

# INFRASTRUCTURE INVESTMENTS

Progress update 2010/2011

21TH PHLG MEETING

29 June 2011



## ELECTRICITY INTERCONNECTIONS

- 400 kV Overhead transmission line Albania (Elbasan) and Former Yugoslav Republic of Macedonia (Bitola)
- 400 kV Overhead transmission line Romania (Resita) and Serbia (Pancevo)
- **May 2011, UNMIK/Kosovo put in operation the 400 kV interconnection line with Albania!**

## POWERPLANT(S)

- Zhur Hydro power plant in Kosovo under UNSCR 1244
- Boskov Most HPP in Former Yugoslav Republic of Macedonia

## GAS INTERCONNECTION PIPELINES

- Interconnection Bulgaria (Dimitrovgrad) – Serbia (Nis)
- Ionian Adriatic Pipeline
- KRL LNG Terminal, Croatia

# 400 kV INTERCONNECTION ALBANIA – FORMER YUGOSLAV REPUBLIC OF MACEDONIA

## PROGRESS 2010 -2011

- ✓ September 2010 (in an extra-ordinary round), both TSOs submitted a joint application for the Feasibility Study and ESIA to the WBIF
- ✓ December 2010, the application was approved by WBIF Steering Committee pending on available residual funding under IPF window
- ✓ April 2011, common ToRs were prepared by IPF Consultant and agreed by OST AL, MEPSO MK, EBRD, KfW and ECS in a joint meeting
- ✓ May 2011, the project funding under IPF window was confirmed

## NEXT STEPS

- ✓ ToRs are approved by DG ELARG and IPF Consultant is mobilised , mid June 2011
- ✓ OST and MEPSO will nominate the project teams and send their coordinates to ECS, IPF, EBRD and KfW
- ✓ Next meeting is scheduled for after the 1st project report is prepared (Mobilisation Report)

## FINANCING OPTIONS

- ✓ Pending on the results of the FS, both EBRD and KfW expressed interest

## TIMETABLE (estimate)

- ✓ Contracting the consultant for FS/ESIA by end Q2 2011.
- ✓ Preparation of the FS and ESIA (one year): finalised during Q2 2012
- ✓ Finalisation of financing Q2 2012 to Q3 2012
- ✓ Tendering/ permitting, land use rights, and construction: 2 - 3 years: Q3 2012 – 2014/ 2015

## PROGRESS 2010 - 2011

- Technical meetings in Romania and Serbia between EMS and Transelectrica in January and April 2011, agreement reached on cross border point and route

Serbia has continued with the project documentation:

- ✓ ESIA finalised
- ✓ Urbanism plans contracted, etc.

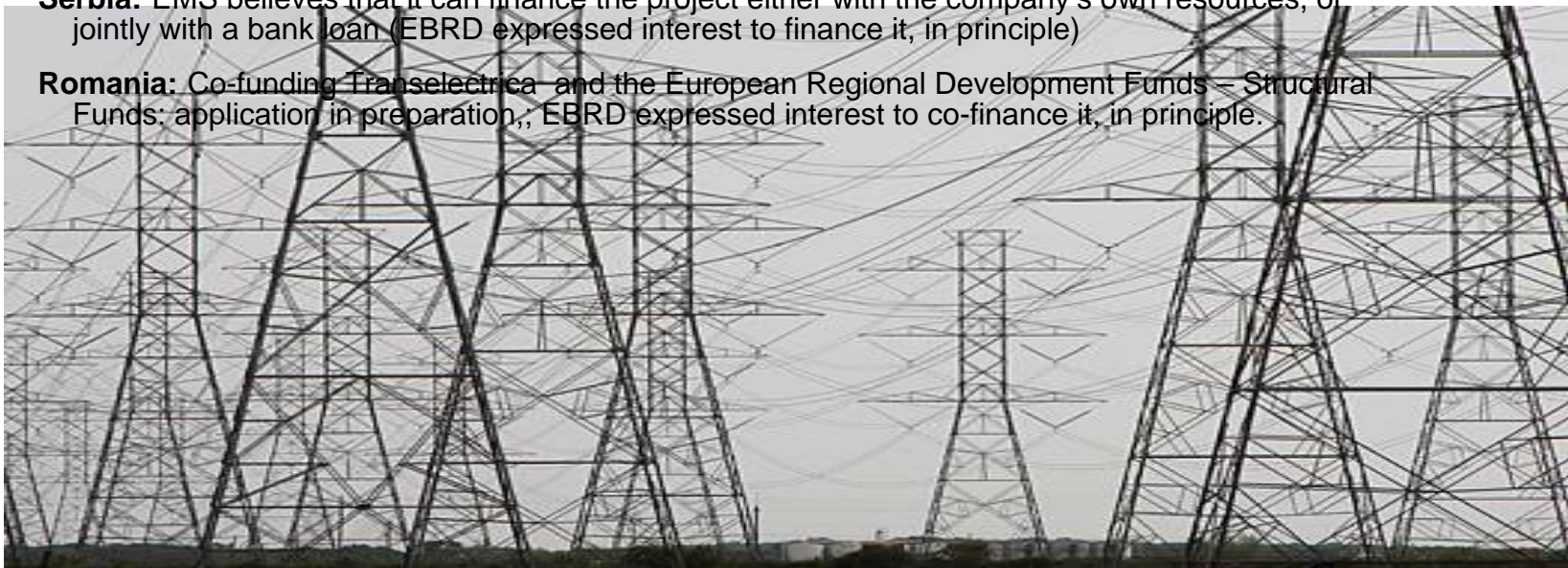
Romania:

