



# **Developing the Roadmap of the EU-Russia Energy Cooperation until 2050**

**3rd Meeting of the GAC**

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# **1. Some general issues**

# Continuing with questions being posed at the last meeting

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- How to **construct** the mutual part of our energy future?
- Which part of **uncertainty** could and should be thus diminished?
- How to create the **pathway** to this future?
- How **efficient** may be **results** of our cooperation along this pathway?
- How to **prevent** this pathway from being destroyed?
- How to combine the **flexibility and definiteness** of the pathway?
- How to provide for **self-developing** character of our cooperation?

**Roadmap is result-oriented, so we should try to use first of all not “straight” but “reverse” logic**

# The mutual energy future (the result – 2050)?

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Basic requirements	“Straight” logic	“Reverse” logic
<ul style="list-style-type: none"><li>• Not to inherit non-rational parameters of current situation, to “look through” it</li><li>• Not to use unstable final figures in such a long run</li><li>• To be testable</li><li>• To be able to serve as leading light, as subject of successive implementation on the 40-years long way of our energy cooperation</li></ul>	<ul style="list-style-type: none"><li>• Improving the cooperation conditions for:<ul style="list-style-type: none"><li>- gradual convergence of regulatory bases and markets;</li><li>- stimulating reciprocal investments and joint projects;</li><li>- development and use of innovative technologies</li></ul></li><li>• Moving forward but getting the inevitably fuzzy result</li></ul>	<p>The ultimate result of cooperation manifests itself in economically efficient and reliable functioning of (pan-European) energy infrastructure, being observed through prism of sovereign energy policies of both sides; all the rest constitutes the varying environment, tools and mechanisms for getting the result</p>

**Result-2050: “Pan-European Energy Infrastructure (PEEI), functioning as integral organism and making the necessary contribution to ensuring energy security and reaching the sustainable development goals of the EU and Russia”**

# The commentary: why energy security of Russia?

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Some principles of energy security (from the Energy strategy of Russia up to 2030):

- Ensuring the guaranteed and reliable energy supply to the economy and population in full under normal conditions and in the minimum necessary amount under various exceptional circumstances
- Ensuring reliable operations and predictable development of the energy infrastructure
- Ensuring timely exploration, preparation and development of new deposits (deposits, areas, sections, provinces) of traditional fuels, timely preparation to the use of substitute innovative energy resources and energy sources
- Improving national energy security as a result of international cooperation in the energy sector while guaranteeing execution of the obligations under international export contracts for energy supply

**All these issues depend to certain extent  
on the results of the EU-Russia energy cooperation**

# Diminishing the uncertainty (scenarios and decisions)?

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Basic requirements	“Straight” logic	“Reverse” logic
<ul style="list-style-type: none"><li>• To have at each moment the representative, well-grounded and transparent set of energy scenarios</li><li>• To be able to assess always the influence of potential or actual policy decisions in energy field on the PEEI development and functioning</li><li>• Not to confuse scenarios and decisions: the latter shouldn't be hidden by the foregoing</li></ul>	<ul style="list-style-type: none"><li>• Producing (rather arbitrarily) the set of different energy scenarios (including among other some observable and unobservable assumptions about policy decisions)</li><li>• Trying to get from scenario investigation some evidence for the support of (often initially seen as preferable) or declining of (often initially seen as un-preferable) policy decisions, and for evaluating its parameters</li></ul>	<p>We are interested first of all in systematic assessment of the “real price” of different planned or already being implemented policy decisions: the anticipated scope of the short and long term consequences of its realization; all the rest (including scenarios) plays in this context the subsidiary role</p>

**Mechanism: regular maintaining and iterative two-way correction of the sets of assessed energy policy decisions (“decision field”) and actual energy scenarios (“scenario field”) on the way to PEEI final goal**

