



# **Electricity Market Integration 2.0 in Central and South East Europe**

**Cross-border capacity remuneration  
schemes**

**Case of Bulgaria**

**Budapest, May 30, 2017**



## ***Published documents***

---

- 1. ACER annual report pursuant to Article 11 of the Regulation EC 713/2009 on the results of monitoring and barriers to the completion of the IEM, published on 30 July 2013***
- 2. Interim Report of the Sector Inquiry on Capacity Mechanisms and Commission Staff Working Document (EC), published on 13 April 2016***
- 3. Clean Energy Package (CEP), EC proposals published in November 2016. Ongoing consultations***



# ***CRMs and internal market for electricity***

**Gaps in the current  
Target market model**

**1**

**Interface with  
Decarbonisation  
policies: EU ETS  
and RES integration**

**2**

**Short term price  
Signals**

**3**

**Investment  
framework to  
ensure security  
of supply**

**4**

**Locational signals  
to coordinate  
network,  
generation**





# ***CRMs and internal market for electricity***

## **Gaps in the current Target market model**

**1**

**Interface with  
Decarbonisation  
policies: EU ETS  
and RES integration**

### **Inefficient interface**

Weak prices are not effective  
to drive carbon emission abatement

Policies to promote RES have come  
with number of negative side effects

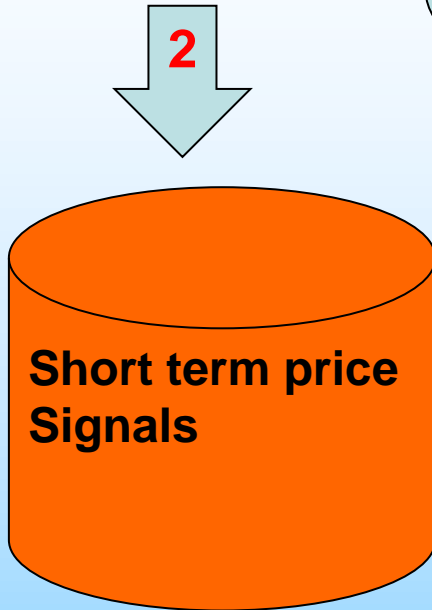
- Distortion of merit order list due to RES support schemes (e.g negative prices)
- Lack of control of volumes
- Stranded costs



# ***CRMs and internal market for electricity***

## **Gaps in the current Target market model**

**2**



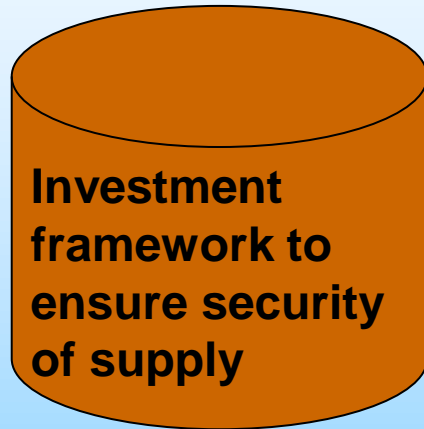
The current short term price signals do not convey the proper scarcity value of operation flexibility in many countries  
Energy only markets should be able to provide the price signals necessary to trigger the investments provided wholesale prices allow fixed costs to be recovered  
The value of short term operating flexibility is typically captured through intraday and ancillary services markets  
Short term electricity prices do not send the right signals



# ***CRMs and internal market for electricity***

## **Gaps in the current Target market model -1**

**3**



The current market framework does not send adequate long term investment signals

Need for capacity mechanism, but .....many risks:

CM may strengthen market power if they do not allow new or alternative providers to enter the market.

Over-procurement of capacities

Over-compensation of the capacity providers

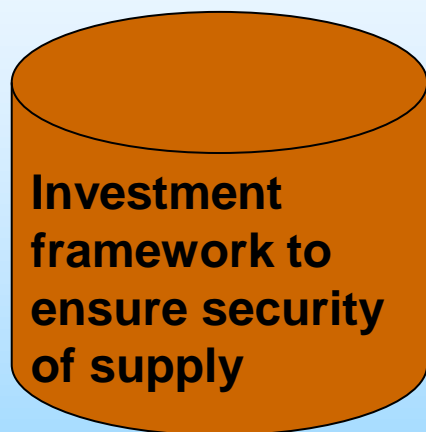
Increase energy costs for consumers



# ***CRMs and internal market for electricity***

## **Gaps in the current Target market model -2**

3



A number of recent national reforms were introduced in the past years to guarantee security of supply, but they are not harmonized.

