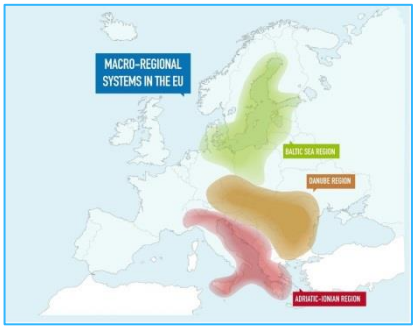
Regional Cooperation for Renewable Energy in the Danube Region

"Technology Challenges and Regional Approaches for integrating Renewables and Energy Security"
Brussels, 28 May 2015

Szilárd Árvay
Ministry of Foreign Affairs and Trade of Hungary

Macro-regional strategies of the European Union

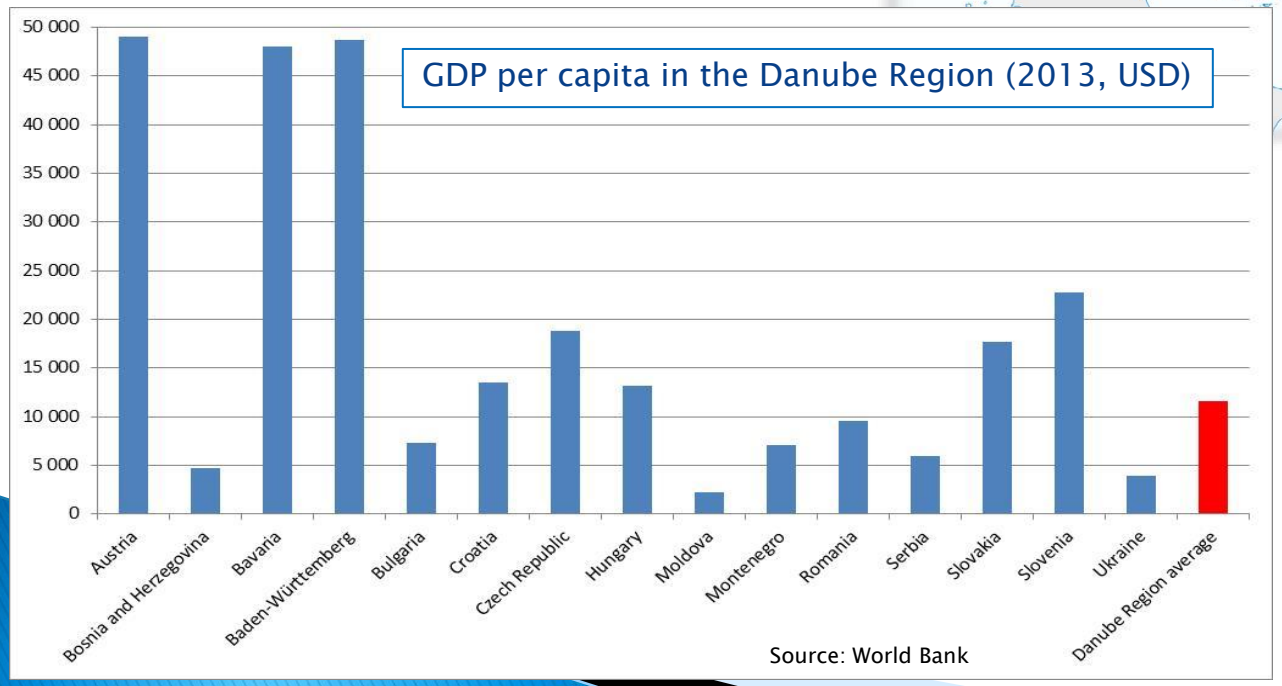


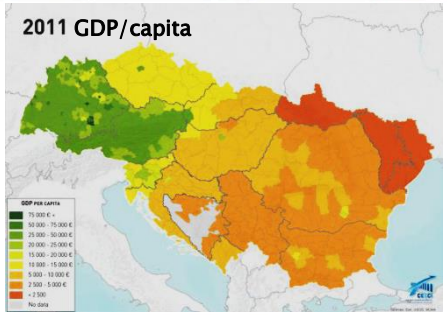
- **EU Strategy for the Baltic Sea Region (EUSBSR) – 2009**
  - First macro-regional strategy in Europe;
  - 85 million inhabitants;
  - 8 EU Member States (Sweden, Denmark, Estonia, Finland, Germany, Latvia, Lithuania and Poland)
- **EU Strategy for the Danube Region (EUSDR) – 2011**
  - 115 million inhabitants;
  - 9 EU Member States (Austria, Croatia, Czech Republic, Bulgaria, Germany, Hungary, Romania, Slovakia, Slovenia) and 5 non-EU countries (Bosnia and Herzegovina, Moldova, Montenegro, Serbia, Ukraine);
- **EU Strategy for the Adriatic and Ionian Region (EUSAIR) – 2014**
  - Home to more than 70 million people;
  - 4 EU Member States (Croatia, Greece, Italy, Slovenia) and 4 non-EU countries (Albania, Bosnia and Herzegovina, Montenegro, Serbia).
- **EU Strategy for the Alpine Region (EUSALP)– Autumn 2015**
  - 5 EU Member States (Austria, France, Germany, Italy and Slovenia) and 2 non-EU countries (Liechtenstein and Switzerland);

