

Project No 213744

SECURE
Security of Energy Considering its Uncertainty, Risk and Economic implications

SP1 – Cooperation
 Collaborative project
 Small or medium-scale focused research project

DELIVERABLE No 7.10

Proceedings of the final Conference in Brussels
"EU Security of Energy Supplies in the International Context:
Final Conference of the SECURE Project"

Brussels, 25 November 2010

Due date of deliverable: December 2010
 Actual submission date: 21 December 2010

Start date of project: 1/1/2008

Duration: 36 months

Organisation name of lead contractor for this deliverable: CEPS

Revision: 0

Project co-funded by the European Commission within the Seventh Framework Programme		
Dissemination level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Proceedings of the final Conference in Brussels "EU Security of Energy Supplies in the International Context: Final Conference of the SECURE Project" Arno Behrens, CEPS

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1 Introduction

The chair of the meeting, **Mr Christian Egenhofer of CEPS** and **Mr Pedro Moraleda of OME** welcomed some 60 participants to the final conference of the SECURE project held at CEPS on 25 November 2010.

2 Session 1: “Main Results and Policy Recommendations of the SECURE Project”

The key results of the SECURE project and the main policy conclusions were presented by **Mr Manfred Hafner and Mr Andrea Bigano of FEEM**, who concluded that “smart” energy policies needed to combine security of supply, sustainability and competitiveness without neglecting the international relations context. Similarly, European climate policies brought a significant double dividend in terms of reduced vulnerability to energy shocks, but the transition to a low carbon economy was not granted and adequate governmental support was necessary. The most efficient way for the EU to develop cost-effective low carbon energy use was to have a generalised and viable EU-wide emissions trading system capable of delivering standardised carbon prices or an effective EU-wide carbon tax. Energy security of supply and competitiveness converged when it came to the development of the EU internal market. Integration of markets by developing regulatory policies, which enhanced interconnections in gas and electricity infrastructure and thus fostered competition, would be a big step in the right direction for European security of supply. The unsatisfactory functioning of the international oil markets and the resulting uncertainty and volatility in oil prices was the main security threat for future oil supplies because it hindered investment. Measures to reduce this artificially increasing volatility thus needed to be envisaged. Climate policies strongly influenced the menu of policy solutions to energy security problems. Related uncertainties affected policy making in the next decades. Institutional solutions needed to be combined with a dialogue with the EU’s partners on a medium term programming of investments in the energy sector, in a balanced perspective of mutual understanding.

In response to the presentation about the SECURE project, **Mr Jean-Arnold Vinois of the European Commission** noted that while the Commission was fully aware of existing EU energy security challenges, a lot had been achieved already – especially over the last five years. The EU dimension of supply security issues was well recognised today. This had not been the case five years ago. To prove this point, he referred to several recent policy initiatives (e.g. energy and climate change package, third internal market package, oil stocks directive, security of gas supply regulation, Lisbon treaty, European economic recovery plan etc.) which together represented a major step forward towards securing European energy supplies. He also stressed the role of the internal market for increasing supply security and criticised that the internal market was not central enough in the SECURE project. Over the next months, implementation of the internal market was to play a key role in the work of the European Commission. Mr Vinois also commented on specific aspects of the SECURE

project. For example, he noted that growing scarcity was of no concern anymore on the gas market, which was currently characterised by oversupply. This new situation needs to be taken into account, as well as the fact that gas could be a ‘game changer’, especially when equipped with CCS technology. On the latter, Mr Vinois said that more progress was needed in order to answer the many questions related to the technology, such as when it would be available. Progress on CCS technologies would have a major impact on coal use. Mr Vinois also stressed the importance of dialogue with producing countries, which was already going forward – amongst others – with Russia, OPEC and GCC. However, there was a case to extend the powers given from the member states to the EU with respect to these dialogues. As regards oil, the role of financial markets in the price hike needed more attention in the assessment of oil security of supply and more specifically of oil price volatility. Mr Vinois closed his intervention with an outlook to the upcoming Roadmap 2050, which would include several scenarios. The SECURE scenarios were a good contribution to this strategy and would be taken into consideration.

2.1 Discussion:

- On CCS it was noted that it may not necessarily contribute to securing energy supplies as it reduced the flexibility of power plants. The Commission replied that efficiency issues of power plants with CCS needed to be addressed and that it would continue to support the development of CCS technologies. After all, there was a global case to be made for the technology, which was crucial for other non-European countries like China. However, pricing carbon would benefit the business point of CCS.
- The importance of the EU-Russia energy dialogue was stressed, but Gazprom’s position needed more attention. Producers needed better signals on future import needs.
- On vertical integration, there was a question why it was not taking place. The Commission’s response was that there were cases of it, giving the example of Lukoil buying downstream. Similarly, Gazprom would benefit from the EU market for gas. Producers needed to be allowed to invest in the internal market, but the same should apply for consumer countries’ investments in producer countries.