The EC worried that there is a risk for distorting competition. Such uncoordinated mechanisms could undermine further integration of European electricity markets.

The Sector inquiry contributed to the Commission's Energy Union strategy in particular by supporting the development of a legislative proposal for a new electricity market design in the EU.





# ***CRMs and internal market for electricity***

## **Gaps in the current Target market model**

**4**

**Locational signals  
to coordinate  
network,  
generation**

Locational signals are missing to coordinate network, centralized and decentralized generation

Only few markets within EU have locational signals, (e.g zonal prices or locational transmission charges)

Network investments are primarily driven by RES Generation

According to ENTSO-E TYNDP 2014 80% of the proposed network investment in the next decade across Europe linked to RES integration (over €150 billion)





# ***CRMs and internal market for electricity***

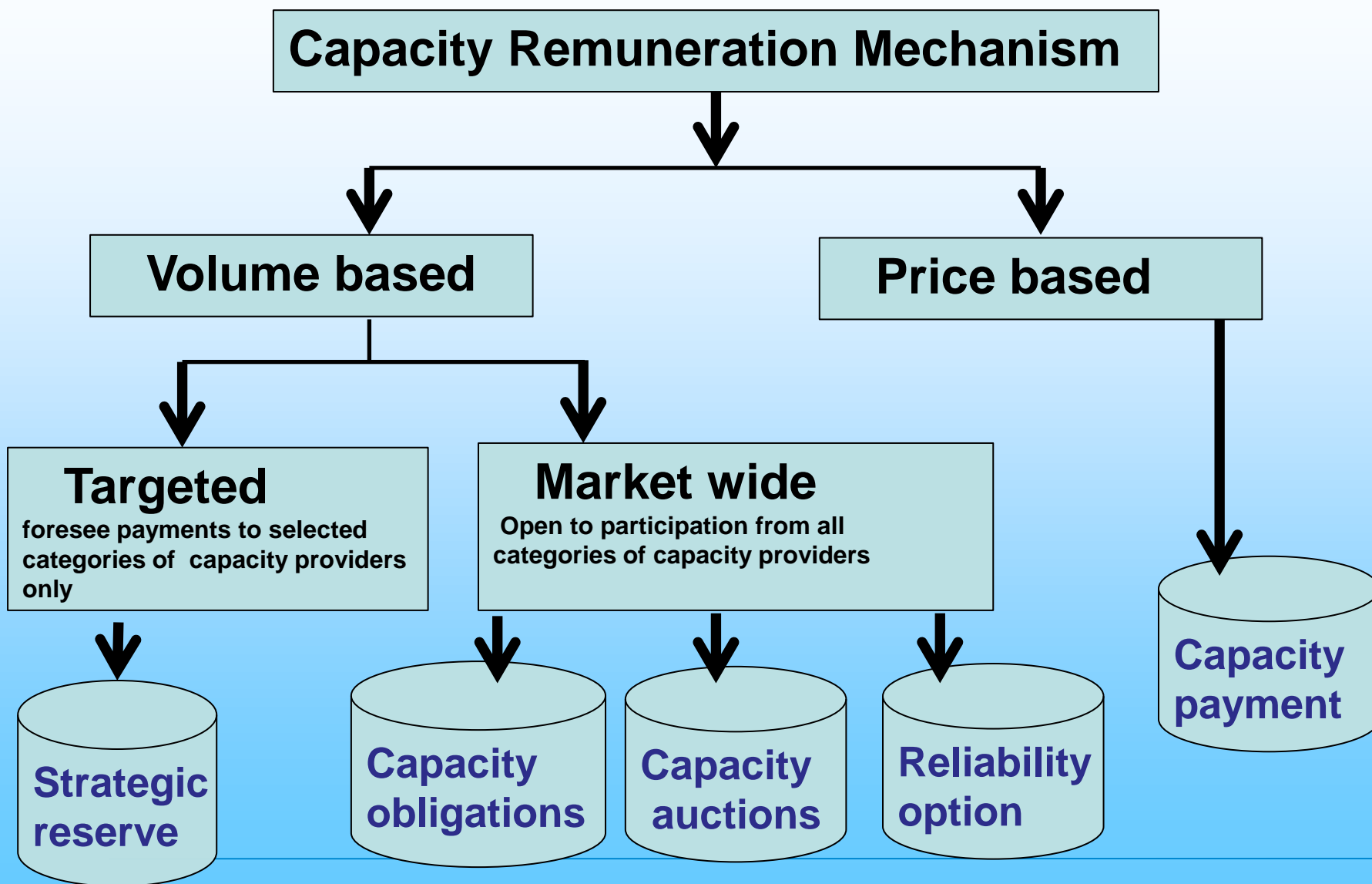
---

- 1. Electricity markets with increasing shares of RES will not be able to deliver sufficient capacity to meet electricity demand at all time periods in the future – uncertainties, RES support schemes distort price signals, unpredictable scarcity periods***
- 2. CRMs provide additional stimulus to investors and ensure that sufficient amount of capacity will be available and in many MSs such CRMs were introduced***
- 3. On the other hand, CRMs impose additional costs to energy consumers and could not be treated separately from the integrated market design***





# ***CRMs and internal market for electricity***





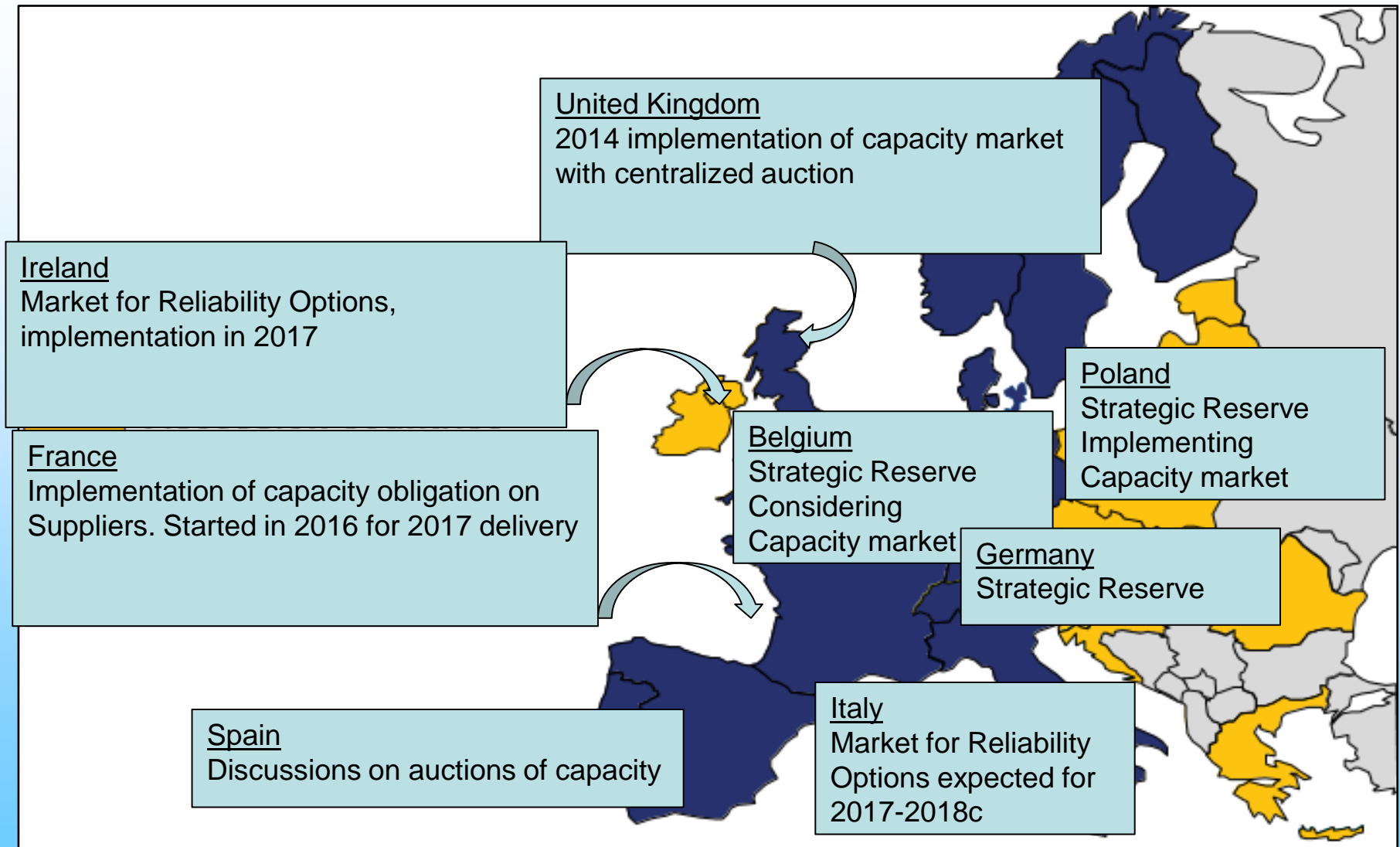
# ***CRMs and internal market for electricity***