# The commentary: two types of errors

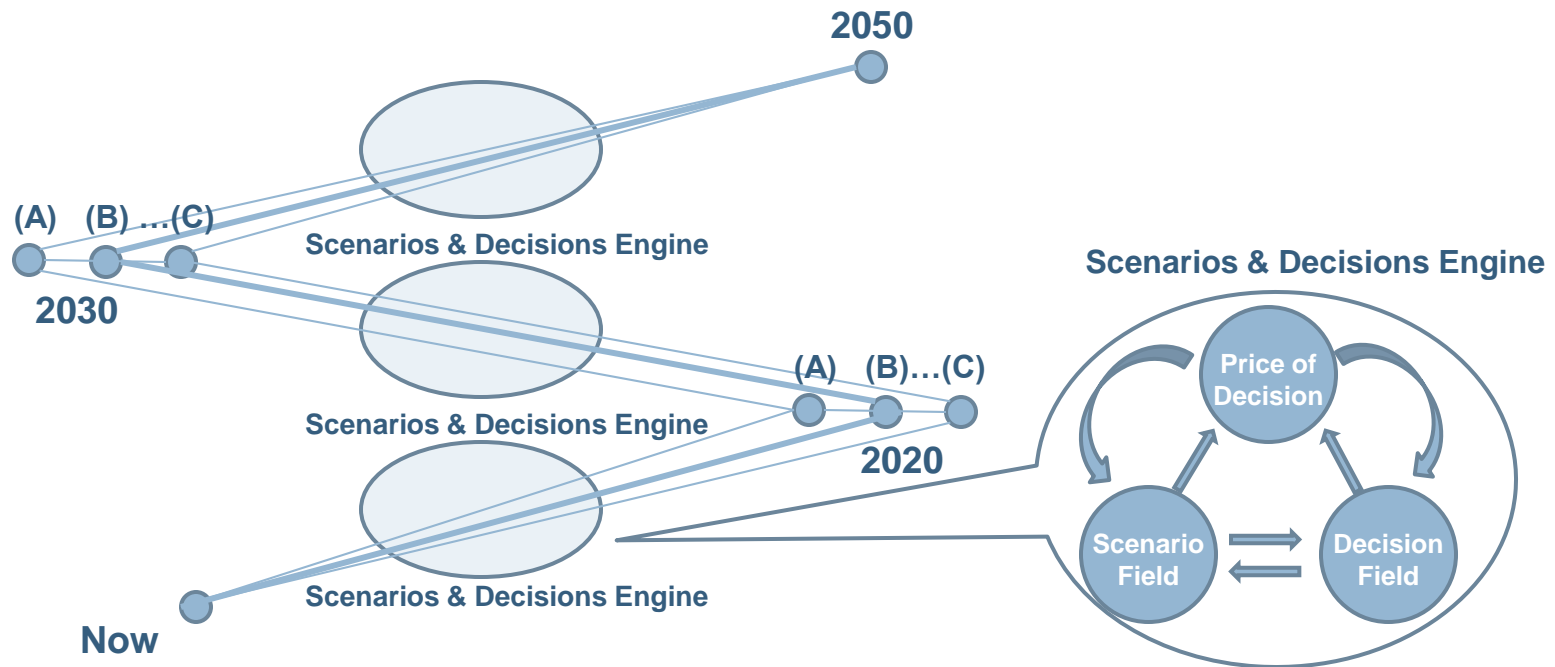
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- In analogy with statistical test theory there may be distinguished the Type I and Type II errors – which correspondingly mean: **to reject incorrectly true hypothesis, or to accept false hypothesis**
- **Main hypothesis in our context concerns “small” or “big” volume of the mutual part of our energy future**
- If we don't support concrete hypothesis (e.g. about “big” volume), and it should appear to be true – that means one “price” of erroneous decision **for each side**; if we support this hypothesis, and it should appear to be false – another “price”
- **Both possibilities** for the hypothesis (to be true or to be false) in principle **do exist always** – with different probability for different situations and points on time scale

**The concrete choice should be based on “weighing” the consequences of both potential errors and possibly modifying (e.g. “hedging”) policy actions  
For doing it we need actualized “decision field” and “scenario field”**

# How to create the pathway to the future being both flexible and definite enough ?

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**Mechanism: “dynamic programming” of the optimal (rational) pathway,  
bringing us with the help of Scenarios&Decisions Engine  
nearer and nearer to the PEEI final goal**