3 Session 2: “How to assess different policy options for energy security”

The second session focused on the assessment of SECURE scenarios with different levels of CO₂ reduction. **Mr Stefan Hirschberg of Paul Scherrer Institut** presented the results of PSI’s multi-criteria decision analysis (MCDA), which ranked the scenarios according to environmental, economic, social and security of supply criteria. MCDA provided a tool to compare the scenarios on all aspects simultaneously. Environmental criteria focussed on CO₂-emissions, economic indicators on energy expenditure, social indicators on severe accidents and terrorism risk, and security of supply indicators on the diversity of fuels in energy consumption, share of energy imports and diversity of exporters. Mr Hirschberg noted that no single scenario met all

sustainability and security of supply criteria used in SECURE and that trade-offs were thus inevitable. Given a balance between environmental, economic, social and security of supply criteria, the global climate regime scenario (without shocks) performed best while the baseline scenario performed worst. Changing the weights of different criteria showed that there were clear synergies between protecting the climate and security of supply. Meeting ambitious GHG emissions reduction goals by means of successful decarbonisation of the energy supply system through the expansion of renewables, nuclear and CCS, combined with very extensive efficiency improvements, was also highly beneficial for security of supply.

3.1 Discussion:

- The main point in the discussion concerned the important role of the indicators for the results of the analysis. Concerns were raised regarding the selection of indicators and it was suggested to expand them in order to give a better picture of reality. For example, it was mentioned that using only safety concerns to define the social indicator was too narrow. The social indicators needed thus to be enlarged to take into account other concerns, such as employment and energy poverty. The same argument was raised with respect to the security of supply indicator which should be expanded to include risks related to infrastructure as well as geopolitical risks (e.g. in the form of country ratings). Similarly, the economic indicator did not include externalities. Mr Hirschberg responded that the concerns raised were justified and that the analysis clearly depended on the choice of indicators. He referred to the NEEDS Project where a much broader set of sustainability indicators was established and quantified for selected technologies but without a detailed treatment of security of supply. The current indicators were primarily determined by the scope of the POLES model; for example inclusion of externalities beyond CO₂-emissions was not feasible since major pollutant emissions are not included in the output of POLES. However, inclusion of such as well as geopolitical indicators would actually strengthen the current conclusions since scenarios with reductions of the share of fossil contributions to the energy supply would be assessed even more favourably....

4 Session 3: “What Europe’s Energy Suppliers Think: Key Messages from Three Regional Workshops of the SECURE Project”

The afternoon session was introduced by three rapporteurs of the SECURE project, who briefly summarised the main elements of the three SECURE regional workshops in Manama, Bahrain (**Giacomo Luciani of GRCF**), Moscow, Russia (**Tatiana Mitrova of ERI RAS**) and Cairo, Egypt (**Pedro Moraleda of OME**). Please refer to the respective minutes of these workshops for details on their contents. One of the overarching themes of these workshops, which were all held in countries supplying the EU with hydrocarbons, was the uncertainty of European demand as a function of energy policy. Exporters were concerned with security of demand in much the same ways the EU was concerned with security of supply. From their point of view, there was an

inconsistency between EU security of supply and climate change policies. The latter sent signals to producing countries that EU demand for hydrocarbons may decrease considerably thus leading to reduced investment in these countries. However, if the EU's targets were not achieved, there may be a large supply gap the EU will need to deal with. It was thus suggested that the EU only agree to realistic and achievable targets that send the right signals to producers and do not undermine supply security of hydrocarbons in the future. In addition, there was criticism that frequent and fast regulatory changes often ignored the interests and positions of producers. Producers investing billions in new infrastructure and production were presented with a 'fait accompli' without any discussion about the possible consequences (which could be negative for the EU as well). Intensifying the dialogue between the EU and its suppliers was thus suggested in order to inform the EU's partners about regulatory changes and to take their positions into account when EU legislation is designed.

For the podium discussion, the three SECURE presenters were joined by **Aris Tekelenburg of the General Secretariat of the Council of the EU**, **Maxim Buyakevich of the Permanent Mission of Russia to the EU** and **Marco Margheri of Edison**. Mr Tekelenburg highlighted the importance of the Commission's new Energy 2020 strategy for securing European energy supplies. On Russia he noted that the EU's ambition to decrease the relative dependence from Russian imports would not necessarily lead to an absolute decrease in demand. However, there was a need to cooperate on the security of demand issue and he suggested cooperation between the EU and exporting countries on the development of scenarios for estimating the future of demand and supply. As regards the EU's renewables target, Mr Tekelenburg held that it gave certainty to investors and thus also benefited producers. Similarly, he called on Russia to pursue energy efficiency actions as there were lots of cost effective potentials in that country. Increasing energy efficiency would also safeguard gas and oil deposits in Russia for future uses.

Mr Buyakevich focussed mainly on cooperation mechanisms between the EU and Russia, noting that the two counterparts are likely to overcome most problems in the context of the EU-Russia dialogue. He also commented on the uncertainty of EU energy demand forecasts and suggested the establishment of a scientific centre which could help building a common understanding on supply and demand between the EU and Russia. He gave the example of the Jamal Europe Pipeline which showed that the EU and Russia were capable of finding a compromise in a spirit of constructive cooperation. On the future of gas, Mr Buyakevich stated that it would remain an important energy source for Europe, e.g. in power generation, but that currently low gas prices may make the future of renewables more difficult.

Mr Margheri stressed the multilateral dimension of EU energy supplies and called for an increasingly multilateral vision for investment and trade. Similarly, there needed to be better interlinkages between buyers and sellers with a view to achieve new partnerships, also with additional and new suppliers. On gas, he noted that it may not necessarily be the fuel of choice in the European energy strategy, but rather a fuel of consequence. This required more flexibility upstream but also more competition downstream. Regarding the latter, Mr Margheri suggested redesigning the internal market (e.g. in the context of a 4th legislative package) so that capacity development would play a bigger role. The EU's energy security would benefit from a better

integrated internal market, but also from a non-politicised vision on diversifying supplies.