***All categories may be designed in many different variants:***

- ✓ ***Different kinds of capacity and demand side participation***
- ✓ ***How the eligibility to provide capacity is determined?***
  - ✓ ***How far in the future obligations are contracted?***
  - ✓ ***How the level of adequate capacity is determined?***
    - ✓ ***How availability is documented and certified***
- ✓ ***How the payment is determined ? (administratively, by the auction, by the market). How the costs are allocated?***
- ✓ ***The Rules for operation and activation of the capacity***



# CRMs in Europe





## ***CRM in Bulgaria***

---

***The amount of the Strategic reserve is determined by the Minister of Energy***

***The amount is set to 400 MW in the period from April to September and 600 MW in the period from October to March***

***The capacity is contracted via auctions for a period from several months up to one Year.***

***The procedure is transparent***





# ***CRM in Bulgaria***

---

***The following documents are published on the web-site of ESO:***

***Register of the qualified participants***

***Rules for Tender organization***

***Invitation to the Bidders***

***Tender Documentation***

***Results from the tender***

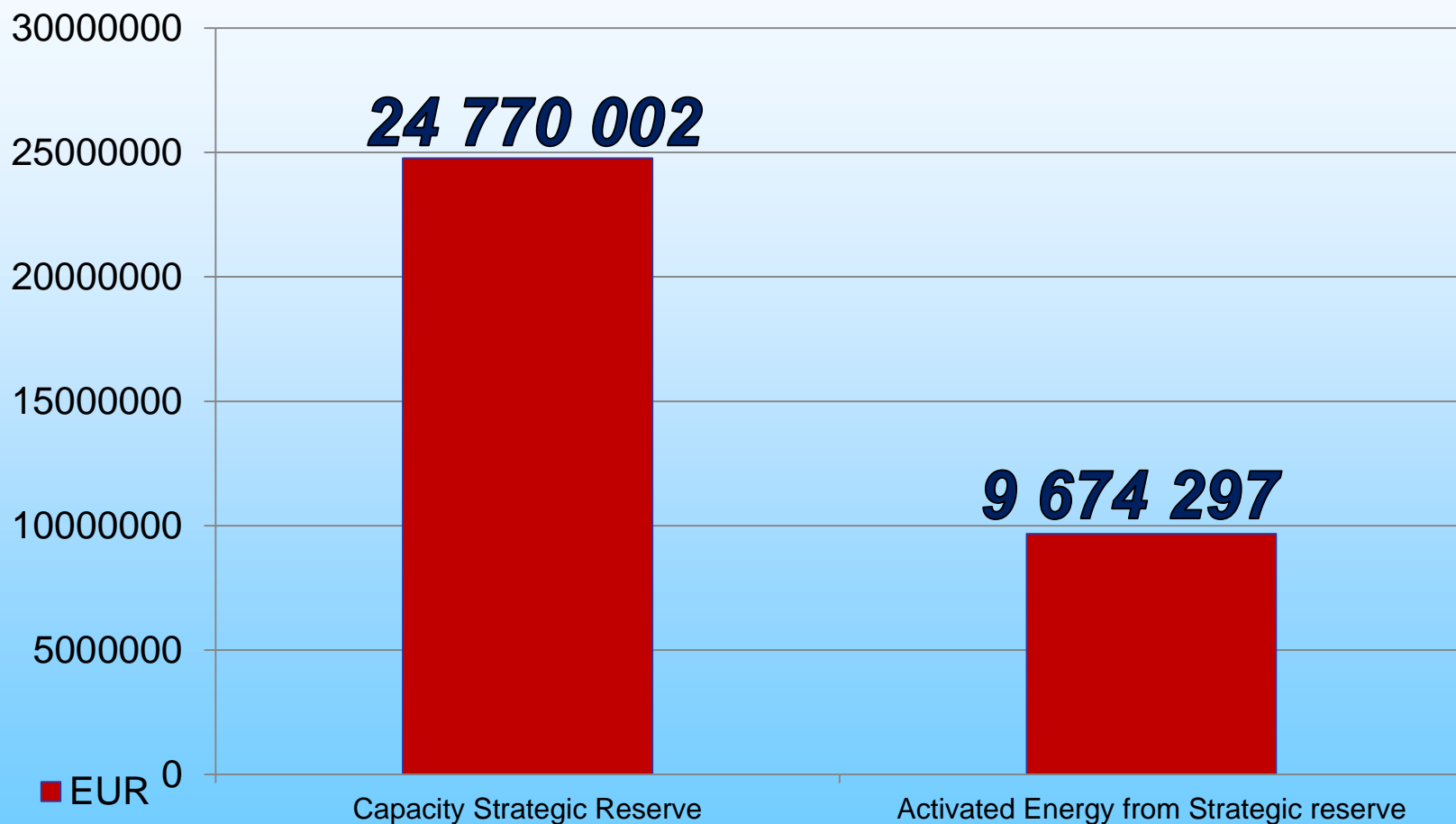
***Protocol's from the tender committee***





