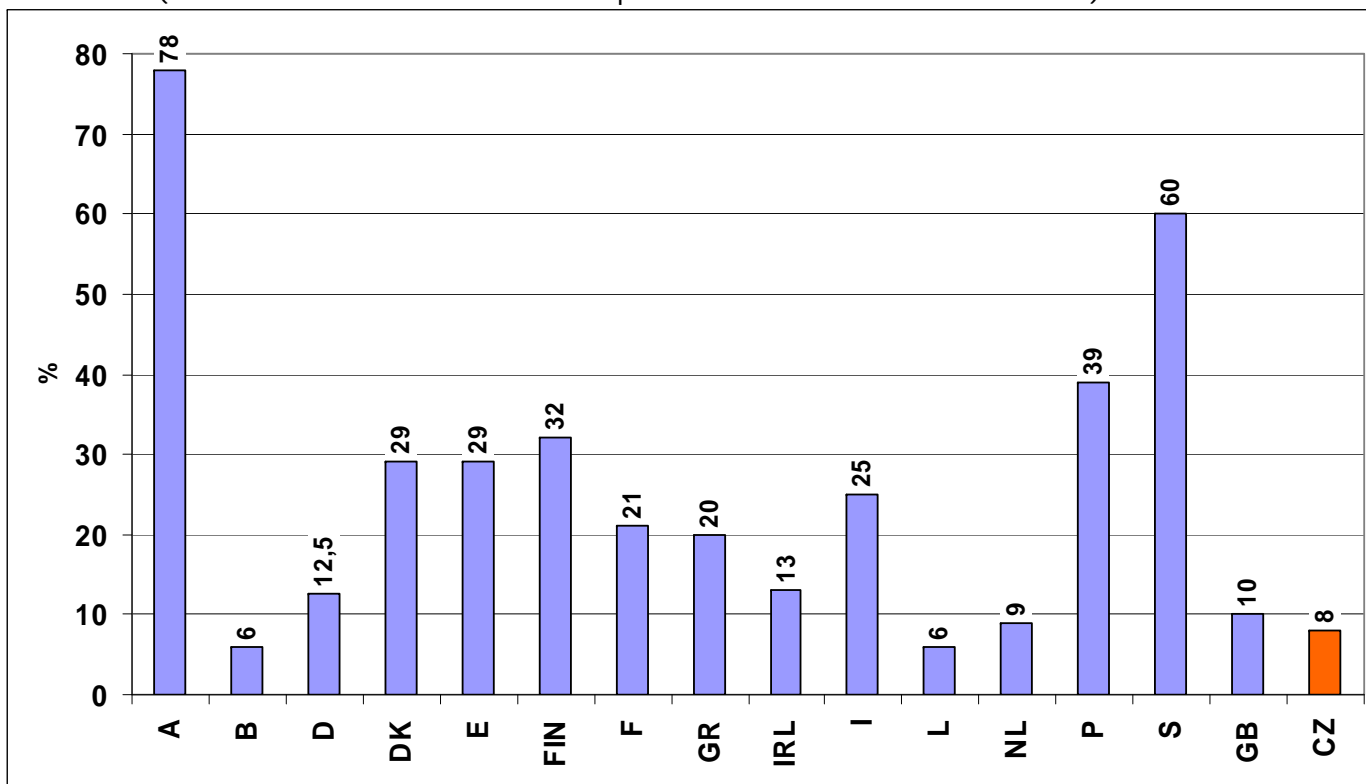
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Feed-in tariff system in price decisions has been employed since 2001  
(before RES-E act in 2005)

- **Feed in tariffs are set as minimum electricity purchase prices**
  - **no price reduction with regard to deviations** - responsibility of deviation is transferred to a distribution or transmission company
- **Bonuses are set as fixed prices**
  - **responsibility for deviations is subject of an agreement between producer and trader** – no bonus reduction either
- **Prices are published in the ERO Price Decision:**
  - **annual update of minimum prices and bonuses**
  - **prices are differentiated by the type of a renewable source and its commissioning date**
  - **more than 30 categories of prices exist in 2008**
- **Extra premium for renewable cogeneration electricity**

