

Clingendael International Energy Programme

# Annual Report 2007



### **Clingendael International Energy Programme (CIEP)**

Affiliated to the Netherlands Institute of International Relations, ‘Clingendael’, CIEP acts as an independent forum for governments, non-governmental organisations, the private sector, media, politicians and all others interested in changes and developments in the energy sector.

CIEP organises lectures, seminars, conferences and roundtable discussions. In addition, CIEP staff members lecture in a variety of courses and training programmes. CIEP’s research, training and activities focus on three themes:

- Regulation of energy markets (oil, gas, electricity) in the European Union;
- International economic and geopolitical aspects of oil and gas markets, particularly with respect to the European Union security of supply; and
- Energy and sustainable development.

CIEP is endorsed by BP, the Dutch Ministry of Economic Affairs, Eneco, Energie Beheer Nederland, Essent, the Dutch Ministry of Foreign Affairs, GasTerra, Nederlandse Gasunie, ING, NAM, NUON, Oranje-Nassau Groep, Port of Rotterdam, Shell Nederland, Total E&P Nederland, the Dutch Ministry of Housing, Spatial Planning and the Environment, Vopak Oil Europe Middle East, Wintershall and RWE.

CIEP publications and research results are made available primarily through the CIEP website: <[www.clingendael.nl/ciep/](http://www.clingendael.nl/ciep/)>.

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## **Clingendael International Energy Programme (CIEP) in 2007**

### **Introduction**

For a brief moment at the beginning of the year, 2007 seemed to be a re-run of 2006, when an important pipeline connected to the European market once again was shut down. However, this time it was the flow of oil, not gas, destined to transit through Belarus that was affected. The flaring of tensions in the relationships between the states of the defunct Soviet Union and the former Comecon partners on occasion spill over into the realm of energy relations. As long as relations between these countries are not normalised, there will be conflicts over the pricing of energy and transit fees. These conflicts will include hydrocarbons originating from Central Asia, whether traversing through Russian soil or not, and destined for Western and Central European markets. The increased competition between consuming countries to ensure adequate supplies of energy for their markets is being observed carefully by the Central Asian countries and the Central European transit countries. They are all too aware of the substantial leverage they have with the increased value of oil and gas, and will not shy away from interrupting the energy flows – including those to Commonwealth of Independent States (CIS) countries – if they feel their demands for higher prices are not met. To normalise relations between CIS countries and their neighbouring states, domestic political relations will need to be stabilised as will relations with the European Union (EU) member states and Russia.

The reshuffling and normalisation of political and economic relations noted above is acquiring a new dimension by the strengthening of energy relations of Russia and the Central Asian states on the one hand, and China on the other. This dimension is taking shape because Western and Central Europe find themselves competing with China and East Asia over increasingly scarce hydrocarbon resources. Until recently the oil and gas originating from Russia and Central Asia was perceived as locked into the EU market. However, the new pipelines being built east to China provide a new booming market for the Russian and Central Asian energy reserves. Seeing that Russia is planning to connect its future Yamal Peninsula developments to the Eastern markets, and Russian consumers are slated to pay European netback prices by 2011, Europe will not only have to compete with Chinese but also Russian consumers.

Although the aforementioned dimension can be observed in the formulation of both national and EU energy policy, Europe is struggling to establish a common energy policy toward Russia and at the same time to make its market more attractive to liquefied natural gas (LNG) producers from around the world. The EU energy relations with Russia, Central Asia – and eventually China and the rest of Asia – are a central part in CIEP's research. The development

of an external EU energy policy and security of supply policy remain central pillars of CIEP research and are explored under the CIEP research themes of (A) regulation of energy markets (oil, gas, electricity) in the European Union; and (B) international economic and geopolitical aspects of oil and gas markets (see below).

### **The EU, in search of policy initiatives**

On 10 January 2007, the European Commission presented its vision of a new energy strategy in the white paper entitled ‘Energy in a Changing World’. In this paper, the Commission presented the policy objectives it wanted to achieve by 2020 (20% renewables, 20% reduction in emissions, and 20% increase in efficiency). These objectives were presented by José Manuel Barroso, President of the European Commission, as a necessary industrial revolution to ensure a timely transition to a low carbon economy.

The intention to create an integrated approach for an internal energy and climate policy was immediately translated into what eventually became the ambitious goals of the new Dutch government. The European Council put its support behind the ambitious initiatives and goals of the Commission resulting in a year of new discussions and studies to assess how the initial goals could be translated into concrete measures.

However, an important dimension sorely lacking from the roadmap to a sustainable energy household was that of an external energy policy. This dimension focused unswervingly on relations with Russia, whilst discussions regarding the oil market, a most prescient topic in the US, were hardly initiated. With the increased demand for and imports of fossil fuels and biofuels, an energy revolution needs now to be realised more than ever. The ever increasing dependence on imported energy and the accompanying implications for energy relations in the short and mid-term are still underestimated themes on the European agenda.

High priority issues for the European energy agenda can be identified and observed in the publication of the Third Legislative Package in September 2007. These issues, such as competitiveness in the internal European energy market, cannot be addressed independently from issues such as import dependency and the creation of new market structures in the rest of the world. The discussions being waged around the unbundling of distribution and production networks in Europe are indicative of the controversies surrounding these new legislative initiatives, highlighting the different perceptions on market-structures, domestic market traditions, and foreign relations.

Producing countries are becoming increasingly assertive in controlling the conditions under which access and investment are allowed with regards to production and trade of domestic energy resources in their own countries. Additionally, these countries are vying for a greater market share and are pursuing this strategy by vertically integrating in the markets of consuming nations. This is in contrast to the European strategy of developing assets outside of national borders to secure an adequate supply of energy. In examining the European initiatives, a clear convergence of security of supply, market mechanisms and increasing sustainability can be observed. This same convergence can be detected in the intertwining of CIEP’s research themes and subsequent publications.