# ***CRM in Bulgaria***

## ***Costs for 2016 (Strategic reserve) EUR***

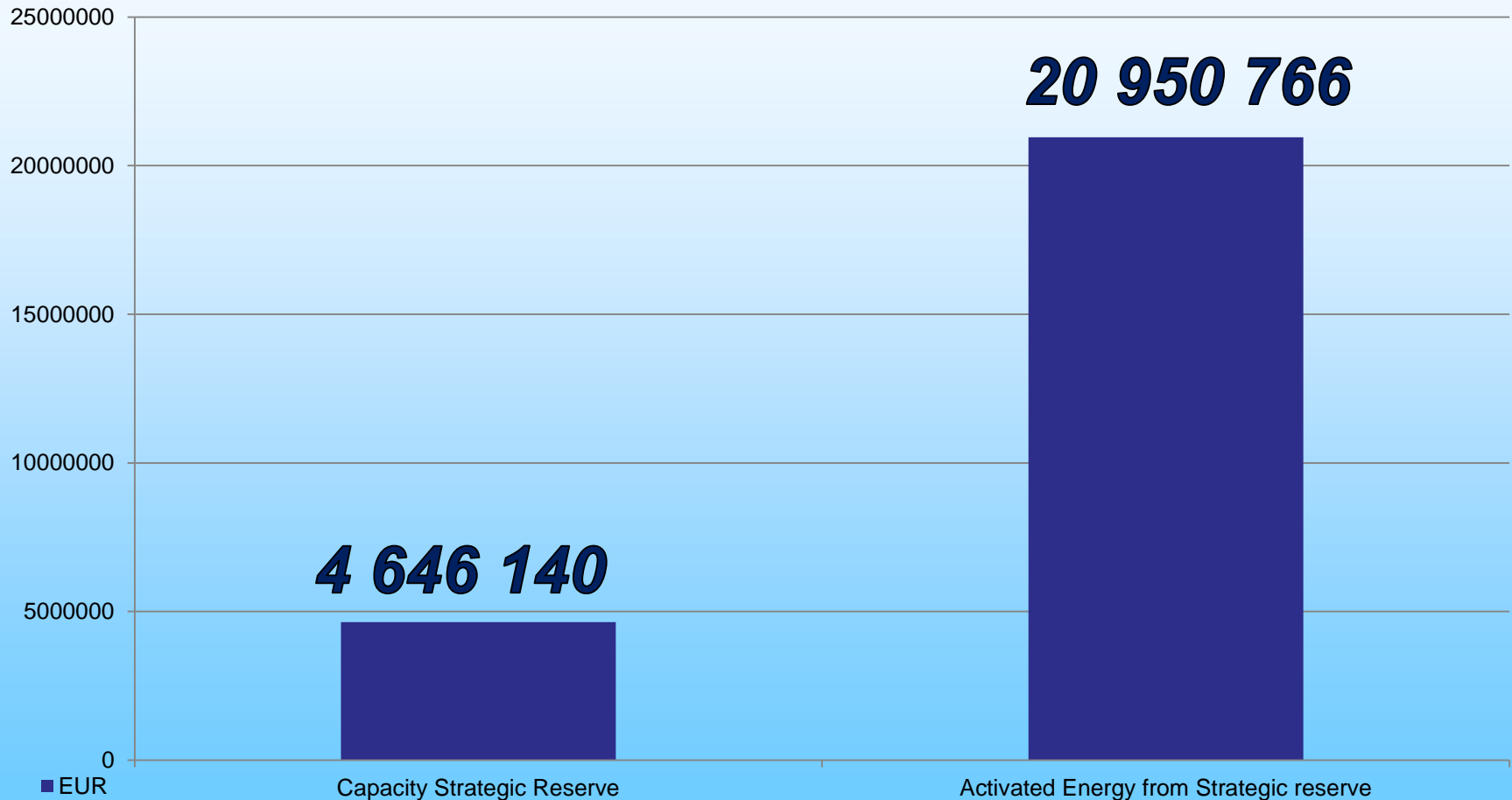






# ***CRM in Bulgaria***

## ***Costs for 2017 (January-March) EUR***





## ***New Regulations for CM (CEP)***

---

***The amendments in the Energy legislation (CEP) aim to harmonize Rules for Assessment of Resource Adequacy at Regional and EU level and introduce competition between investors from different MSs***





# ***New Regulations for CM (CEP) -1***

## ***Proposed amendments to Electricity Regulation, Article 21***



***Capacity mechanisms (CMs) shall be open to direct participation of capacity providers located in another MS provided there is a network connection***






***MS shall not restrict capacity which is located in their territory from participating in CMs of other MS***





# ***New Regulations for CM (CEP)-2***

## ***Proposed amendments to Electricity Regulation, Article 21***

-  ***CMs cannot create unnecessary market distortions or limit cross-border trade***
-  ***CMs existing on the date of entry into force of the Regulation will have to be adopted to comply with the new Requirements***
-  ***MS can introduce CM provided they are justified by a resource adequacy concern documented in an European resource adequacy assessment conducted on the basis of a shared methodology established through ENTSO-E and ACER***



# ***New Regulations for CM (CEP)-3***

## ***Proposed amendments to Electricity Regulation, Article 21***



***Where the adequacy assessment has not identified a resource adequacy concern, MS will not be allowed to implement a CM***



***When applying a CM MS will have to have a reliability standard in place to indicate their desired level of security of supply***





# ***New Regulations for CM (CEP)-4***

## ***Proposed amendments to Electricity Regulation, Article 21***

***12 months after entry into force of the new Regulation, ENTSO-E shall be obliged to submit to ACER the following documents:***

- 1. Methodology for calculating the maximum entry capacity for cross-border participation***
- 2. Methodology for sharing the revenues***
- 3. Common Rules to carry out the availability checks***
- 4. Common Rules to determine a non-availability payment***
- 5. Terms of operations of the Registry of capacity providers***
- 6. Common Rules to identify capacity eligible to participate in tenders***



[www.eso.bg](http://www.eso.bg)

*Thank you for your attention*

*Viktoria Popovska*  
*Head of Electricity Market Department*  
*ESO*