# EU Indicative Targets for Power Generation from Renewables in 2010

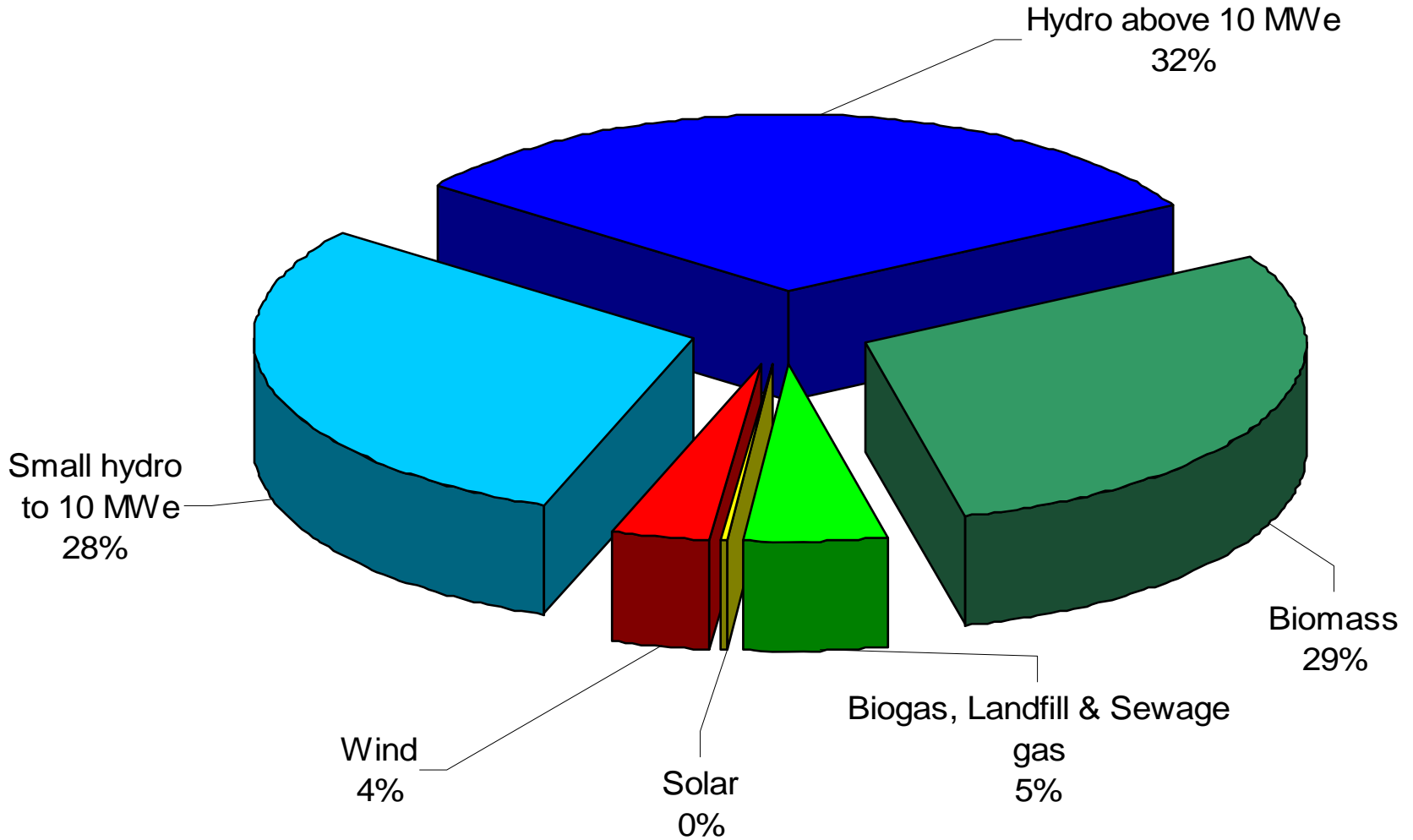
(Directive 2001/77/EC of the European Parliament and of the Council)



## Czech Republic

Share of renewable electricity on gross national consumption %	2003	2004	2005	2006
	2,67	3,97	4,34	4,97