- |   |                             |
|---|-----------------------------|
| ✓ Feasibility Study                     | - approved Dec. 2010        |
| ✓ Environmental and social impact study | - in preparation, Jan. 2012 |
| ✓ Contracting for construction          | - expected in Nov. 2012     |

## FINANCING OPTIONS

**Serbia:** EMS believes that it can finance the project either with the company's own resources, or jointly with a bank loan (EBRD expressed interest to finance it, in principle)

**Romania:** Co-funding Transelectrica and the European Regional Development Funds – Structural Funds: application in preparation, EBRD expressed interest to co-finance it, in principle.



## CURRENT STATUS

- ✓ Feasibility study - Reviewed in 2009, under a WB grant
- ✓ Preliminary environment assessment prepared

## PROGRESS 2010 - 2011

- ✓ Request for Expressions of Interest for Qualification published on 21 June 2010, with the deadline 26 August 2010
- ✓ The pre-qualified companies are:
  1. KI - Kelag International GmbH (Austria)
  2. A consortium of Parties Insaat (Turkey) & D Energy Union System Development Corporation (UK)
  3. Limak Group (Turkey)

## NEXT STEPS

- ✓ The project is put on hold, pending reaching an international agreement with Albania for the use of international waters; bilateral talks are conducted currently;
- ✓ Albania has given a number of HPP concessions downstream the same river, and Zhur HPP if constructed will change the Albanian hydro potential.

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- EBRD funded the technical and environmental due diligence for the project
- Final decision for funding by EBRD is pending; total costs approx. 84 Million Euro ;  
Installed capacity 70MW, 11.8 GWh/year,
- Construction expected to start 1<sup>st</sup> Q 2012



# IONIAN ADRIATIC PIPELINE

## PROGRESS 2010 - 2011

- ✓ The Interstate Committee (Al, Mn, Cro, BiH) was established in 2010; 1<sup>st</sup> meeting was held in Vienna on 25<sup>th</sup> November 2010;
- ✓ A joint application for Feasibility Study (FS) & Environmental and Social Impact Assessment (ESIA) was prepared and submitted to the Western Balkan Investment Framework (WBIF) by Plinacro CR on behalf of all four CPs ( with support letters) in February 2011.
- ✓ The project was approved by the Steering Committee in June 2011.
- ✓ TAP Company signed MoUC with Plinacro (CR), BH Gas (BiH) February, and with Montenegro in May 2011
- ✓ 2<sup>nd</sup> meeting of the Interstate Committee on IAP organised on 7<sup>th</sup> April 2011 in Dubrovnik (to present MoUC and further activities and agreed on ToR)
- ✓ The Study “Gas market potential for the gas ring” was finalised in January 2011, by EIHP and presented at the 2<sup>nd</sup> meeting of the IAP Interstate Committee .