## **Geopolitics and energy**

Uncertainties around developments in the international oil market are not restricted to Europe. The United States (US) and Asia have similar worries, especially with regard to the issues of dependence, price and the position of oil from the Middle East. Policy in China, Japan, and also the US is determined mainly in response to problems of energy security and security of supply. This is in contrast to European policy which focuses on market liberalisation and climate policy. These issues are not nearly as important for the US, China and Japan. Rather, their sustainability efforts are often formulated in terms of increasing energy security, thus using security as the main driver for change.

In July 2007, with broad support from the energy and security community, an important study was published by the National Petroleum Council in the US. The analysis of this study on energy dependency had much in common with similar analysis originating from the EU. However, the solutions offered varied between the two due to differing domestic realities. Despite its growing import dependency, the US has large reserves of coal augmented by considerable domestic oil and gas production. Large scale improvements in US energy security can be achieved by increasing energy efficiency in sectors such as transport, households, and electricity production. In addition, important legislative initiatives are being prepared in an attempt to lessen the United States' addiction to foreign oil and to ensure that viable alternatives to gas are available for electricity generation.

Biofuels, for the transport sector in particular, are being actively promoted with notable results. In using maize as a biofuel, subsequent price increases for maize have had far reaching social effects in countries such as Mexico where maize is the main ingredient for the popular tortilla. The reality of social unrest is intensifying discussion around biofuels, especially now that it has become clear that energy is going to claim an increasing amount of land otherwise destined for agricultural produce.

The US is diversifying its imports away from the Middle East and importing an increasing volume from Africa. It is here that the strategic energy interests of China and the US converge. China, after all, is also actively trying to diversify its oil supplies. China's dependency on Middle Eastern oil is a great worry to its government. Additional oil supplies are being sourced and brought on-stream from Central Asia, Africa and even Latin America, where once again it meets US interests. Although Japan and Korea are convinced that their purchasing power will remain an attractive incentive for oil producers, they are becoming increasingly nervous about their ability to attract supplies. The depreciation of the dollar and the appreciation of the yen and euro have ensured that increased oil prices are noticed less in the national currencies.

With increased oil prices and the intensified competition for access to oil and gas reserves and markets between large consuming nations such as the US, EU, China and Japan, the potential for a clash of interest and conflicts is amplified

## **A sustainable future**

The integrated approach of energy and climate policy, which has increasingly led to the convergence of CIEP's three main research themes (namely the EU electricity and gas market and security of supply, geopolitics and geoeconomics, and sustainable development), incites extra attention with regard to the sustainable energy sector. Mindful of the proliferation of

first generation biofuels for the transport sector, the increased competition for agricultural land and higher food prices are a reality. Yet, dilemmas also exist for electricity production in terms of increasing the share of sustainable energy. The increase is most likely to be found in the co-firing of biomass in coal plants which will present a possible scenario in which more coal capacity is needed to increase the share of sustainable energy; with coal being the most intensive emitter of CO<sub>2</sub> and a larger contributor to emissions than any other fossil fuel. The issue of storing CO<sub>2</sub> has therefore been catapulted to the top of the list of policy options, even though the technology is only in its infancy. Nevertheless, a concerted effort is needed in this area since China will predominantly remain a coal economy. In addition, nuclear electricity generation has managed to project itself to the top of the policy agenda, not least because countries of interest from countries such as China, India and Iran. The geopolitical issues are of a contemporary nature with both energy independence and non-proliferation as part of the discussion.

## **Research and activities**

CIEP continued largely on the same footing as for 2006, based on the plan and estimated budget as described in *CIEP 2005-2008, Towards a European Forum*, and as agreed upon by the Board of Stichting Fonds Instituut Clingendael and the participating institutions.

Energy continued to feature prominently on the political agenda in 2007 and was also covered extensively in the media. Among the prominent European institutes dedicated to the study of energy matters and international relations, demand for CIEP's expertise is growing. Representatives of European countries often consult CIEP on European energy security issues, as well as for matters regarding the operation of energy markets. Requests for lectures and interviews have also greatly increased.

An important element of 2007 was an intensified cooperation with various energy sector stakeholders in discussion groups. Research results were jointly discussed and developed in brainstorming groups. These brainstorming groups bring together academic, policy and business knowledge and are instrumental for setting the agenda for CIEP's activities. The brainstorming groups have not only become a powerful instrument for research, they are also an integrated part of the CIEP platform function, illustrating CIEP's role as a network organisation and contributing to CIEP as a knowledge centre.

CIEP's 2007 research was manifested across three themes:

- A. Regulation of energy markets (oil, gas and electricity) in the European Union;
- B. International economic and geopolitical aspects of the oil and gas markets, mainly with respect to the security of oil and gas supply in the European Union, in the context of an increasing dependence on imported energy; and
- C. Energy and sustainable development.

### **Theme A – Regulation of energy markets (gas and electricity) in the EU**

#### *A1 Electricity*

Research and activities with regard to electricity focussed on the evolving organisation structure of the EU electricity market. With the publication of the third legislative package in September 2007, the Commission intends to finalise the liberalisation process. Additionally, the 10 January 2007 package in which the measures to realise a lower carbon economy were launched will also greatly impact the sector. Market participants are both adapting to and actively seeking to influence these developments in their own markets. The interaction between regulatory measures at the national and the EU level and the strategic market behaviour of some of the large market participants is one of the areas that CIEP studied. Subjects that will be covered in this project include policies of the EU and the member states with regard to market liberalisation, strategies of the different states and other main market participants, security of supply, the environment, unbundling and privatisation.