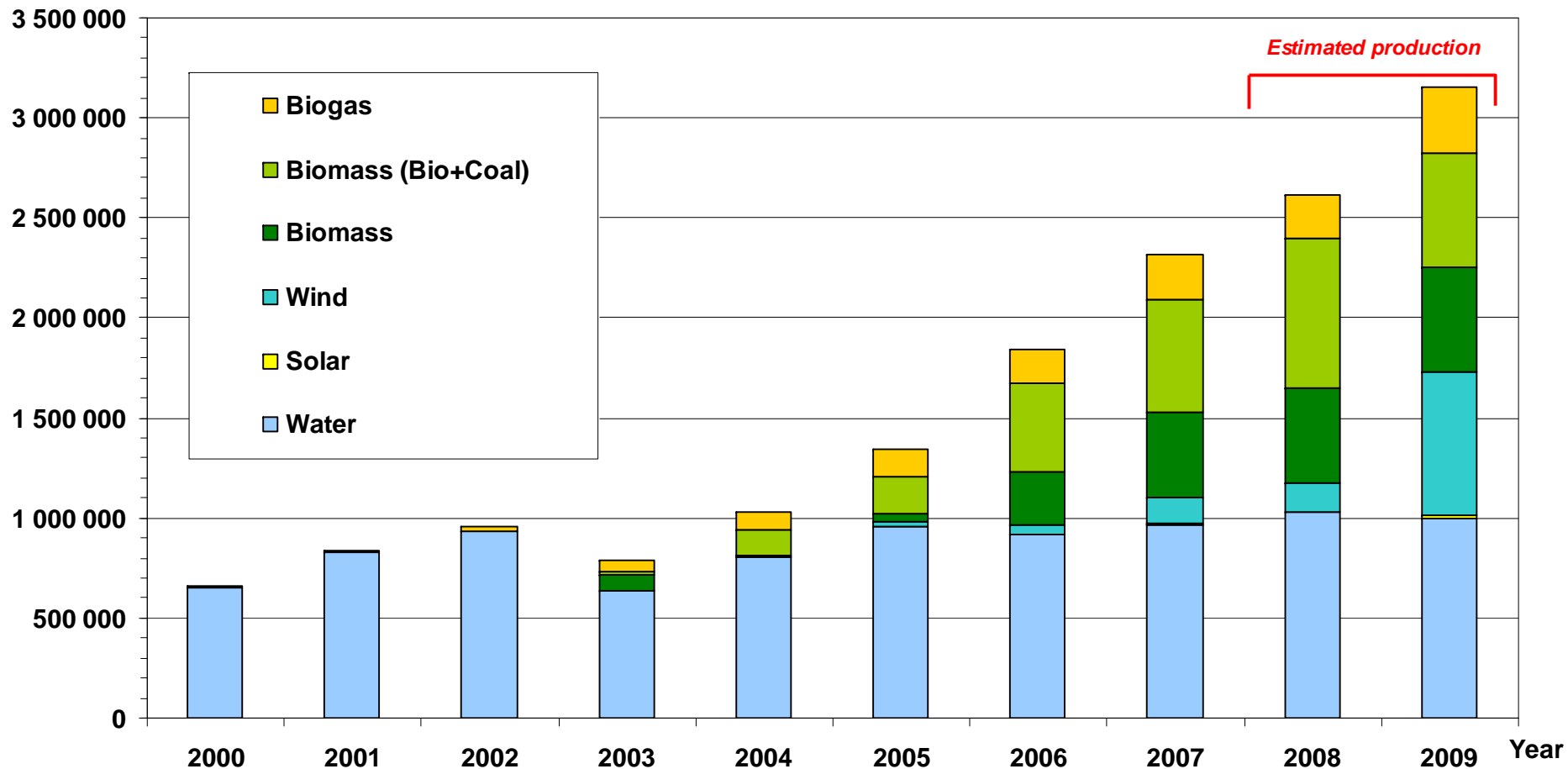
# Share of different types of Renewables in 2007 in CR