## NEXT STEPS

- ToRs for the FS & ESIA to be prepared by the IPF Consultant and agreed with parties, 3rdQ 2011
- Studies prepared Q3 2011 – Q3 2012

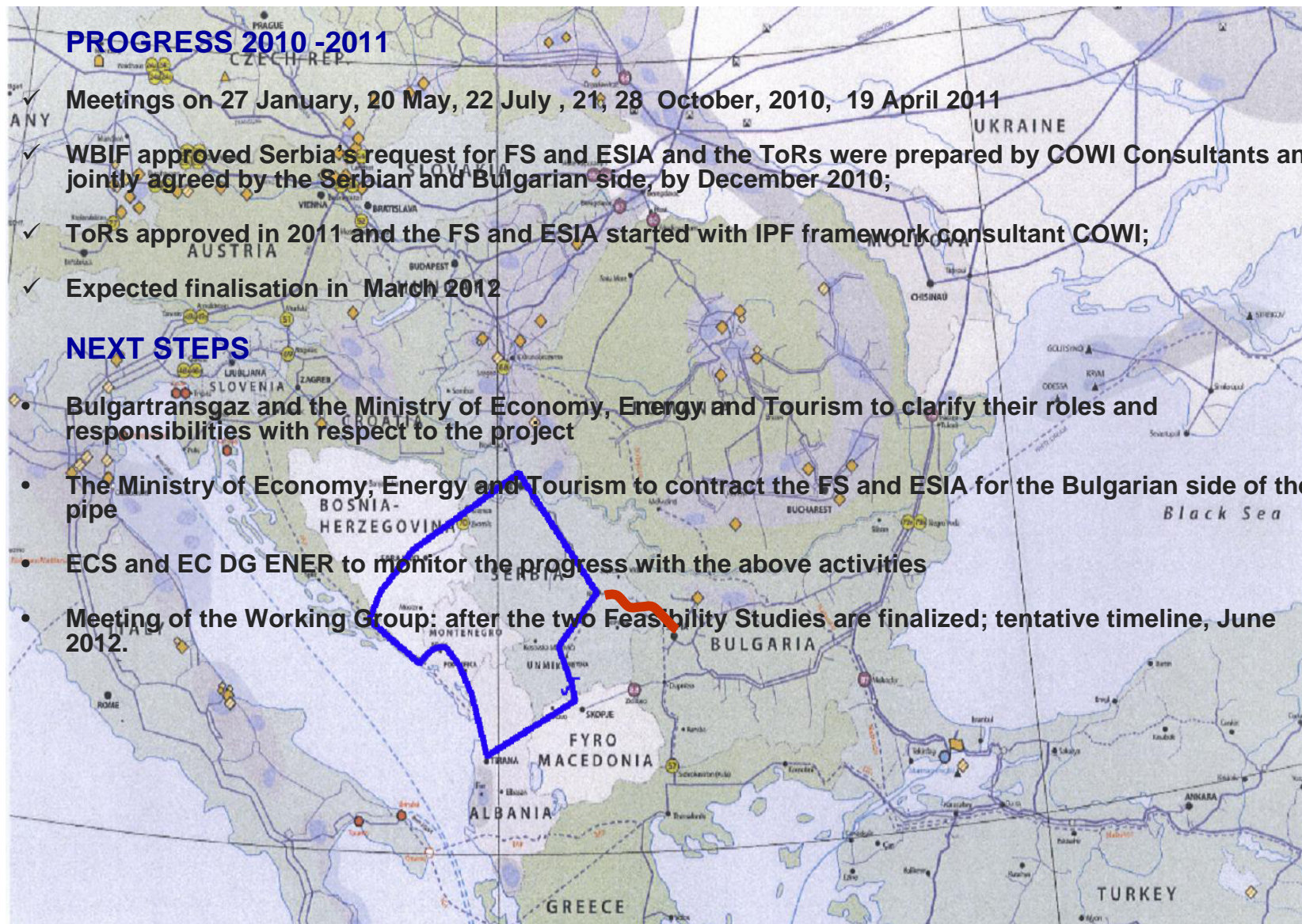


## PROGRESS 2010-2011

- ✓ Meetings on 27 January, 20 May, 22 July, 21, 28 October, 2010, 19 April 2011
- ✓ WBIF approved Serbia's request for FS and ESIA and the ToRs were prepared by COWI Consultants and jointly agreed by the Serbian and Bulgarian side, by December 2010;
- ✓ ToRs approved in 2011 and the FS and ESIA started with IPF framework consultant COWI;
- ✓ Expected finalisation in March 2012

## NEXT STEPS

- Bulgartransgaz and the Ministry of Economy, Energy and Tourism to clarify their roles and responsibilities with respect to the project
- The Ministry of Economy, Energy and Tourism to contract the FS and ESIA for the Bulgarian side of the pipe
- ECS and EC DG ENER to monitor the progress with the above activities
- Meeting of the Working Group: after the two Feasibility Studies are finalized; tentative timeline, June 2012.