Publications and activities have been initiated in part and supported by the discussions in the CIEP Energy Policy Group (EPM). This group, initiated in 2004 as the electricity group, comprises representatives from energy companies, relevant governmental institutions and academia and convenes regularly to exchange views of different stakeholders with respect to recent developments in electricity markets. Topics that have been scheduled thus far include:

company strategies of main players in the European electricity (and gas) markets; regulatory developments in the EU as a result of the sector inquiry, green papers and the third energy package; the low carbon economy measures of 10 January 2007; optimising the fuel mix in the electricity sector; and the nuclear fuel cycle.

## *A2 Natural gas*

All CIEP research and activities on gas related matters were supported in 2007 by regular meetings of CIEP's gas group. This group, comprising some 25 experts from CIEP's supporting institutions, assists in setting the CIEP agenda on gas issues and acts as a sounding board for CIEP's activities related to natural gas, contributing where possible to these activities and facilitating exchange of information and views.

During 2007 working groups deriving from the gas group were active in contributing to evaluations of the following topics: a) barriers to investment in seasonal storage; b) the pricing systems of natural gas in Continental Europe; c) the future of gas exploration and production in the Netherlands. A paper on seasonal storage was published at the beginning of the year. Further publications on the other subjects are slated for the first months of 2008.

The meeting dates of the CIEP Gas Group were 23 January, 20 February, 14 March, 24 April, 15 May, 11 September, 17 October, 20 November and 10 December 2007.

The International Gas Union (IGU), under the new presidency of Argentina, is involved in the Gas Market 2030 Outlook study, in which Coby van der Linde, in her capacity as an external expert to the IGU is a member of the steering committee. In this manner, CIEP remains involved in the research work of IGU.

Relations with Russia and gas supplies from this country and the countries around the Caspian Sea, including the new pipeline routes, remained a key area for CIEP. A large project on pipeline routes is currently underway and should reach a final stage at the end of 2008.

Company strategies of European gas companies both in the context of EU developments and international developments on the gas market, and government strategies towards their domestic gas industries will be a main part of next year's research agenda.

On the many issues arising from the discussion on the new European Energy Policy plans, CIEP continued following the discussions and brought CIEP's views on standards for security of supply, gas market regulation, energy value chain management, external EU energy policy, nuclear energy, etc., closer to the European policymaker.

**Theme B – International economic and geopolitical aspects of the oil and gas markets, mainly with respect to the security of oil and gas supply in the European Union, in the context of an increasing dependence on imported energy**

As noted above, relations with Russia continued to feature high on the research agenda, including for oil supplies from Russia and pipeline politics in the CIS and investment policies and strategies in the CIS.

As a part of the study on value chain management by states and companies, work on precisely what role states play in energy markets and to what extent business-to-business relies on government-to-government relations is continued. This is important in order to determine the scope of a European energy policy, but also that of other important consuming (US and China) and producing countries (such as Russia, Saudi Arabia, Norway).

Based on the 2006 study on geopolitical scenarios and energy, research into the shifting flows in the oil market is an important subject for the oil discussion group. The position of China, its investment policies and strategies but also US energy policy, is analysed. Developments in the Middle East are closely monitored. This research also included the position of national oil companies and international oil companies and their investment policies and possible shifting flows of crude oil and oil products.

The CIEP Asia project covers energy-related developments occurring in Asia or resulting from major Asian economies' rapidly increasing demand for energy (see Clingendael Asia studies, below).

CIEP initiated a project on economic relations with Russia, focussing on energy. This project was undertaken upon the request from the Department of Foreign Economic Relations of the Dutch Ministry of Economic Affairs in 2006. On 12 February 2007, a closed seminar was organised with a number of invited Dutch and European stakeholders, such as government and European Commission representatives and representatives from the energy sector and other related sectors.

During the first part of the seminar, lectures were given on the current state of the political relations between the EU and Russia by a representative of the Foreign Office of the Federal Republic of Germany and on the development of the economic cooperation by an economist from the European Bank for Reconstruction and Development. A panel of experts consisting of a senior energy consultant of the presidential administration of the Russian Federation, a former energy minister from Bulgaria and a representative of the European Commission commented on both lectures. During the second part of the seminar, speakers from international energy companies gave lectures on their perspective on recent developments in Russia's oil and gas sector. In the subsequent panel discussion, energy experts from the international business department of Gazprom, the Directorate-General for Energy and Transport (DG TREN) of the European Commission, together with the director of CIEP, presented their views on several issues of the EU-Russian energy cooperation.

In September 2007, CIEP published the Clingendael Energy Paper, "Energy as a Bond: Relations with Russia in the European and Dutch Context". This paper offers a comprehensive overview of several issues of current EU-(Dutch-)Russian relations, in particular with regard to energy relations from both multilateral and bilateral perspectives. The paper was inspired by the two seminars that were organised during the project on

relations with Russia and the comments on background papers that were issued to the participants of these seminars.

## **Theme C – Energy and sustainable development**

CIEP's research theme "Towards a low-carbon energy sector" is structured around two key areas: global energy power shifts and EU policy and energy transition.

Transition to a global low carbon energy sector will almost certainly involve major changes in existing international energy relations. For some countries, these changes will be positive; for others negative. The result of these power shifts might be that 'old' political tensions will be resolved, but that new political tensions may arise in their place. The focus of this research is to identify the kinds of power shifts that might occur, to what extent these changes might give rise to tensions, and how tensions can be prevented from becoming conflicts.