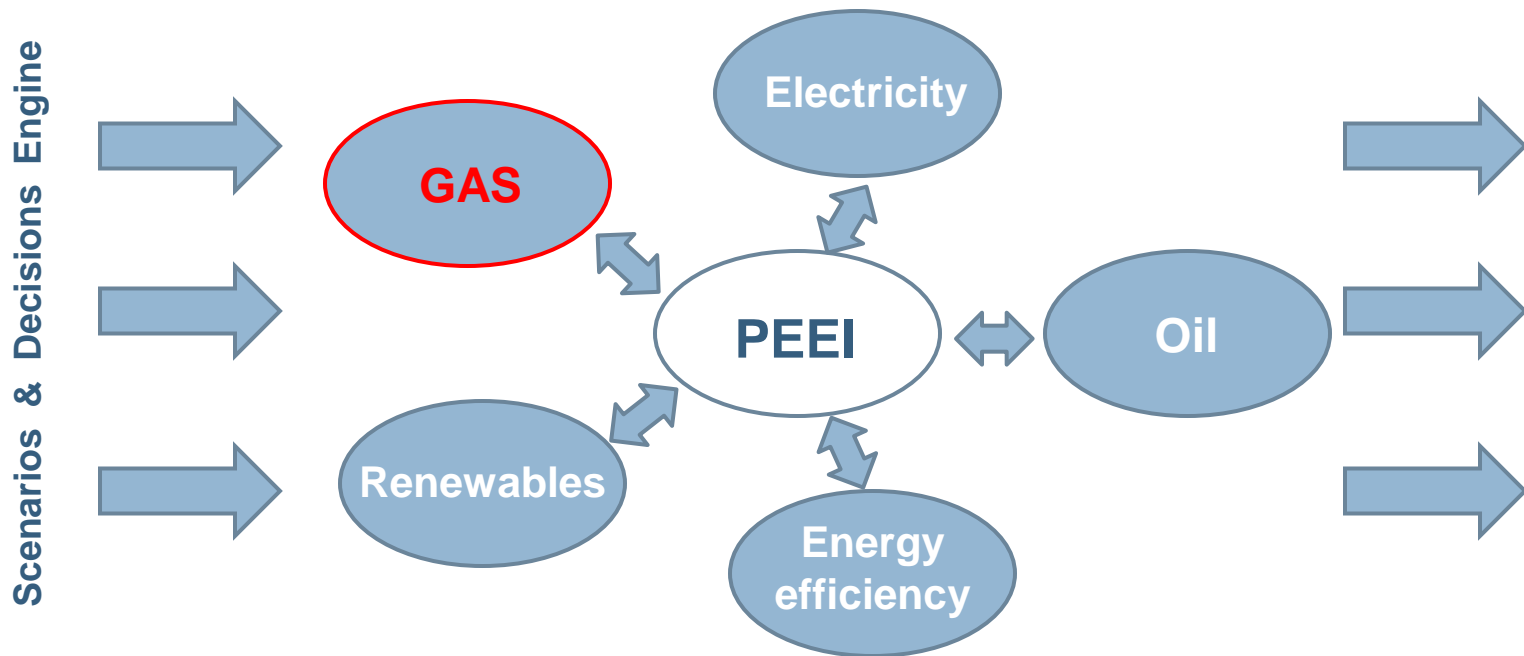




## **2. About Gas chapter**

# The Energy Cooperation Roadmap structure

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**We need milestones, mechanisms and institutions of cooperation**

# **Shtilkind's slides about the integrated gas infrastructure functioning**

# Tools for management of Integrated Gas Infrastructure (1)

- **One of the main goals of the Gas Directive:** *“to enable all consumers freely to choose their suppliers and all suppliers freely to deliver to their customers”* **cannot be achieved without saving all gas market players from excessive troubles related to searching routes and available gas transportation capacities.**
- **To get this goal all the interlinked gas nets should be considered as an integrated system managed by an integrated Dispatch Service based on powerful computational Complex.**
- **Its functions include inter alia:**
  - optimization of gas flows schemes through all the gas nets,
  - ensuring system reliability,
  - radical simplification of procedures for market players.

# Tools for management of Integrated Gas Infrastructure (2)

**Another computational complex may be created for the sake of perspective planning. It could provide the possibility:**

- based on in-depth analysis of structure and functioning of the system as a whole, optimization of flows schemes inclusive,**
- to evaluate the consequences of one or other decision making (of political, investment or regulatory nature) as well as of significant changes in market trends,**
- to identify bottlenecks and to recommend: where, when and to what extent it would be reasonable/necessarily to expand system capacities,**
- to enhance energy security by means of eliminating lack of capacities,**
- to cut down needs in investments due to optimization of development and control over infrastructure.**

# How procedures for market players may look (1)

- **A gas consumers willing to conclude a purchase contract with certain supplier in the concrete point for certain time period and/or a supplier willing to sell this gas to that consumes should appeal to the said Dispatch Service. Its computational Complex, basing on sufficiently full and continuously upgraded information on infrastructure capacities, contracts in force, etc. generates one of two alternative responses.**
- **Positive answer: Deal is feasible, transportation is possible and (regulated) tariff will be such and such. If both parties agree, contract will be concluded and the Complex considers related capacities over period of their usage as being contracted.**
- **Important notice: such response is only a proposal and creates no obligation to enter into contract.**

# How procedures for market players may look (2)

- **Negative answer**: Deal is infeasible, for transportation of required gas volumes within required time period is impossible because of lack of capacities. Meanwhile the Complex may propose to transport gas on interruptible basis, or less gas, or change time period, etc.
- Every negative answer provides information on real market demand which was not covered, such data could be collected and then used for substantiation of new infrastructure projects.
- If contract is concluded, the Complex may provide for its documentary and administrative support. For this sake, based on information of pipelines used and regulations on tariffs in force, the Complex can calculate which system operators and to what extent will get their fair earnings.

