SHALE GAS DEVELOPMENT IN UKRAINE: GLOBAL CONTEXT OF PROBLEM AND PROSPECT OF REGULATION
What do people think about shale gas?

The nature was created for the person, its lord and master?

We must do all we can to restore the public’s trust and prove to our neighbours that shale gas is not needed at all. At a reasonable energy policy we can in good conscience refuse shale gas. It is only necessary to speed up the development of renewable energy sources, and not on paper but in reality...»

"Position statement on shale gas, shale oil, methane and coal bed methane and ‘fracking”, adopted 24 April an international coalition of organizations involved in environmental and human health, focuses on the disclosure of information by companies on the list of chemicals used in fracturing.
Why in Ukraine?

1. Ukraine is widely believed to be one of Europe's largest holders of the shale gas

2. Ukraine wants to be an independent player on the gas resources market and not to be dependent on Russia.

3. The involvement of foreign companies to develop domestic reserves of gas to Ukraine is gradually transformed into a state strategy

4. The officials refute the statements the availability of environmental threats and expect to meet all the energy needs of the state
International experience

- **Poland**: Enthusiastic support
- **China, Mexico, South Africa**: Shale boom
- **France, Romania**: Prohibition
- **USA, Canada**: Leaders, active technology development
- **Czech Republic**: Protests
- **Ukraine**: Plan to start in 2014
- **Germany**: Suspended in some regions for EIA
Did the «hydrolic fracturing» exist before?

First hydrogaps in 1947 in the US (George Mitchell)

In the USSR hydraulic fracturing was used since 1952 till 1960

In Ukraine it has never been done before

Thus, fracturing – a new, which is well forgotten old.
For Russia, but not for Ukraine.
Reality

• Ukraine has made a major step - with "Chevron" and "Shell" have signed contracts to develop gas fields
• NGOs opinion and local self governments position were not taken into account
• Due to new legislation government doesn’t need an approval of local self-government authorities for shale gas development anymore
• All investors costs will go to the State Budget and local authorities won’t be able to finance elimination of environmental damages
Shale gas: environmental impact or energy independence?
Today you can not confidently say that this technology is safe, and during the process of shale gas is a potential danger of mini earthquakes and floods.

Contamination of drinking and ground water, the toxicity of mixtures for hydroblow, the problem of disposal and flooding, especially expensive equipment and high population density on these areas - is, in my opinion, "Molotov cocktail" that could explode at any given time and place Lviv region on the brink of ecological disaster.

Irina Sekh, Lviv region self-government

DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY
Environmental rights of locals

No information – no choice?

<table>
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<th>MAIN ISSUES</th>
<th>lack of appropriate explanatory activities on issues of unconventional gas by the central government in dealing with local authorities</th>
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<td>Lack of accurate, reliable and complete information</td>
<td>lack of transparency in matters of individual companies fracturing applicants</td>
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<td>the legal, tax, environmental restrictions, lack of geological knowledge stocks, high production cost, lack of technologies</td>
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Questions to discuss

- Do the existing laws adequately address the new technology being used for shale gas development?
- Are the existing laws adequately enforced?
- Are there conflicting provisions that make it difficult for industry to comply with the regulations?
- Is there a clear distinction between national and local regulatory authority?
- What role will international agreements such as the Aarhus convention (for the moment failed in Ukraine) or Kyoto treaty play in shale development?
- Where are the proceeds sent?
- Does a percentage go to local governments in the impacted areas – to help pay for infrastructure like water supplies and roads?
- How would produced water be disposed of?
- What areas must be off-limits to shale gas development due to ecological or water quality concerns?
1. Ukraine enters into a contract with an investor to conduct mineral exploration.
2. The PSA sets out a work plan that defines a schedule of the completion of exploration activities as well as the financial details of the agreement.
3. The investor is under obligation to conduct all the exploration at his own cost and risk.
4. Over the past few years, amendments to the PSA Law have greatly diminished the power of local self-governments to affect these agreements. When the PSA Law was first passed, the contractor on behalf of the state could also be a self-government authority. Today, the contractor on behalf of Ukraine is required to be the Cabinet of Ministers.
In Ukraine, local self-governments preside over villages, settlements, cities, districts and territories (oblasts). The legal framework for local self-government was established by the Law of Ukraine on Local Self-Government. Decisions of the local self-government are made through direct self-government and representative government.
Baseline plan
15 billion cubic meters of gas per year

Optimistic plan
50 billion cubic meters of gas per year

But is this the sustainable development?

✓ Special permit
✓ Mining lease
✓ Contract with landowners
✓ Production Sharing agreement
✓ Local self-governments will have little ability to respond to social needs or environmental, road, or national reserves protection.
CONCLUSIONS

1. Local governments are not in authority to influence on language of production sharing agreements.
2. The legal basis for the reform could be grounded in the adoption of National Program of Shale Gas Development by the Cabinet of Ministers.
3. It will mean that the territories affected by shale gas development are under especial caution of the state and the state gives financial and other help.
4. We should also change the system of standardization and monitoring; to do clear and grounded distinctions between national and local regulatory authority; study to evaluate the threat that hydraulic fracturing poses to water supplies; water, lands and air quality in rulemaking.

So two main global values - human being and natural resource development - should be equally protected.

THERE ARE THREE THINGS THAT WILL NEVER COME BACK:
THE TIME
THE WORD
THE OPPORTUNITY