Energy policy has long been a topic of EU policy discussions. In January 2007 the EU took a new step in energy policy with its long-awaited "Energy Policy Package" in which, for the first time, the EU presented an approach to balancing the overall energy policy targets of affordability, reliability and climate change mitigation. However, national interests make it difficult for the EU to speak with a single voice regarding energy. Also, an overall vision on how to achieve a long-term energy transition within the EU is still lacking. It is also unclear as to what external strategy the EU will follow in order to stimulate other countries to participate in this transition. The aim of this research is therefore to examine what should be included in feasible political strategies for an energy transition in the EU, both internally and externally.

The Global Energy Transition & International Politics (GETIP) discussion group was founded in December 2005, initially under the title of "Sustainability Group". In 2007, eight meetings were organised, with a great variety of speakers and topics (see Table 1). The year saw some organisational changes for the discussion group in order to strengthen its focus and link to CIEP research. These included the name change to GETIP, the introduction of a yearly theme to which all organised meetings relate and an increased number of participants from a wide range of organisations. The year was successfully concluded with an evaluation session on the 2007 overall theme "Drivers for Change".

**Table 1: Sustainability / GETIP Group meetings in 2007**

<b>Date</b>	<b>Topic</b>	<b>Main Discussants</b>
(1) 7 February	Market parties as drivers for energy transition	Kornelis Blok (Ecofys), Ewald Breunesse (Shell)
(2) 19 March	The European Strategic Energy Technology Plan	Iñigo Sabater (DG-TREN), Wim Turkenburg (Utrecht University)
(3) 24 April	Bioenergy and developing countries	Kees Daey Ouwens (Eindhoven University), Wim van Nes (SNV), Frans Vollenbroek (Ministry of Environment)
(4) 22 May	Dutch Energy Transition Policy	Florian Kern and Adrian Smith (University of Sussex), Peter Aubert (Ministry of Economic Affairs)
(5) 20 June	Energy Efficiency in Russia	Roel Martens (Ministry of Economic Affairs), Cornelis van Aerssen (European Bank for Reconstruction and Development)
(6) 6 September	Chinese Climate Policy	Joris Thijssen (Greenpeace China), Susann Handke (Clingendael International Energy Programme)
(7) 12 November	New Energy Technologies in Oil and Gas Producing Countries	Derek Taylor (DG-TREN), Coby van der Linde (Clingendael International Energy Programme)
(8) 11 December	Drivers for Change – Summarizing Session 2007 and Outlook for 2008	Lucia van Geuns and Stephan Slingerland (Clingendael International Energy Programme)

## **Projects**

### **Clingendael Asia studies (CAS)**

CIEP Asia studies address energy-related developments that occur in Asia or result from major Asian economies' rapidly increasing demand for energy. The focus of the three Asia projects includes aspects that are also relevant to European policymakers and multinational energy companies. The first project focuses on the possible diversification of Russian oil and gas supplies towards East Asia and China's energy cooperation with Central Asia countries. The second project examines the economic and geopolitical consequences of China's and India's quest for oil in Africa. The third project assesses the reforms underway in China's and India's power sectors and policy initiatives in both countries that aim at the transition to a low carbon economy.

Lucia van Geuns and Susann Handke made a research and networking trip to China and Hong Kong as part of CAS work during 15-25 April 2007. They gave presentations at several universities, research institutes and think tanks. Their visit also provided a perfect opportunity for an exchange of views and ideas with Chinese researchers and scholars. The contacts made during this trip will be further developed and used to organise CIEP CAS conferences and conduct joint research projects in the future.

Conversations with Chinese scholars mainly focussed on geopolitical developments and China's security of energy supplies, the use of renewable energies to reduce China's air pollution and the promotion of more energy efficient solutions in China.

Visits were made in Hong Kong to the Center on China's Transnational Relations at the Hong Kong University of Science and Technology and to the Civic Exchange think tank; in Shanghai, to the renowned Shanghai Academy of Social Sciences; and in Beijing to several research institutes and universities, such as Renmin University of China, the Energy Research Institute of the National Development and Reform Commission, the Chinese Academy of Social Sciences, Tsinghua University, the China Institute of International Studies, as well as the Royal Netherlands Embassy.

### **WAB project**

For the Dutch Scientific Assessment and Policy Analysis Programme (WAB), CIEP together with Energy research Centre of the Netherlands (ECN) and the Netherlands Environmental Assessment Agency (MNP) carried out a study on the relation between the EU energy policy targets of competitiveness, security of supply and climate change. It was concluded firstly that the often suggested synergy between the three objectives is far from straightforward. Secondly, the study argued that current EU energy policies to stimulate (nearly) commercial and immature technologies are most likely insufficient to mitigate climate change and secure energy supply up to and beyond 2050. Thirdly, regarding EU external relations the study concluded that, via its external relations in particular with fossil fuel exporting countries, the EU sends out ambiguous messages, on one hand stimulating them to increase their exports to the EU, on the other hand taking internal measures to reduce EU dependency on these countries with the transition to a low carbon energy sector. A better strategy might be to engage more seriously in dialogue with fossil fuel exporting countries around how a low

carbon energy transition could be made profitable to them as well as to the EU. In this way, they could become allies rather than adversaries to a global energy transition

### **Curacao project**

CIEP commissioned a study for the Isla refinery in Curacao on exploring options and processes for defining a energy policy for the island. The study was undertaken in cooperation with the Institute for Environmental Issues (IVM) at the Amsterdam VU University. A number of stakeholders were interviewed about their ideas and concerns with respect to the Curacao energy situation in general and the role of the Isla refinery in particular. The study proposed not only an inventory of all relevant issues to be taken into account, but focussed on a road map for a dialogue process with all relevant parties and stakeholders. As follow-up, a more detailed proposal was sent to Willemstad, with IVM taking the project lead and CIEP together with Delft University of Technology (TUDelft) as partners. Isla and its owner the Curacao council have agreed to this proposal, which CIEP will lead, developing some energy scenarios for the island and a number of workshop sessions in late 2008. The output of the project will be clear advice to the council on a Curacao energy policy with a road map for further development and implementation.

