



# **Energy for Cohesion**

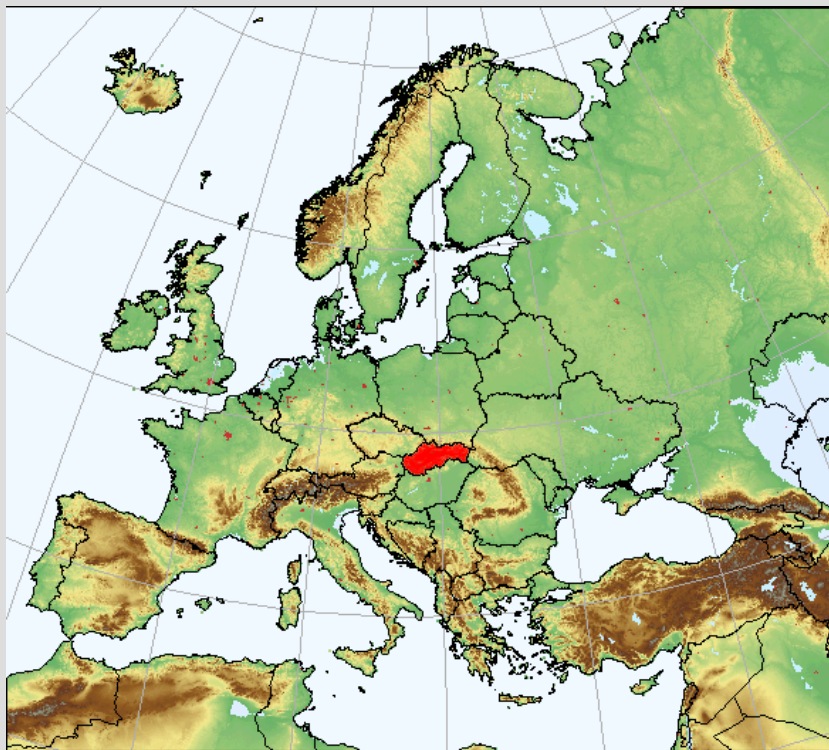
## Kick-off Meeting, Munich

Energy Centre Bratislava

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## Slovakia



- **Area: 49 036 sq.km**
- **Population: 5.4 Mio**
- **PES consumption (2002): 788,8 PJ**
- **Almost 90% of PES imported**
- **Real GDP is growing at around a 4 per cent annual rate**
- **Number of Dwellings: 1 719 836**



## **ENERGY CENTRE BRATISLAVA**

**Energy Centre Bratislava (ECB) established in 1993.  
Status: NGO**

**Mission: the promotion and support of energy efficiency and improvement of environmental protection in Slovakia through activities in the main fields:**

- **Rational Use of Energy (RUE)**
- **Promoting the use of renewable energy sources (RES)**



## ENERGY CENTRE BRATISLAVA

### Activities:

- Sector research and technology promotion strategies
- Energy advisory services to households and SMEs
- Development and implementation of RUE and RES projects
- Legislation
- Increasing the public's energy awareness, media campaigns
- Conferences, seminars, workshops, courses, excursions
- Development of market studies
- Sustainable energy regional development concepts
- RUE/RES Investments facilitation



## ENERGY CENTRE BRATISLAVA – selected projects

- National energy efficiency study for SR (World Bank 2001/02)
- Survey of district heating systems in CEE countries, Consumer thermal comfort and energy attitude survey, KANTOR, GR
- District Heating in Slovakia: Identification of upgrade and CHP conversion projects, November 2001 – April 2002, DEPA 2002
- Potential of Biomass as a renewable energy source in the Slovak Republic, November 2001- April 2002
- Trans-European Biofuel Transportation Analysis, October 2001 – May 2002, EC 2002
- Atlas of renewable energy sources utilization, EKOPOLIS 2002
- European Barometer Of Renewable Energy Sources, Altener, EC 2002
- Pushing A Least Cost Integration Of Green Electricity Into The European Grid, 5th Framework Programme, EC 2003
- OPET District heating / Combined heat and power production, OPET, EC 2003
- Support to the implementation of small and medium sized CHP in Slovakia as one of the alternatives of nuclear energy, EKOPOLIS Slovakia 2004