# RES-E generation development in CR

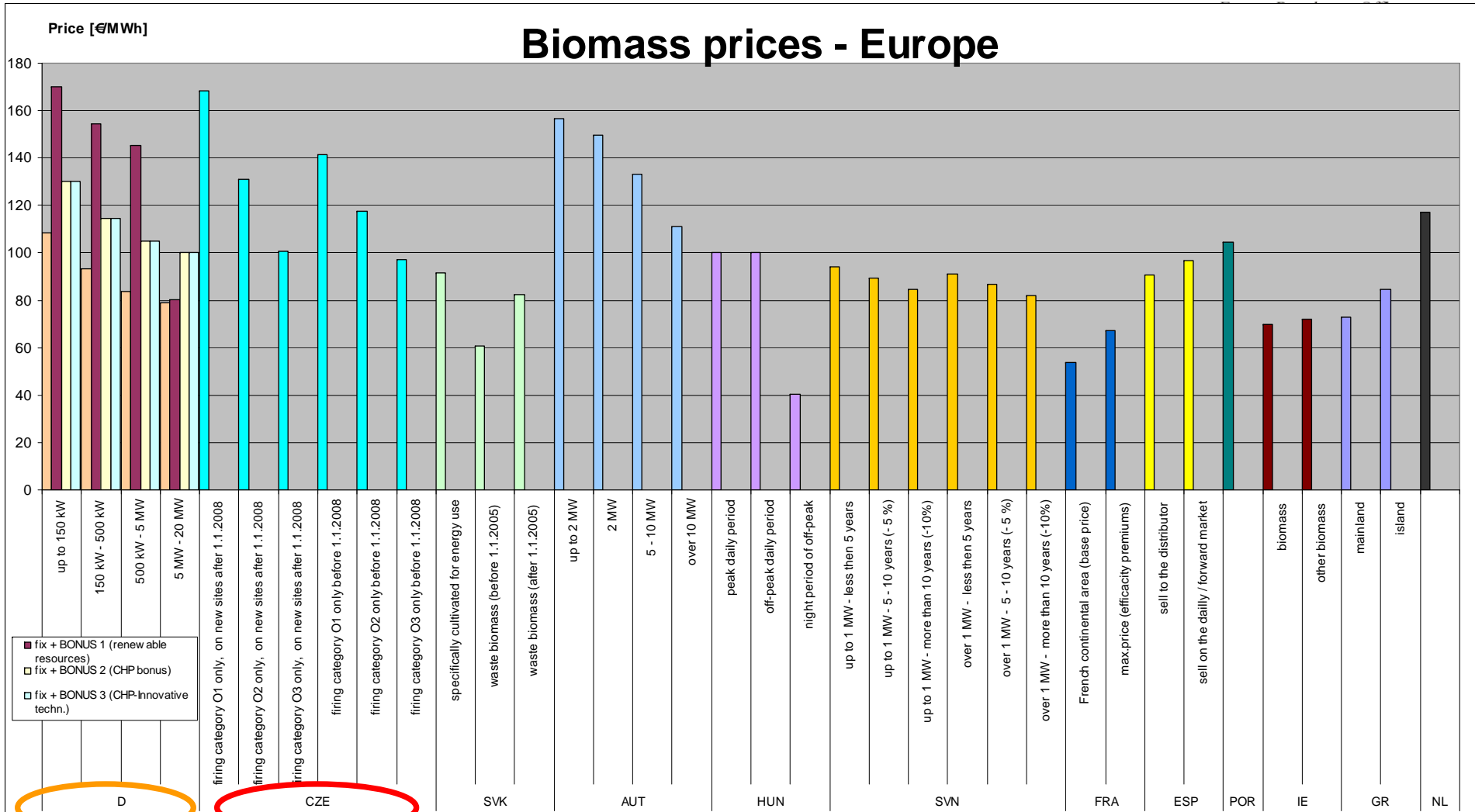
*Renewable electricity production development in the Czech Republic  
(excluding large hydro)*

Production [MWh]