## 400 KV INTERCONNECTION ROMANIA (Suceava) – MOLDOVA (Balti)

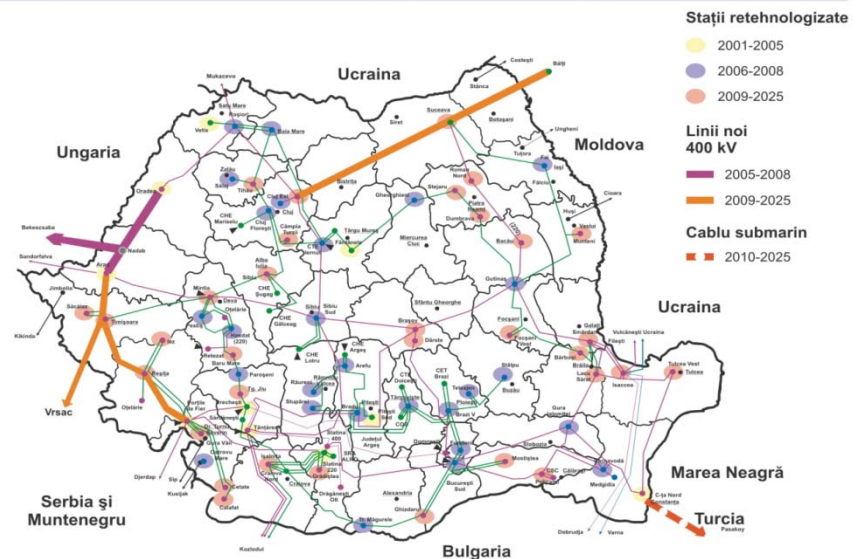
### PROGRESS 2010-2011

- MoU signed with Transelectrica Romania
- Joint application by MLD UKR RO to Joint operational programme for the feasibility study for synchronous interconnection with ENTSOE submitted 31 March 2011 and approved; phase II with detailed project proposal in preparation: deadline for decision 1 July 2011
- The project in Moldova is on the EU Indicative pipeline of operations in the Eastern Region 2010-2011 of the Neighborhood Investment Facility

### NEXT STEPS

- FS for synchronous interconnection of MLD and UKR with the ENTSOE to be prepared by 2013; the Consortium for the Study is managed by TRANSELECTRICA RO, and funded by Eastern Partnership programme

#### Rețeaua Electrică de Transport a CN Transelectrica SA



## GAS INTERCONNECTION ROMANIA (IASI) - REPUBLIC OF MOLDOVA (UNGHENI)

### PROGRESS 2010 - 2011

- Project - supported by both governments of RM and Romania
- Promotion of this project for Joint Operational programme Romania - Ukraine - Republic of Moldova 2007 - 2013 to consider for financing
- First meeting of working group in Iasi during 16 - 17.09.2010; participation of Ministry of Economy and Moldovagaz (Moldova), and SNTGN Transgaz (Romania)
- 31 May 2011, SF and ESIA are finalised by both Parties (MLD and RO)
- Moldova and Romania have made a joint application for 7 Mil Euro grant to Joint Operational Programme which was approved: 3 Mill Euro for Moldova and 4 Mill Euro for Romania.

### FINANCING OPTIONS

- EBRD expressed interest to finance Moldova pipeline, pending on the FS results; decision is pending;
- TRANSGAS RO plans to finance it from own sources.

