EU Energy policy , New Initiatives and Structural Funds for RE

Emil Bedi Agigea, Romania September 2005

French PM Dominique de Villepin has announced (Sept. 2nd) a set of **measures for "post oil era"**

The transport sector will be the most affected with an increase in the car registration tax ("carte grise") as of 1 January 2006. ,It is time to "face reality" about energy. We have entered the post oil era".

EU Action plan to counter rising oil prices

by Energy Commissioner Piebalgs (Sept. 7th, 2005) Background : The OECD report (Sept. 2005) predicts: eurozone will be "more vulnerable to the oil price spike" than the US and Japanese economies.

1. Reducing Europe's demand for energy

following the publication of the Energy Efficiency Green Paper in June 2005, the Commission wants to present an action plan on energy savings early 2006;

it wants to speed up the adoption and implementation of measures, already in the pipeline, such as the Energy Services Directive and the Buildings directive;

2. Switching to alternative energy sources

the Commission will present a Biomass Action Plan before the end of the year and a Communication on bio-fuels early 2006;

it will push for an increase of research budgets on renewable energies, clean coal and carbon sequestration:

financial support for renewables in the member states will be under review.

3. Increasing transparency and predictability of oil markets

to counter speculation, the commission will publish twice monthly better statistics on EU oil security stocks a new DG TREN "Oil and Gas Market Observatory Unit" will be created;

dialogues with OPEC, Russia and Norway will be intensified; a "Fossil Fuels Forum" will be set up.

4.Increasing the supply of oil and gas

the Commission will work with producers and European oil companies to promote a better investment climate

5. Better co-ordination of strategic oil reserves

in view of the fact that several EU member states are not members of the International Energy Agency, more coordination will be needed.

EU Directive on Municipal Waste Nr. 2001/118/

Goal :Reduction of bio- waste : 25% by 2006, 50% by 2009, 65% by 2016

Targets postponed by 4 years for some new MS (Slovakia etc.) • No combustion of bio-waste with other wastes

• No mixing with other (toxic waste) since Jan. 1st, 2006

• Since 2006 separation of waste obligatory for all communities

• Utilisation of <u>biogas</u> from municipal tips should be encouraged

• Requirements for waste disposal sites (cover layer, etc.)

• Composting = prefered way of bio-waste treatment

BIOGAS POTENTIAL

Average person = 200 kg of municipal organic wastes/year =

= 100 m3 of biogas = 70 litres of diesel (gasoline) per year.

1 Cow = 1,4 m3 biogas/day = 1 liter of diesel per day = 365 ltrs/yr

- 1 Cow = 3 pigs = 100 pcs poultry
- 1 ha of maize = 8000-10000 m3 biogas per year = 5600-7000 litres of diesel per year

1 ha silage grass (30 ton/ha , 182 m3 biogas/ton) = 5000 m3 biogas = 3500 litres of diesel per year.

The Czech Republic

RE-E Law (May, 2005) - based on DE, ESP - model for new EU MS

Target 8% RE-E in 2010 (now 3,8%). **Minimum feed-in-tariffs guaranteed for 15 years**. Tarriffs set by the regulator on annual basis.

Annual reduction of tarriffs max. 5%.

RE operator can take **"green bonus"** (diff. between market price and feed-in tarrif) instead of purchased price. Co-firing is also the subject for "green bonus" (gains for large coal, grain burning ?).

Power grid operators (distributors) are obliged to connect RE operators (if tech. req. are fullfiled). Detailed regulations will be published this year.

Large hydro is in (CEZ lobby), RE heat is out. Wind farms with more than 20 MW are out. Gas from closed coal mines is also in.

STRUCTURAL FUNDS and RE

\$F = DG REGIO

unds for energy projects = DG TREN and DG RESEARCH

he door is open, sufficient publicity is a problem (also in EU 15).

The UK's allocation of SF is EUR 16,6 billion (2000-2006).

3,2 million EUR grant aid to RE projects in Wales.

mplementation of RE projects is low.

bialogue between energy and development experts is poor.

Development experts are not aware of the potential of RE for the levelopment.

The current objectives of the Structural Funds 2000-06

Objective 1: less developed regions

 Objective 2: regions with structural problems (industrial decline and rural areas)

 Objective 3: education, training and employment

FINANCIAL RESOURCES About EUR 233 bn representing 1/3 of the EU's total budget or 0,45 % of EU's GDP

49.5% of the population in EU25 live in areas covered by Objectives 1 and 2







New programming period 2007-2013.

National Strategy Plans - harmonisation with EU strategy (2005).

Schedule for Slovakia: •Analysis of current state (March 2005), •National vision on social and economical development until 2015 (May 2005), •Setting of priorities, investments and co-funding resources etc (June 2005), •Final Strategy Plan for Slovakia (December 2005).

•Slovakia priorities : Growth of GDP , market reforms •Role of NGOs – Wales model?

CLIMATE CHANGE

Hurricane Katrina : worst natural disaster America has ever faced

reminder of what scientists expect to happen as a result of human induced climate change

major storms in the Atlantic and Pacific since the 1970s have increased in intensity by about 50%



OIL PEAK

Global rates of oil discovery have been falling since the early 1960s (confirmed by ExxonMobil).

All of the 100 or so supergiant fields that are collectively responsible for about half of current world production were discovered in the 1940s, '50s, '60s, and '70s.

No fields of comparable size have been found since then; instead, exploration during recent years has turned up only much smaller fields that deplete relatively quickly. The result is that today only one new barrel of oil is

being discovered for every four that are extracted and













China, India and other developing nations will need far more il and gas if the world development will be based on fossil uels like oil and gas.

opulation is growing and current oil and gas use is still imited to the "chosen few."

to the question is: How the demand will be met by the upply?

NON-CONVENTIONAL OIL

Oil from tar sands (heavy oil).

Scientists acknowledge abundant non-conventional oil. But the oil production is costly and environmentally unfriendly.

Oil sands are now and will be important for some countries like Canada as a long-term source of energy and income.

But they will hardly be a source of oil as are the world's oil wells today.

NATURAL GAS

Natural gas faces similar uncertainty as the oil. For years, most natural gas was flared as the waste product. Now many experts believe that natural gas will be the energy of the future - or at least of the 21st century.

But the gas is fossil fuel and like oil it will peak as well. Conventional natural gas in the USA peaked in mid 1990s, and is now down to 20% - 30%. This decline reflects US oil decline more than 30 years ago. More important for the world economy is that 60% of current world gas base (US, Russia, Canada, UK) is in decline.

Worldwide gas discoveries peaked only a few years later than oil, though worldwide interest in natural gas business increased over the last two decades.



CRISIS OR A NEW START

The world already experienced the shock of shortage of cheap oil. During oil crisis in 1973 price of oil rose from 3 USD to 5 USD per barrel on (Oct. 19th). By Christmas Eve it reached almost 12 USD.

"The worst crisis to the free world since World War II." (Henry Kissinger in his Memoirs). All what happened was just a 5% imbalance between demand (great) and supply (low). Evidently if supply ever becomes even 1% less than demand, a crisis is triggered and if it will last longer the impact on economy will be immediate and drastic.

Oil peak seems to be the ultimate trigger for another world economy crisis.