Danube Region – A heterogeneous macroregion

Key features:

- 9 EU + 5 non-EU countries;
- More than 100 million inhabitants;
- One-fifth of EU total area;
- Significant regional disparities;





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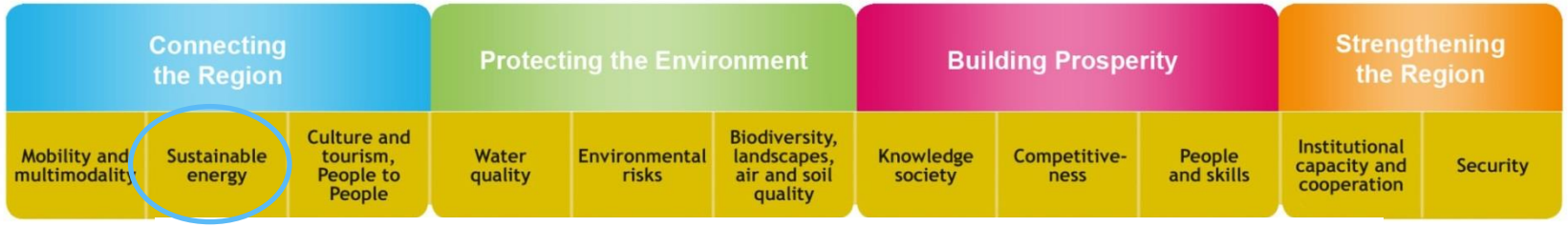
The energy priority area is coordinated by CZ and HU

- The EU Strategy for the Danube Region (EUSDR) is a macro-regional strategy of the European Union, endorsed by the European Council in **June 2011**.
- **Driving force** ⇨ the one-size-fits-all approach is not working in an EU of 27 Member States (Croatia joined on 1 July 2013) and 271 regions.
- The **Strategy was jointly developed** by the European Commission, the Danube Region countries and stakeholders in order to jointly address common challenges.
- The Strategy seeks **to create synergies and coordination between existing policies and initiatives** taking place across the Danube Region.
- The strategy tackles these various topics in a structured way through **4 pillars and 11 priority areas**.
- **Priority Area 2 – Sustainable Energy** (PA2) is jointly coordinated by Hungary (Ministry of Foreign Affairs and Trade) and the Czech Republic (Office of the Government);
- The decision making bodies are the **Steering Groups,** consisting of representatives of the Danube Region countries appointed from the line ministries.

THE FOUR PILLARS



11 priority areas, each coordinated by two priority area coordinators

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All countries are actively involved in the Strategy

Priority Area	Countries in charge of coordination
P1 | Mobility and intermodality	Inland waterways: Austria, Romania Rail, road and air: Slovenia, Serbia
P2 | More sustainable energy	Hungary, Czech Republic
P3 | Culture and tourism, people to people	Bulgaria, Romania
P4 | Water Quality	Hungary, Slovakia
P5 | Environmental risks	Hungary, Romania
P6 | Biodiversity, landscapes, quality of air and soils	Germany (Bavaria), Croatia
P7 | Knowledge society (research, education and ICT)	Slovakia, Serbia
P8 | Competitiveness of enterprises	Germany (Baden-Württemberg), Croatia
P9 | People and skills	Austria, Moldova
P10 | Institutional capacity and cooperation	Austria (Vienna), Slovenia
P11 | Security and organized crime	Germany, Bulgaria

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From policy coordination to fundable projects

EUSDR PA2 applied the following working method:

1. After **completing initiatives that had significant policy impact** on the final list of the Projects of Common Interest (PCIs), namely the Danube Region Gas Market Model and the Gas Storage Analysis **in 2012**, the emphasis was put on renewables and electricity in 2013.
2. The same approach was applied that was already successfully used for the gas market by **initiating a joint thinking of the countries with the help of regional studies** to summarize and present the current status and suggest further steps to promote the development of these renewable energy sources.
3. Taking into account the limited financial resources, we prioritized and focused on those **renewable sources** of energy first, which **still offer significant untapped potential for the Region**, i.e. biomass and geothermal energy. The **integration of renewables to the existing electric power grid** was also analysed by initiating a discussion on the 'smarting' of power grids. The "Renewable Electricity Market Monitoring Report in the countries of the Danube Region" provided an up-to-date **evaluation of the RES-E development**.
4. In 2014 we turned to **project development** with our geothermal (DanReGeotherm) and biomass (REPLAN & DANUBIOM) project concepts and consortia being in place, but also continued policy coordination.

