



Fondazione
Eni
Enrico Mattei



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

Manfred Hafner

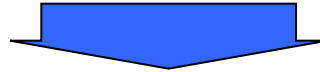
SECURE Second Stakeholder Meeting: Oil, Gas and Coal
"New Approaches to Secure Europe's Energy Supplies"

Paris, 26 November 2009

- **Comprehensive framework** of all issues related to energy security including **geopolitics, economic/regulatory and technical design of energy markets both inside and outside the EU**
- Analysis of **all major energy sources and technologies** (*oil, natural gas, coal, nuclear, renewable and electricity*) from upstream to downstream (*supply and demand side approach*)
- **Development of tools, methods and models** (global and sectoral) to measure and assess security of supply
- **Policy recommendations** on how to improve energy security taking into account costs, benefits and risks of various policy choices
- Consortium of 15 partners
- **Intensive Stakeholders consultations**
- Duration: 3 years (39 months: January 2008 - March 2011)

WP1. Methodological developments

Definition of concepts and general methodology of the project



WP2. Value of energy security

Estimation of consumers' risk aversion and willingness to pay for security

WP3. Long term policy lines

Qualitative analysis of energy policy options and scenarios for the EU

WP4. Quantitative global models

- Long term energy scenarios based on policy lines
- Adaptation of the POLES model to include risk assessment
- Development of energy risks assessment model (ERA)
- Quantitative analysis of policy recommendations

WP5. Models and tools by energy source

5.1. Oil

5.2. Natural gas

5.3. Coal

5.4. Nuclear

5.5. Renewable energy sources

5.6. Electricity

5.7. Impact of accidents and terrorist threats

5.8. Demand dimension of energy security

- External supply
- Internal supply
- Geopolitical risks
- Technical risks
- Economic & regulatory risks

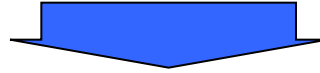
WP6. Results and policy recommendations

WP7. Stakeholders consultations and dissemination

WP8. Scientific coordination

WP9. Administrative management

WP1. Methodological developments (FEEM)



WP2. Value of energy security (Univ. Bath)

WP3. Long term policy lines (CEPS)

WP4. Quantitative global models (Univ. Grenoble CNRS/LEPI)

WP5. Models and tools by energy source (FEEM)

5.1 Oil (GRCF)

5.2 Natural gas (Ramboll)

5.3 Coal (TUD)

5.4 Nuclear (LEI)

5.5 Renewable energy sources (FHI-ISI)

5.6 Electricity (ERSE)

5.7 Impact of accidents and terrorist threats (PSI)

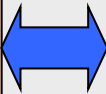
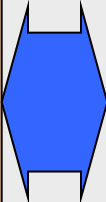
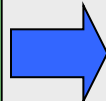
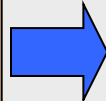
5.8 Demand dimension of energy security (FEEM)

WP6 Results and policy recommendations (FEEM)

WP7. Stakeholders consultations and dissemination (CEPS)

WP8. Scientific coordination (FEEM)

WP9. Administrative management (OME)



Timetable

	2008												2009												2010												2011		
	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	jan	feb	mar
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36	M37	M38	M39
WP1													Mi3																										
WP2																						Mi7																	
WP3																																							
WP4																																							
WP5																																							
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WP5.7																																							
WP5.8																																							
WP6																																							
WP7																																							
WP8																																							

Mi Milestone
 WS Workshop
 CO Final Conference

Thematic Workshop:
 methodology, value,
 scenario story lines

Thematic Workshop:
 oil, gas and coal

Thematic Workshop:
 Electricity, renewables,
 nuclear, accidents and
 terrorism, demand

Policy Workshop:
 Results and Policy
 Recommendations

Regional Workshops:
 Moscow, Algiers and Dubai

Audition at
 the European
 Parliament

Final
 Conference



Stakeholder Consultations and Dissemination

Nr.	Timing*	Workshop name	Location	Organizor
WS1	29 Jan 09	Thematic WS (WP1, 2, 4: Methodology and scenarios)	Brussels	CEPS
WS2	26 Nov 09	Thematic WS (WP5.1, 5.2, 5.3: oil, gas, coal)	Paris	OME
WS3	18-19 Jan 2010	Thematic WS (WP2, 5.4, 5.5, 5.6, 5.7, 5.8): Nuclear, Renewables, Electricity, Accidents&Terrorism, Demand, Value)	Milan (2 days)	ERSE
WS4	Sept 2010	Workshop for WP6 (Results & Policy Reccomandations)	Brussels	CEPS
WS5	Oct 2010	Regional WS “ Russia & CIS ”	Moscow	ERI RAS
WS6	Nov 2010	Regional WS “ North Africa ”	Algiers	OME
WS7	Dec 2011	Regional WS “ Gulf ”	Dubai	GRCF
WS8	Jan 2010	Policy event at the European Parliament	Brussels	CEPS
CO	Mar 2011	Final Conference	Brussels	CEPS

Thanks for your attention!

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