# How procedures for market players may look (3)

□ As a consequence: if such a Complex will be developed and implemented, market player will be practically free from all the troubles related to transportation routes choice, capacity allocation, congestion management mechanisms, UIOLI schemes and all that. For this reason they will, in accordance with Gas Directive, enjoy the possibility to buy or sell gas everywhere and transport it wherever they want within gas network system.

**In is quite clear that the development of the Complex over Pan-European Energy Infrastructure requires common efforts both Russia and EU, as well as mutual responsibility and concise timetable of joint activities.**



# Gas chapter and basic energy security issues

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- We have to materialize in our collaboration such basic principles as “security of supply” and “security of demand”.
- We have to provide these signals to our societies in order to get them knowledge of practical benefits of our collaboration
- I.e. with current (and potential future) changes of market structure and regulation – who is in charge of both “securities”?
- At a moment in gas supplies – it is completely unclear who is in charge of security of gas supply for final consumers on the EU side or on behalf of member-state side?!
- It is not a theoretical question as on each stage of transformation (at least until our markets form a “single” market from Lisbon to Urengoy or to Vladivostok(?) – if this is a goal and a process) – such determination is a must! Why – because:
  - consumers have to be aware of it
  - contracts have to reflect it
  - mechanisms of EWM and Joint Infrastructure have to be linked with them.

**Further joint elaboration of basic energy security issues is needed**

# What are the alternatives to this approach?...

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- Main alternative:
  - ▣ EU and RF are simply trading partners in energy sector
  - ▣ Each side takes its own strategic decisions and tactical measures
  - ▣ In view of the scale of uncertainty, lack of predictability and wide spread suspicions regarding intentions of each side - most likely decisions will be directed to reducing size of interdependence, lower and lower projections and “pragmatic” (close to egoistic) decisions
  - ▣ Mutual actions are becoming more and more short-term oriented (as a prevention of transit crisis – now less and less actual; i.e. to be concentrated on the “preparation of army to the past war”)
  - ▣ Only in case of crisis or unexpected events the demand for “solidarity” is becoming at the top
  - ▣ But in this case – a behavior of a partner may be egoistic and/or he may not be able to respond in a cooperative manner

## ...What are the alternatives to this approach?

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- ▣ In case of gas sector items and for Russia a “logical way” – to reduce long term contracts coverage and to “modulate deliveries” to EU market based on maximizing short-term financial returns
- ▣ For EU a “logical way” – to further increase subsidies and investments in alternative energy sources - while the world will definitely increase a role of gas (based on competition and efficiency principles)

**It could become a sort of “cold war” approach in gas sphere.  
Who will win out of this – in current XXI century  
globalised world where there are always political and economic  
alternatives?**

# If the positive decision is taken to move forward following this approach then what has to be explored?

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- **Structure of Cooperation:**
  - Joint monitoring of technological developments, joint R&D Programs,
  - Regular consultations on the harmonisation of legal and regulatory systems (incl. understanding on subsidies)
  - Industry and investment panels
  - Institutions (as GAC, later – horizontal links between relevant institutions of Parties)...
- **Dynamic determination of targets at milestones** - for instance, till 2015:
  - To fix a structure and fundamental principles of cooperation in mutually binding documents – as documents in the scope of a new Basic Agreement on EU-Russia Partnership and specific agreement(s) in gas sphere – on gas infrastructure and its development
  - To form main components of the Structure of Cooperation
  - To agree on the “tolerable level” on uncertainty in gas sphere for the period till 2030



## **3. Next steps**

# The Energy Cooperation Roadmap: specified timing

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<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
		Presenting the initial draft to the Thematic groups of the Russia-EU Energy Dialog		Presenting the final draft of the Roadmap	
<u><i>TG-1</i></u> <u><i>Subgroups:</i></u> Considering main milestones and recommendations of the Roadmap	<u><i>TG-1:</i></u> Considering the initial draft of the Roadmap	<u><i>GAC:</i></u> Considering the Gas Chapter of the Roadmap	Making amendments to the Roadmap		



**Thank you for your attention**