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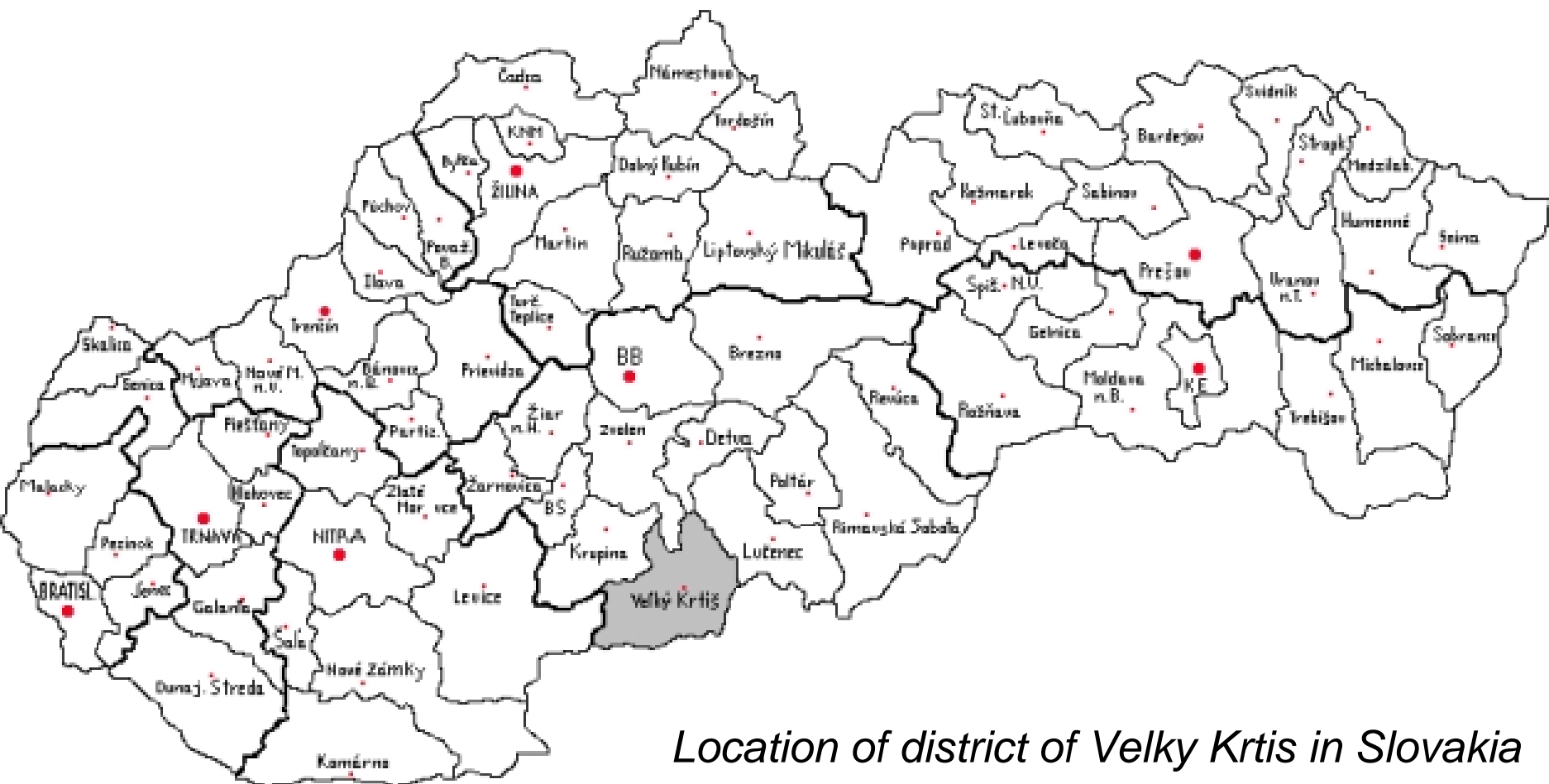
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## District of Velky Krtis

...target region of the activities of the planned project



*Location of district of Veľký Krtíš in Slovakia*





## Background figures – Velky Krtis region

Territory	84,847 ha
Population	46,724
Population density	55 inhabitants per km <sup>2</sup>
Population at working age	22,675 (December 31, 2004)
Unemployment rate	25 – 35 %, depending on season
Religious	Roman-Catholic (70.9 %), Protestant (15.9 %), No religious (9.0 %)
Number of municipalities	69
Largest cities	Velky Krtis (14,181 inhabitants), Modry Kamen (1,426 inhabitants)
Smallest municipality	Cervenany (28 inhabitants)
Municipality with highest location	Suchan (500 m above see level)
Municipalities with lowest location	Ipelske Predmostie a Velka Ves n/Iplom (135 m above see level)
Highest place	Rechtorov vrch (676 m above see level)
Lowest place	outflow of Ipel river from the district (126 m above see level)
Climate	warm (Ipelska kotlina), mild warm (Krupinska planina a Ostrozky)
Average annual temperature (Zelovce):	9,2 °C
lowest temperature:	-3,4 °C (January)
highest temperature:	20,2 °C (July)
Yearly precipitation (Dolne Plachtince):	649 mm
Monthly precipitation (Dolne Plachtince):	lowest: 39 mm (January), highest: 75 mm (June)

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## Natural conditions

- Vast majority of the district territory is deforested
- Remaining forested areas are composed of islands of oak; beechwoods are less present in higher locations.
- Sufficient amount of natural resources suitable for the development of tourism
- Thermal and mineral springs became a key factor for development of the thermal swimming pools in 2 villages



## **Economic situation = sleeping giant**

- Lack of technical infrastructure, housing and insufficient industrial development;
- Location and the favourable climate and soil conditions represent proper; conditions for agriculture and forestry development;
- The regression of agriculture, especially in livestock production, was caused mainly by complicated transformation of ownership;
- Good opportunity to use the waste from crop production for energy generation;
- Currently, 1,500 people are employed in the agriculture sector, compared to the 7,000 employees in 1990;
- Number of local saw mills in the district that process up to 60,000 m<sup>3</sup> of coniferous wood annually;
- The waste (saw-dust and edgings) is unused locally and is being exported from the district.
- One of regions with the highest unemployment rates in Slovakia. The unemployment rate fluctuates between 25 and 35
- The average monthly salary was 10,536 SKK (appr. €270) in 2004, which is markedly below Slovakia´s average (15,825 SKK, i.e. 66 %).

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## Energy sector

- Almost all primary energy resources are imported
- 43 major municipalities (62 %) were gasified and 7,658 private households are currently connected to natural gas. Total annual consumption of natural gas represents 29,829,000 m<sup>3</sup>.
- Only Velky Krtis have own district heating system
- Other municipalities in the district have not built any central heating stations until now.
- Only firewood is used for the heating of family houses without connection to NG
- Wood biomass represents the most significant potential renewable energy resource
- Overall wood biomass for energy exploitation available in the district is about 20,000 – 25,000 tons a year, representing an energy value of 170,000 to 210,000 GJ.
- Solar, wind and geothermal energy are not used for energy generation (with a few exceptions).
- Electricity is imported to the district by 400 KV power lines. At the present, there is one small hydro-electric power plant by the water reservoir in the village of Nenince.



**Thank you for attention.**

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