### **CeSSA – Coordinating Energy Security in Supply Activities project**

CeSSa is a large EU-funded research cooperation project with among others, UdP-France; Comillas-Madrid; Oxford University; DIW-Berlin. CIEP was responsible for a study on security of gas supply. This draft report was submitted in August 2007.

## **World Energy Council (WEC)**

CIEP traditionally hosts the Netherland's World Energy Council (WEC NL) board meetings and one CIEP staff member is a member of the board. An event for young energy professionals was organised by CIEP in collaboration with TBM/TUDelft on behalf of WEC NL. CIEP also contributed to national and European preparatory discussions and analyses on the forthcoming WEC-scenarios to 2050. CIEP thinking was, amongst others, instrumental for developing the analytical framework for the scenarios, especially with regard to the global geopolitical context. CIEP organised a special scenario seminar in June 2007 (see the overview of CIEP activities).

## **Training programmes**

Continuing the series from previous years, during 2007 CIEP organised three public energy training days. Each reflected one of the CIEP research themes: Geopolitics of Energy, European Energy Policy and Towards a Low-Carbon Energy Sector. All days were attended by about twenty participants. Training materials and programmes were completely updated in order to give the participants insights into the latest developments in the energy sector.

In addition, CIEP organised several external training sessions. These included a three-day energy case study for Dutch junior diplomats and a week's training on energy and climate for Chinese mid-career diplomats.

- |   |                  |
|---|------------------|
| • Geopolitics of Energy                                 | 8 March 2007     |
| • EU Energy Policy: Liberalisation in Challenging Times | 11 May 2007      |
| • Drivers for change towards a low carbon energy sector | 15 November 2007 |

CIEP staff lectured in Clingendael Institute courses, and also for the Energy Delta Institute, Groningen University and Delft University of Technology and in a series of events throughout the year (see Appendices 3 and 4). CIEP was also involved in developing an executive Master programme in Gas Business of the Energy Delta Institute. The Master programme started mid-2007 and will deliver its first graduates in 2008.

## **Knowledge Centre**

An important task for CIEP is to provide the general public with information on energy related topics. This is achieved in part by CIEP's own activities and publications, but also by giving public lectures and interviews to the media. In 2007, over 150 presentations, lectures and interviews were given by CIEP staff. Further, the CIEP website served as an important source of information on publications, activities and training programmes.

## **Network**

CIEP is primarily a network organisation. CIEP is a small organisation and does not intend to compete with other energy oriented knowledge centres, but rather works to complement and cooperate with many of these institutions. Positioned between the private sector and public institutions, between scientific research organisations and consultants, CIEP strives to achieve its mission and objectives via cooperation across its extensive network.

CIEP has initiated discussions between different experts across its extensive network. For example meetings between energy and environmental experts and energy and security experts have served as sounding boards for new issues in international and national energy. The various study groups and meetings with CIEP supporting institutions are also network events.

## **CIEP supporting institutions**

In 2007, CIEP was supported by the following institutions:

- Dutch Ministry of Economic Affairs (EZ)
- Energie Beheer Nederland (EBN)
- Gasunie
- Gasterra
- ING Group
- Nederlandse Aardolie Maatschappij BV (NAM)
- N.V. NUON
- Oranje-Nassau Energie BV
- Total E&P Nederland BV
- Port of Rotterdam
- Shell Nederland
- Dutch Ministry of Housing, Spatial Planning and the Environment (VROM)
- Vopak Oil Logistics Europe & Middle East B.V.
- Essent
- Eneco
- BP
- Wintershall
- Dutch Ministry of Foreign Affairs (BZ)
- RWE Nederland (*new since 1.1.2007*)

These institutions are a cross-section of energy sector stakeholders in the Netherlands. The companies are major international players in their field of expertise. The public institutions understand that national energy policy is largely influenced by international developments. The institutions contribute to CIEP's knowledge base and *vice versa*, especially within the CIEP Advisory Board and the Contact Group. Furthermore, staff members from the institutions participated actively during 2007 in CIEP research and study groups, such as the Gas Study Group, the Oil Discussion Group, the GETIP Group and the Energy Policy Discussion Group.

## **CIEP network**

Within the Netherlands, CIEP has working relationships with a wide variety of institutions, including:

- Energy Delta Institute (EDI)
- Energy research Centre of the Netherlands (ECN)
- International Institute for Asian Studies (IIAS)
- Technical University Delft (TUDelft)
- Centrum voor Energiebesparing (CE Delft)
- Netherlands Environmental Assessment Agency (MNP)
- Algemene Energieraad

Internationally, the CIEP network spans the following institutions:

- European Policy Centre (EPC)
- Royal Institute for International Affairs (RIIA, Chatham House)

- Oxford Institute for Energy Studies
- European University Institute Florence
- Institut Français des Relations Internationales (IFRI)
- DG TREN (European Commission)
- International Energy Agency (IEA)
- Columbia University (New York)
- Yale University Business School
- The Judge Institute, Cambridge University, UK
- World Energy Council (WEC)
- Moscow State Institute of International Relations (MGIMO)
- Waseda University (Japan)

During 2007, cooperation continued between CIEP and EPC, a well-established platform for European policy related discussions. CIEP will occasionally function as the energy branch of EPC to place more of the conferences and debates in an EU context. In January 2007 CIEP co-organised a conference on issues related to the 10 January 2007 package of the EU Commission.