These initiatives were aimed to result in more investment, more competitiveness and more jobs in the whole Danube Region in the middle term.

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Promoting cooperation through common goals

Threefold approach of PA2:

I. Coordinating regional energy policies

- DR Gas Market Model – Oct 2012;
- DR Gas Storage Market Analysis – March 2013;
- Renewable Electricity Market Monitoring in the Countries of the DR – Nov 2013;
- The Potential Use of the Flexibility Mechanisms of the RES Directive in the DR – Feb 2014;
- DR Biomass Action Plan (DRBAP) –Feb 2014;
- DR Geothermal Report – June 2014;
- Natural Gas Reverse Flows in the DR – Nov 2014;
- Potential for integration of the gas markets in the DR – Nov 2014;

II. Enhancing the energy market integration of non-EU countries

- Training Program of the PA2 in the Republic of Moldova – February–July 2013;
- ERRA Case Study – Supply quality regulation in the energy industry – Hungarian case study with European outlook (ENG+RUS) – Feb 2014.

III. Facilitating cutting edge technology developments

- DR Smart Grid Concept – Jan 2014.

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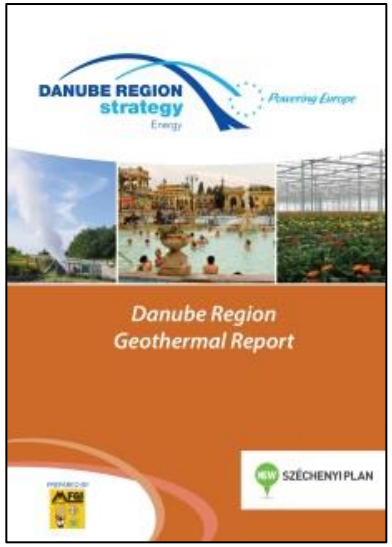
Geothermal Report & DanReGeotherm Project Consortium

- **Project workshop** organised on November 2013 to finalise the project concept and establish the project consortium;
- The **main output of the macro-regional project** will be a uniform and transparent pool of geothermal database for the entire Danube Region which will contain all necessary geological and geothermal data, as well as information on the regulatory, economic, social and environmental aspects of geothermal utilization in the DRS countries;
- The project received EUR 25.000 consultancy support from PA10 **Technical Assistance Facility** in November 2013 to finalise the project concept;
- The **Danube Region Geothermal Report** was published in June 2014 by compiling inputs of workshop participants;
- The project concept was also discussed in the PA2 panel at the Danube Region Strategy Annual Forum on June 2014 in Vienna;
- The project was voted 1st out of 45 submitted projects of the **START** call by the Steering Group in November 2014, therefore preparatory work with EUR 44.000 budget has started in 6 countries (CZ, BA, HR, HU, RO, RS) in April 2015;
- The DanReGeotherm project will be submitted to the **Danube Transnational Programme** in September 2015



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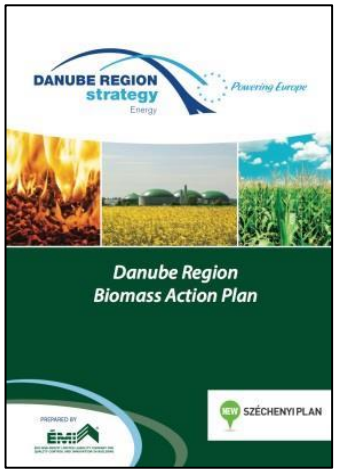
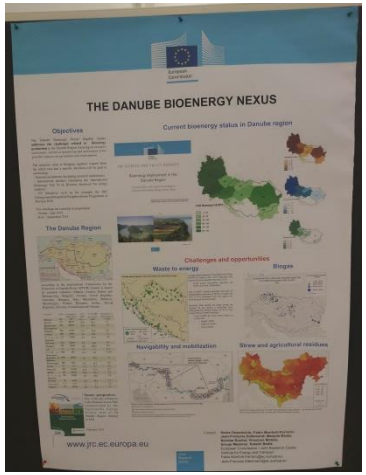
Biomass Action Plan & DANUBIOM Biomass Project