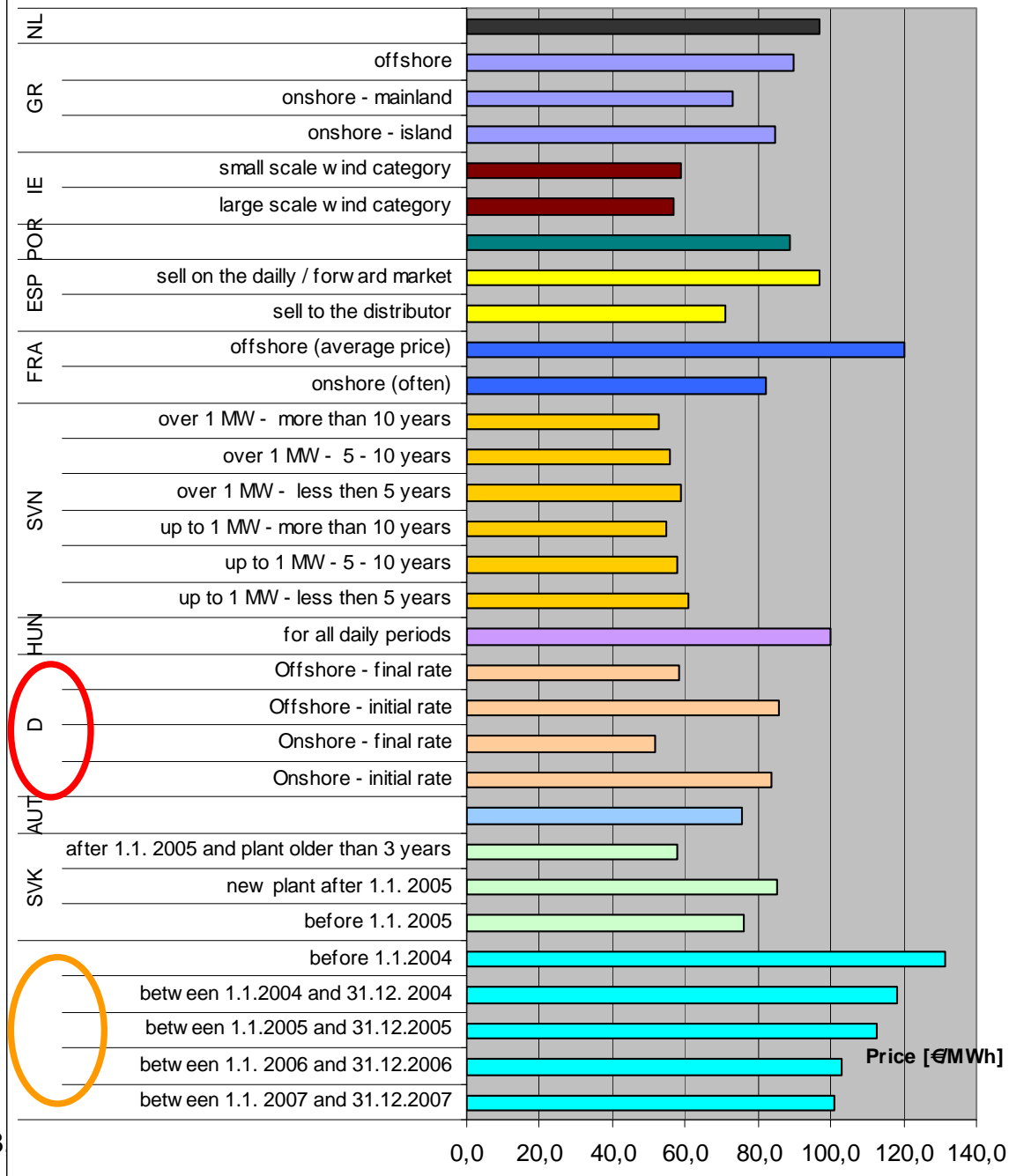


# Biomass prices - Europe

Price [€/MWh]