### **Internal organisation**

CIEP continued to administer the allocation of staff and budgets to the different public activities, research projects and other activities in a transparent way. In this way, CIEP uses time registration (BigBen software) which facilitates prioritising time and assets.

## Overview

### CIEP publications

The following overview highlights a selection of publications, most of which are available on the CIEP website. CIEP (associated) staff also published articles in newspapers, scientific journals and other formats that are not mentioned here.

### CIEP articles/papers

Duits energiebeleid in 2007,  
Christoph Tönjes , in: *Internationale Spectator*, January 2007

Energieveiligheid: de achilleshiel van het Westen,  
Kees Homan en Lucia van Geuns , in: *Atlantisch Perspectief*, March 2007, 9-15

The EU's Policies of Security of Energy Supply towards the Middle East and Caspian Region: Major Power Politics?, Femke Hoogeveen en Wilbur Perlot, in: M. Parvizi Amineh (ed.): *The Greater Middle East in Global Politics. Social Science Perspectives on the Changing Geography of the World Politics*, Brill, 2007

EU Standards for Energy Security of Supply (update), Jacques de Jong, Hans Maters, Martin Scheepers en Ad Seebregts, Clingendael Institute/ Petten, Energy Research Centre of the Netherlands, CIEP/ECN, April 2007

Global Energy Issues – Challenges for the UN CSD meetings in 2007 and beyond, Jacques de Jong, Wilbur Perlot en Stephan Slingerland, Clingendael Institute, April 2007

Energieveiligheid en het Westen, Lucia van Geuns en Kees Homan , *Armex*, June 2007

Japan: nieuwe agenda voor energieveiligheid, Jan-Hein Chrisstoffels, *Internationale Spectator*, July/August 2007

External energy policy: Old fears and new dilemmas in a larger union, Coby van der Linde, in: André Sapir (ed.), *Fragmented power: Europe and the global economy*, Brussels, Bruegel AISBL, 2007

The Art of Managing Energy Security Risks, Coby van der Linde, in: *An Efficient, Sustainable and Secure Supply of Energy for Europe*, EIB Papers, volume 12, no.1, 2007

Energie: de eeuw van mijn moeder, Meagan Linde (dochter van Coby van der Linde), in: Prof. dr. R.J. in 't Veld, Ir. J.H. van der Veen en Dr. F.M.R.C. Basten (eds.), *IJsberenplaag op de Veluwe; Essays over de Toekomst*. Den Haag, COS, 2007

The Geopolitics of EU security of gas supply, Coby van der Linde, in: *European Review of Energy Markets*, volume 2: issue 2, december 2007

Perspectives on security of supply in European natural gas markets, Christoph Tönjes and Jacques de Jong, Cessa paper CIEP, The Hague, Clingendael Institute, August 2007

Getting to Grips again with Dependency: Japan's Energy Strategy, Jan-Hein Chrisstoffels, CIEP Energy Paper, The Hague, Clingendael Institute, August 2007

Energy as a Bond: Relations with Russia in the European and Dutch Context, Susann Handke and Jacques de Jong, CIEP Energy Paper, The Hague, Clingendael Institute, September 2007

Samen werken, samen leven, samen rijden? Warner ten Kate, *Stromen*, September 2007

Touwtrekken om de Oost-Siberische oliepijpleiding, Jan-Hein Chrisstoffels and Susann Handke, *Internationale Spectator*, October 2007

Olie-afhankelijkheid van het Midden-Oosten: een sluipende crisis?, Lucia van Geuns, *Nieuwsbrief Crisisbeheersing*, November 2007

Europe, the EU and its 2050 Energy Storylines, Jacques J. de Jong and Ed Weeda, CIEP Energy Paper, The Hague, Clingendael Institute, December 2007

### **CIEP briefing papers**

Earthquake Alarm – The Kashiwazaki Nuclear Incident and the Consequences for Japan's Nuclear Policy, Jan-Hein Chrisstoffels, CIEP Briefing Paper, The Hague, Clingendael Institute, August 2007

No "Silver Bullet": The 2007 National Petroleum Council Report in the US Energy Debate, Warner ten Kate, CIEP Briefing Paper 6, The Hague, Clingendael Institute, August 2007

Putting Coal to the Test: Is Coal Fired Generation Clean, Competitive and Secure? Stijn van den Heuvel and Jacques de Jong, CIEP Briefing Paper 7, The Hague, Clingendael Institute, December 2007

### **CIEP columns**

The columns appearing in Energie Nederland (Energy Netherlands) are written by Coby van der Linde. In 2007, another column appeared in European Energy Review. They can also be found on the CIEP website (<http://www.clingendael.nl/ciep/publications/columns/>).

### **CIEP activities**

CIEP organised numerous activities (meetings, training programmes, conferences, etc.) during 2007. A listing is given below (see also <http://www.clingendael.nl/ciep/events/2007/>).