### NEXT STEPS

- Organise/participate in the next WG meeting and decide on the actions needed

## Former Yugoslav Republic of Macedonia

### 1. HPPs CEBREN AND GALISTE ON CRNA REKA RIVER

- January 28th 2011, a public call for granting 100% possession for electricity production from hydro power plants on Crna river and participation in public private partnership with AD ELEM was announced. International Finance Corporation (IFC) is the financial transaction manager to the Government.
- Ten out of 16 that expressed interest were invited to submit offers for construction of hydro and Cebren and Galiste and operation of HPP Tigves, by May 2011, as follows:
  - EVN AG (Austria); AES Electric (United Kingdom); Energo pro (Czech Republic); Edison (Italy); Kosep-Daelin (Korea); Lanco- Komipo-KHNP (India); PPC (Greece); Strabag (Austria); Porr, Landsvirkjun (Austria/Island), and CWE&CTGPC (PR China)
- The deadline for submission of final bids is 29th of July 2011.
- Investment cost approx. 600 – 700 Million Euro

### 2. CONSTRUCTION OF 12 HYDROPOWER PLANTS ON VARDAR RIVER

- On April 11<sup>th</sup> 2011, the Government recently signed a Memorandum of Understanding (MoU) with China International Water & Electric Corp. (CWE) and the Chinese Development Bank (CDB) for the construction of 12 hydropower plants on river Vardar with total installed capacity of 325 MW, annual production of around 1050 GWh
- The project will be funded by the government (15 %) and CDB (85 %), total costs will amount to €1.5 Billion.
- Expected to be completed in the next 12 to 15 years.



### 3. 400KV INTERCONNECTION WITH SERBIA

- A loan agreement with the World Bank was signed in Q12011, after the Energy Law was passed by the Parliament (this was the WB's condition for signing)
- Detailed planning documentation and the project for expropriation of the land is under preparation realization is
- The main project for access roads is prepared, and the Technical Agreement between MEPSO (MK TSO) and EMS (SR TSO) is being finalised
- Tender documents for the construction works are planned to be finished by August 2011 and the tender to be announced in September 2011 (pending on the land expropriation process).
- Construction is expected to last 18 months.



## MONTENEGRO

### 1. DC 1000 MW UNDERSEE CABLE INTERCONNECTION WITH ITALY

#### CURRENT STATUS/PROGRES 2011

- End 2010 and early 2011, the Government of Montenegro, Terna IT and CGES MN signed agreements to sell shares to Terna in CGES and form a strategic partnership to build the cable;

### 2. FOUR HPPs ON MORACA RIVER , 238 MW

#### CURRENT STATUS/PROGRES 2011

- IFC selected as advisor for the tendering process in 2009
- Prequalification of four investors in February 2010; three companies invited to submit bids.
- Detailed Spatial Plan and ESIA were prepared in 2010 and tender documentation was approved by the Government
- Deadline for the final bids 30 September 2011

### 3. HPP KOMARNICA, 168 MW

- Detailed Spatial Plan and ESIA are being prepared in 2011; decision on the technical solution and tender documentation will follow



## PROGRESS WITH OTHER INVESTMENTS (CONT.)

### SERBIA

#### 1. TPP KOLUBARA B, 700 MW (2X350 MW) LIGNITE-FIRED AND TPP NIKOLA TESLA B3, 700 MW LIGNITE-FIRED

- Qualification of private investors in August 2009
- Tender documentation submitted to investors in September 2009
- Comments on the Implementation agreements received from the Bidders in December 2009
- Tender process restarted after the government adopted the Conclusion on June 3, 2010
- On July 29, 2010 the government adopted the draft Conferral Act for activities of general interest as well as relevant amendments and annexes to JP EPS founding acts, securing PE EPS's ownership rights over the assets which are necessary for the realization of the Projects
- Submission of final tender documentation by December 2010, extended
- A bid was received from the Italian company EDISON (20 May 2011) for Kolubara B, evaluation of the technical proposal is in progress.
- No bid were received for Nikola Tesla B3 by the extended deadline.