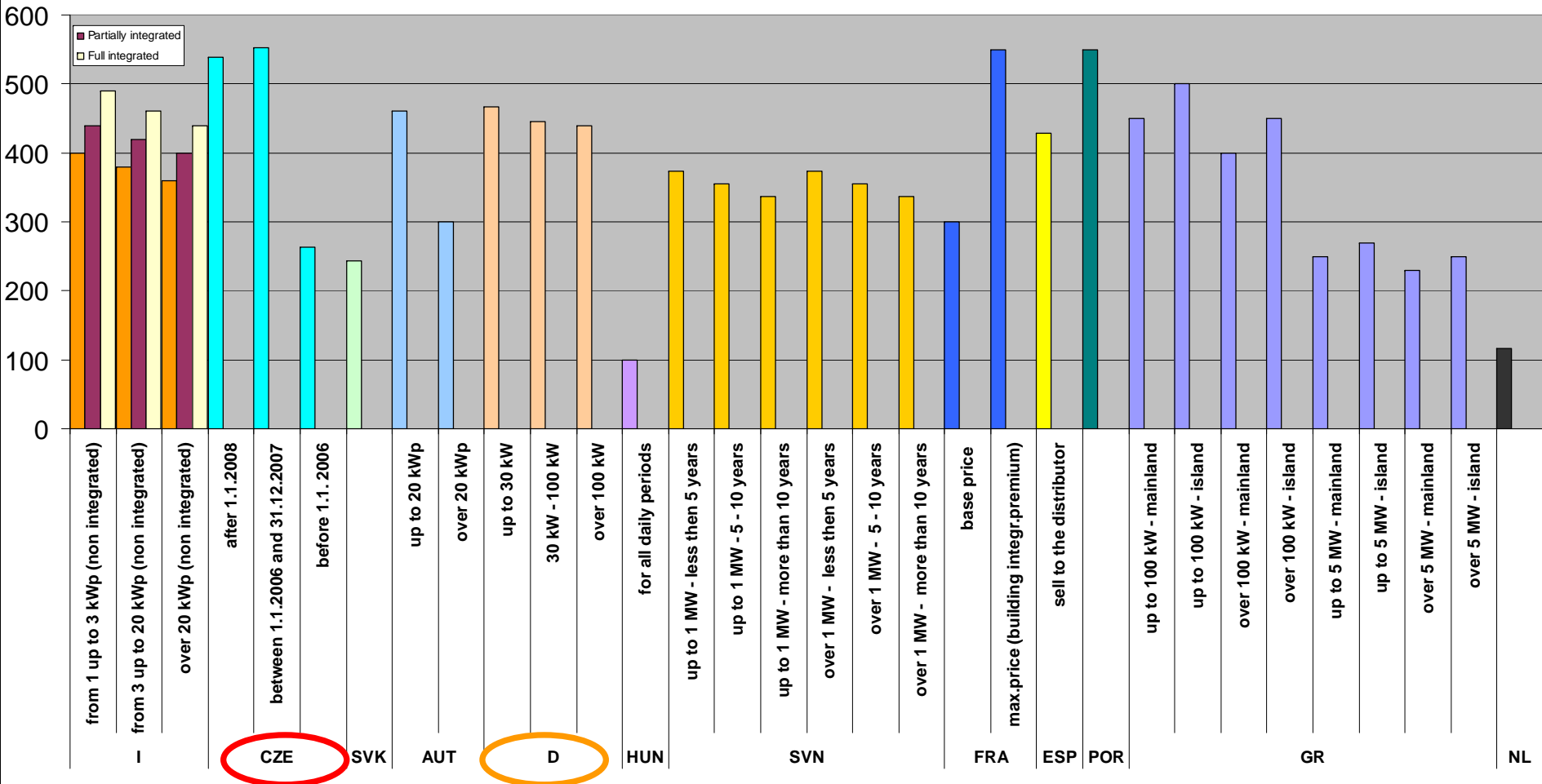


# Wind energy - Europe

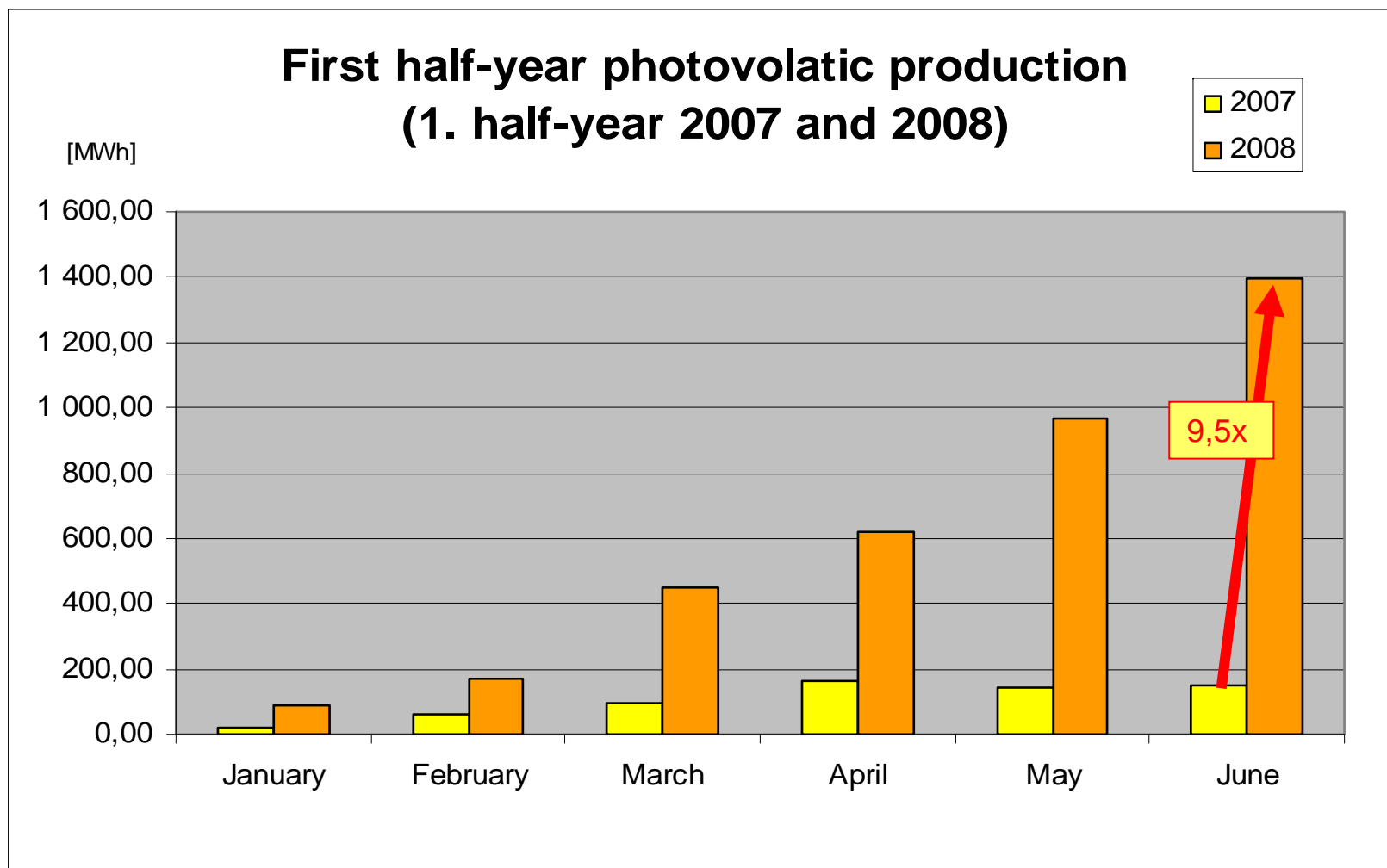


## Solar energy - Europe

Price [€/MWh]