29 January 2007

**The new EU energy policy: balancing the internal market and external security of supply**

CIEP and EPC (European Policy Centre Policy) Dialogue, Crowne Plaza Hotel, Brussels (<http://www.clingendael.nl/ciep/events/20070129/>)

8 and 9 February 2007

**Competition and Market Power in Electricity and Gas**

CIEP-FSR Workshop, European University Institute, Florence-Fiesole

(<http://www.clingendael.nl/ciep/events/20070208/>)

12 February 2007

**Relations with Russia**

Second workshop organised by CIEP in collaboration with the Dutch Ministry of Economic Affairs (<http://www.clingendael.nl/ciep/events/20070212/>)

2 April 2007

**Energy efficiency in mobility**

WEC/CIEP/TUDelft Young Professionals Workshop (NL)

(<http://www.clingendael.nl/ciep/events/20070402/>)

23 April 2007

**Climate and energy policy in the European Union**

CESP/CIEP High-level Expert Seminar

(<http://www.clingendael.nl/ciep/events/20070423/>)

24 May 2007

**Synergies and Trade-offs between Energy Policies**

Expert Workshop together with ECN and NMP

(<http://www.clingendael.nl/ciep/events/20070524/>)

30 May 2007

**Standard grids, smart grids, super grids**

**All the same, all different, complementary, not compatible?**

CIEP Seminar (<http://www.clingendael.nl/ciep/events/20070530/>)

11 June 2007

**Production Sharing Agreements: All you want to know...!?**

CIEP informal workshop about petroleum contracts organised at the request of the Ministry of Economic Affairs.

13 June 2007

**The future of European Gas Pricing**

CIEP Workshop (<http://www.clingendael.nl/ciep/events/20070613/>)

18 June 2007

**Energy scenarios, forecasts, policies & decisions**

One-day CIEP Seminar (<http://www.clingendael.nl/ciep/events/20070618/>)

6 September 2007

**Chinese climate policy**

CIEP Global Energy Transition and International Politics Group (GETIP)

(<http://www.clingendael.nl/ciep/events/20070906/>)

7 September 2007

**Matching demand for commodity and infrastructure**

The CIEP September Gas Seminar: Discussions on scenarios North Western European gas market and the consequences for the transport capacity

(<http://www.clingendael.nl/ciep/events/20070907/>)

1 October 2007

**An appeal for a sustainable renaissance**

Clingendael Energy Lecture by H.E. Mrs. Jacqueline Cramer, Minister of Housing, Spatial Planning and the Environment of the Netherlands

(<http://www.clingendael.nl/ciep/events/20071001/>)

15 October 2007

**Energy Diplomacy: Russia and the World**

Clingendael Energy Lunch with Stanislav Zhiznin, Crowne Plaza Europe Hotel, Brussels

(<http://www.clingendael.nl/ciep/events/20071015/>)

17 October 2007

**The Future of American Energy Policy-making**

CIEP Energy Policy Meeting, SER, The Hague

(<http://www.clingendael.nl/ciep/events/20071017/>)

1 November 2007

**The Hydrogen Economy: Myth or Reality?**

CIEP Future Fuels Seminar

(<http://www.clingendael.nl/ciep/events/20071101/>)

12 November 2007

**The role of oil and gas producing countries in global energy transition**

CIEP Global Energy Transition and International Politics Group (GETIP)

(<http://www.clingendael.nl/ciep/events/20071112/>)

16 November 2007

**Competition for Oil,**

CIEP Symposium (<http://www.clingendael.nl/ciep/events/20071116/>)

22 November 2007

**Network governance: Independent System Operators and Regional TSO's for Europe?**

CIEP Energy Policy Meeting (<http://www.clingendael.nl/ciep/events/20071122/>)

11 December 2007

**Drivers for Change: What did we learn from the GETIP Group meetings in 2007?**

**Where are we going in 2008?**

CIEP Global Energy Transition and International Politics Group (GETIP)

(<http://www.clingendael.nl/ciep/events/20071211/>)

17 December 2007

**Mergers in European energy: blessing or curse?**

CIEP Energy Policy Meeting (<http://www.clingendael.nl/ciep/events/20071217/>)

18 December 2007

### **Clingendael Energy Lecture**

Rotterdam Climate Initiative by Ruud Lubbers

(<http://www.clingendael.nl/ciep/events/20071218/>)

### **Training**

- Geopolitics of Energy, 8 March 2007
- EU Energy Policy: Liberalisation in Challenging Times, 11 May 2007
- Drivers for change towards a low carbon energy sector, 15 November 2007

CIEP also offered training programmes customised to particular needs and interests:

- Three-day Energy Megacetus ‘Energy Geopolitics’ for Young Dutch diplomats (Campus The Hague), 13-15 June 2007
- One week course on energy geopolitics for Chinese diplomats, 3-7 December 2007
- One-day Energy workshop for Essent, 20 December 2007

### **Meetings**

- The *CIEP Contact Group* convened on 13 March, 5 June, 1 October and 3 December 2007
- The *CIEP Advisory Board* convened on 26 June and 18 December 2007
- The Board of *Stichting Fonds Instituut Clingendael* convened on 12 June, 24 September and 27 November 2007
- The meeting dates of the *CIEP Gas Group* were 23 January, 20 February, 14 March, 24 April, 15 May, 11 September, 17 October, 20 November and 10 December 2007
- The *Global Energy Transition and International Politics (GETIP) Group* (formerly the *Sustainability Group*) convened on 7 February, 19 March, 24 April, 22 May, 20 June, 6 September, 12 November, 11 December 2007
- The *Energy Policy* (former Electricity group and Platform Internationaal Energiebeleid: Dutch departments) meetings were organised on 13 March, 9 May, 17 October, 22 November and 17 December 2007
- *The Oil Group* convened on 5 July and 19 September 2007

### **Lectures, Speeches and Presentations**

During 2007 CIEP staff members gave a total of 120 lectures, speeches, and presentations or chaired sessions during training courses, conferences and seminars (a selection of the external lectures are listed in Appendices 3 and 4)

## **Media**

CIEP staff members gave over 75 interviews for radio, television and newspapers during 2007.

## **Website**

During 2007, the CIEP homepage had 135,078 visitors (viewing on average three pages per visit). The most popular page was <http://www.clingendael.nl/ciep/publications/>, with 42,339 hits.