- Danube Region Biomass Action Plan – the study was finalised in February 2014
- Biomass workshop was organised with nearly 30 institutions from 7 DRS countries at November 2014 in Budapest;
- The project concept is now ready & the project consortium was formed with 15 project partners, the lead partner is Szent István University.
- The concrete outputs of the project:
  - Establishing a bioenergy statistical data base;
  - Creating a sustainability assessment tool;
  - Characterising sustainable value chains;
  - Demonstrating ready-to-use biomass based alternatives on demonstration sites;
  - Providing up-to-date planning practices;
  - Policy analysis and proposal for an adequate bioenergy policy amendment;
  - Technology development for standardised feed-stock production, and innovations for improving environmental performance and energy efficiency.
- The DANUBIOM project will be submitted to the Danube Transnational Programme in September 2015





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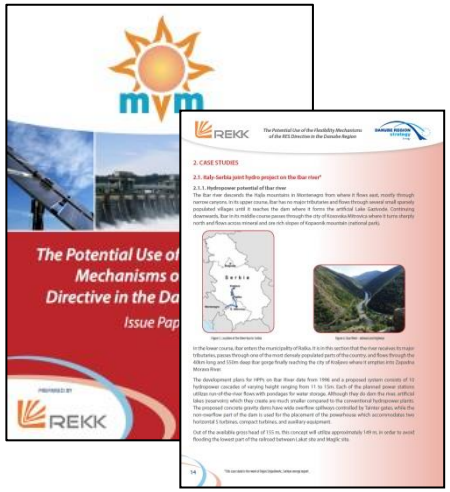
Regional studies on the RES market

- Two studies analysing renewables were commissioned by MVM Hungarian Electricity Ltd. and published by Priority Area 2:
  - **Renewable Electricity Market Monitoring in the Countries of the Danube Region**
    - The years of 2008-2012 have seen tumultuous changes in the region's policy environment;
    - Despite the continued importance of hydro power, significant investments have been made into new RES-E technologies.
    - Sustainability of support is a major issue in the region.
    - It is interesting to note that most of the countries are well on track to meet their RES-E targets in 2020
    - The overwhelming majority of RES-E policymakers in the Danube Region still prefer to use feed-in tariffs (FIT) as their primary instrument choice.
  - **The Potential Use of the Flexibility Mechanisms of the RES Directive in the Danube Region**
    - The heterogeneity of the electricity systems and the RES resource potentials of the Danube Region countries offer opportunities for the use of flexible mechanisms (statistical transfers, joint support schemes, joint projects).
    - Interstate relations are decisive factors, and without the cooperative attitude of governments flexible mechanisms would not be initiated or sustained.
    - Joint projects and joint support schemes can pave the way for a more accountable and reliable RES development within the EU and the Danube Region.



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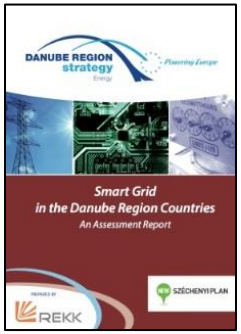
Danube Region Smart Grid Concept



- The Danube Region Smart Grid Concept was initiated together by the Sustainable Energy Priority Area (PA2) and the State Government of Baden-Württemberg, being committed to support environmental technologies in the Danube Region;
- The concept aimed to identify the bottlenecks of smart grid development in the Region and to facilitate a common understanding on the rather complex notion of "smart grids";
- The concept was then further elaborated together with the Regional Centre for Energy Policy Research (REKK);
- The concept included:
  - a kick-off workshop for stakeholders held in Brussels on 18 November 2013 with the participation of around 50 experts from 14 countries, organised together by DG Energy, State Government of Baden-Württemberg and Priority Area 2 of EUSDR;
  - an assessment report which was finalised in February 2014.

- The report and the workshop clearly showed that drivers behind the development of smart grids in the Danube countries at the moment are mainly the reduction of commercial losses and the improvement of service quality and not the need for integrating renewables to the system;
- PA2 and REKK were also invited to 2 April 2014 in Brussels to present the results of the report in the Smart Grid Task Force Steering Committee Meeting;

- Mr Günther Oettinger, former Commissioner for Energy acknowledged the results in his letter of 5 May, 2014:

„I consider the Danube Region Smart Grid Assessment Report an important step forward that can help to provide adequate incentives for the necessary investments in infrastructure."

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For more information please visit:
www.danube-energy.eu

Thank you for your attention!

szilard.arvay@mfa.gov.hu

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