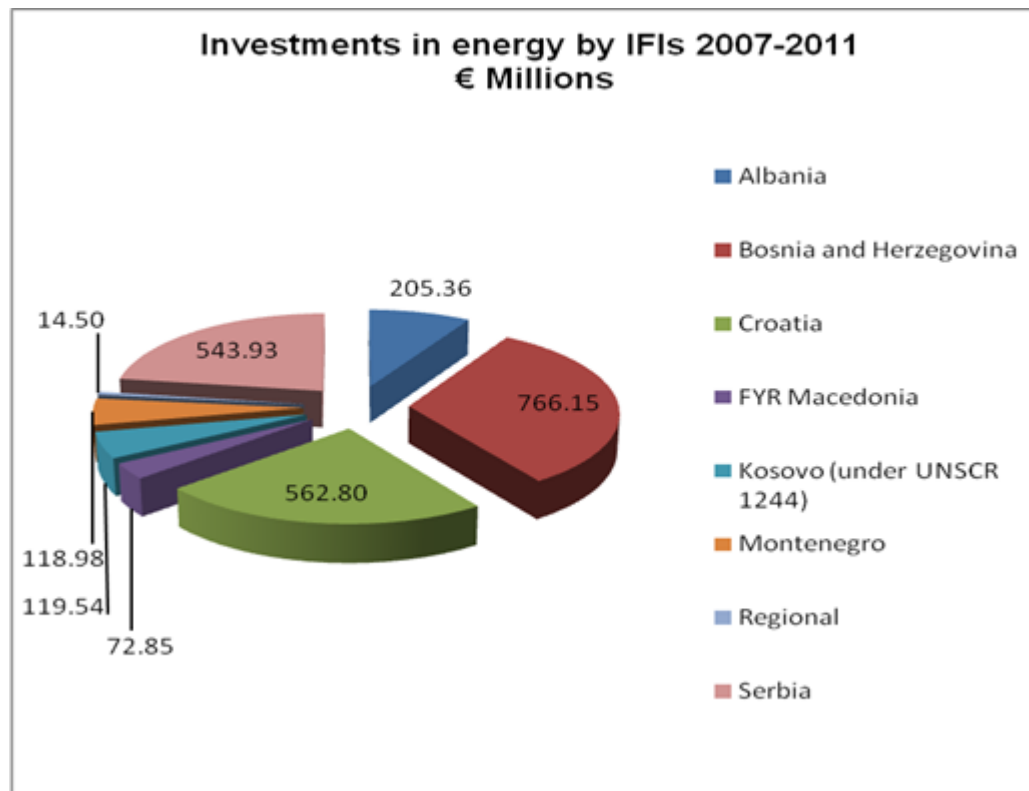
#### 2. RECONSTRUCTION AND EXTENSION OF CCGT CHPP NOVI SAD

- Deadline for submission of bids by prospective strategic partners (four strategic partners have qualified) extended until September 2011.



- Wind Farm in Poklecani, Bosnia and Herzegovina
- LNG Regasification Vessel, Croatia
- LNG Evacuation Gas Pipelines Omišalj-Zlobin-Rupa (Slovenia), Croatia
- Wind and solar projects in Splitsko-dalmatinska County, Croatia
- Small hydro-electric power plant Ozalj, Croatia
- National gasification system, former Yugoslav Republic of Macedonia
- Pljevlja renewable energy heating, Montenegro
- Rehabilitation of the District Heating Systems in Serbia – Phase IV” - Program implementation – Second stage, Serbia
- 400 kV Interconnection Serbia – Montenegro – BiH, Regional Project
- Ionian Adriatic Pipeline, Regional Project.
- **NEXT ROUND 8 SEPTEMBER! NEW APPLICATIONS (REGIONAL ONES) ARE EXPECTED**

The total amount invested by IFIs, 2007-2011 is €2404.11Millions  
(WBIF Report 2011)



- Tenders for new capacity continues to be an area of difficulty and slow progress/ or attraction of IPPs and PPPs
- Incumbent utilities are investing, but their funds are limited; public funds are too small for the investment size
- Some private sector investments are being made, and a lot more in development of renewables
- Nevertheless the effect of the economic crises persist and many private investors have changed their investment strategy and have left the region
- Regulated energy price that do not cover investment costs remain problematic
- Investment preparation , especially for cross border interconnections requires long lead time.
- Incentives for TSOs to develop investments that serve mainly other markets
- Recognition of TSOs costs incurred beyond its territory, in tariffs of its own customers



**Proposed at the Investment Conference and the Investors' Advisory Group, 2011**

## **Rationale to develop a Regional Power Development Strategy and Investment Plan (2020)**

- Ageing power generation infrastructure (LCP Directive): average weighted operation life by the end of 2010, will be 30 years, as compared to 25 years standard life cycle
- The expected economic growth rate will lead to an electricity demand growth of approx. 20% between 2010 and 2020
- Significant investments will be required (3% of cumulative GDP over 2010-2030) - WB.
- Private capital participation is key
- A strategic regional planning is needed

## **Investment Task Force - proposal**

### **Questions:**

- Who should participate?
- Mandate: clear output and timeline
- Other stakeholders' involvement: donors, IFIs, academia