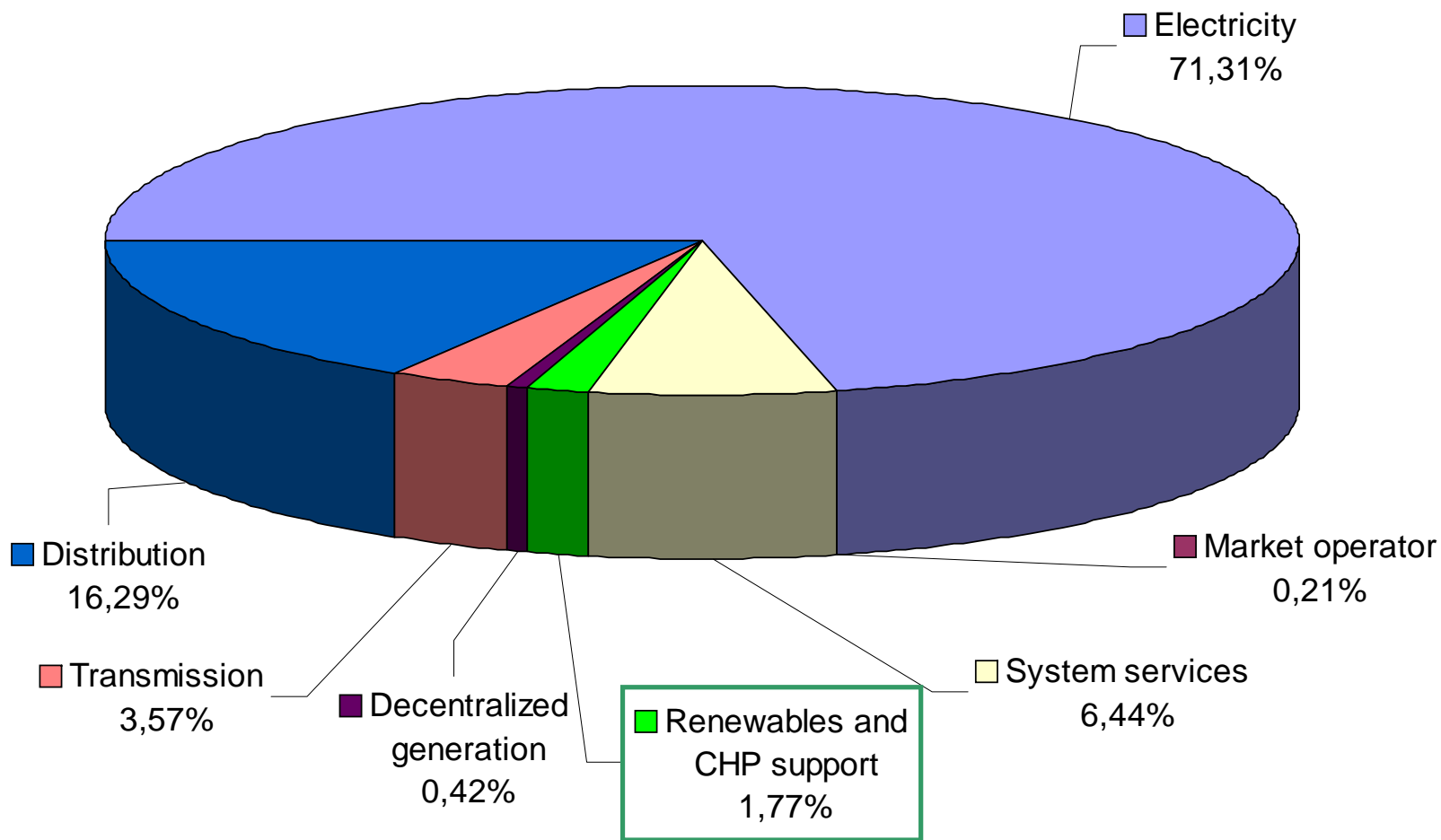


# Photovoltaics – the fastest growing RES in 2008



# Impact of RES support on end customers

## Share of price components on average household price in 2008 (without VAT)



# Problems resulting from RES-E development

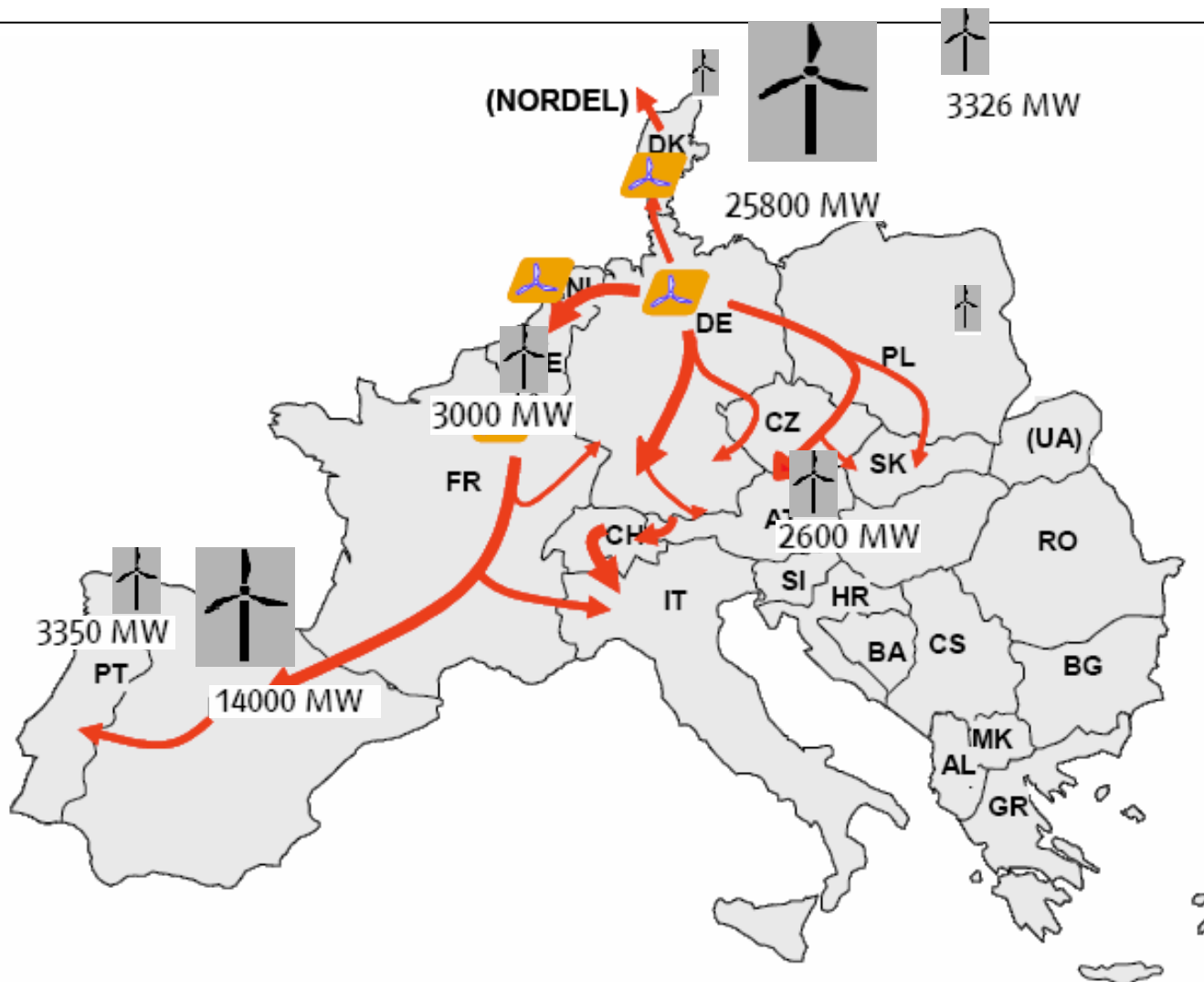
## Impact on prices paid by end customers

- **increasing costs for end customers (difference between market price and support)**
  - 2002          24mil. EUR
  - 2008          76 mil. EUR

## Security and reliability of supplies

- **increasing deviations and cost for deviation management**
  - **influences structure and utilization of balancing energy**
- **need for new reserve capacities**
  - estimated extra cost in 2010 (800 MW in wind)    115mil EUR

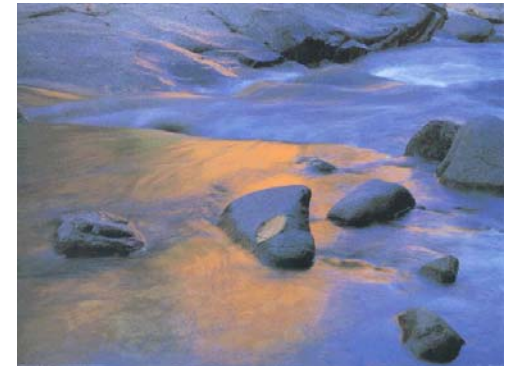
# Problems resulting from RES-E development



# Available information

[WWW.ERU.CZ](http://WWW.ERU.CZ)

- **FAQ concerning renewables**
- **Price decisions**
- **All relevant decrees and laws**
- **Statistics**
- **Contacts**





Thank you for your attention

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