## **Staff**

In 2007, the CIEP staff comprised eleven people:

Coby van der Linde	director	(0.7 fte)
Lucia van Geuns	senior researcher/deputy	(0.8fte)
Christoph Tönjes	senior researcher	(1.0fte) (until 15-11-2007)
Stephan Slingerland	senior researcher	(0.8fte)
Susann Handke	researcher	(0.8fte)
Warner ten Kate	researcher	(1.0 fte)
Stijn van den Heuvel	researcher	(1.0 fte)
Jan-Hein Chrisstoffels	researcher	(1.0 fte) (from 15-01-2007)
Tom Smeenk	researcher	(1.0 fte) (from 01-10-2007)
Wendy Auf dem Brinke	secretary	(0,6fte)
Micha Wortelboer	administrator	(0.4 fte) (from 01-04-2007)

In addition to the core staff, CIEP has 3 fellows and five associate fellows:

Jacques de Jong	seconded senior research fellow	(0.8 fte)
Dick de Jong	senior research fellow	(0.2 fte)
Hans Maters	senior research fellow	(project basis)
Aad Correlje	associate fellow	(0.2 fte)
Kurt Radke	associate fellow (project basis)	(until September 2007)
Mehdi (M.) Amineh	associate fellow (project basis)	(until September 2007)
Paul Nillesen	associate fellow (project basis)	(until September 2007)
Reinaldo Figueredo	associate fellow	(project basis)

Other functions held by CIEP staff members:

Coby van der Linde	Part-time Professor of Geopolitics and Energy Management, University of Groningen Member of the Dutch Energy Council Member of the Supervisory Board of Wintershall Nederland B.V. (WINL)
Lucia van Geuns	Member of the board of the World Energy Council Netherlands (WEC NL) Member of the Earth and Climate Council (RAK) of the Royal Netherlands Academy of Arts and Sciences (KNAW)

## **Board of the Foundation Stichting Fonds Instituut Clingendael in 2007**

Drs G.H.B. Verberg, president  
Mw M.E.R. barones de Vos van Steenwijk-Groenenveld, vice-president  
Drs H.D.A. Haks RA, treasurer  
Mr W.F. Dutilh, member  
Mr W.O. Russell, member

## Appendix 1: About CIEP

### *Introduction*

In September 2001, the Netherlands Institute for International Relations, ‘Clingendael’, launched the *Clingendael International Energy Programme* (CIEP). Supported by twelve institutions from the public and private sectors, CIEP participates in and seeks to make significant and substantive contributions to the public debates on national and international developments in the energy sector. After the initial period 2001-2004, CIEP continued largely on the same footing as the previous years based on the plan and estimated budget as described in the document *CIEP 2005-2008, Towards a European Forum* and agreed upon by the Board of Stichting Fonds Clingendael and seventeen participating institutions.

The main reasons for initiating CIEP were:

1. The need for a forum to discuss developments in the European energy markets, e.g. the liberalisation of the European energy market, which will impact the organisation of the market, government energy policies and strategies of companies operating in the energy sector. These changes in the internal European market take place against the backdrop of an expanding European Union, increased dependency on imported fossil fuels and efforts to address environmental concerns;
2. The concerns raised in public debates about security of supply and a growing import dependency, not only for European Union member states but also for other major consumer regions. These concerns will influence the policy options and choices of both consumers and producers. The political and economic developments in, for instance, the United States, Russia, the Middle East, the Caspian Sea region, and Asia, are therefore important in assessing the developments in the European energy situation.

### *Mission*

Through research, the publication of studies, information releases (particularly through the media and internet) and the organisation of courses and training programmes, CIEP makes a fundamental contribution to the public debate on international politics and economic developments in the energy sector (oil, gas and electricity).

### *Objectives*

- To serve as an independent forum for governments, non-governmental organisations, the business community, politics, the academic world, the media and other stakeholders or interested parties.
- To gather and develop information and knowledge about international political and economic developments in the energy sector on the basis of research, supported by a documentation system.
- To propagate information and knowledge about international political and economic developments in the energy sector by means of seminars, conferences, lectures, courses, publications and information releases via the media.
- To initiate discussions about current events and future developments relevant to the energy sector, energy policy, legislation and the relationship between the government and the private sector.

### *Research and activities*

CIEP's research and activities focus on three main subject areas:

- A. Regulation of energy markets (oil, gas and electricity) in the European Union;
- B. International economic and geopolitical aspects of the oil and gas markets, mainly with respect to the security of oil and gas supply in the European Union, in the context of an increasing dependence on imported energy; and
- C. Energy and sustainable development.

The staff of the Clingendael International Energy Programme, in conjunction with the staff of the Institute at large, develops courses and training programmes on the above-mentioned themes. CIEP publications and research results are made available primarily through the CIEP website ([www.clingendael.nl/ciep](http://www.clingendael.nl/ciep)), which forms part of the Clingendael website.

## Appendix 2: Samenvatting



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**JAARVERSLAG 2007**  
**CLINGENDAEL INTERNATIONAL**  
**ENERGY PROGRAMME (CIEP)**

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### Een goed begin, is het...

Even leek 2007 een zelfde start te krijgen als 2006, met de afsluiting van een belangrijke pijpleiding van Rusland naar de Europese markt. Deze keer betrof het de oliestroom via Wit-Rusland. Het inrichten van de nieuwe relaties tussen de staten van de voormalige Sovjet Unie en de voormalige partners in de Comecon blijft zorgen voor oprispingen in de onderlinge relaties, welke soms via de energiestromen worden uitgevochten. Zolang deze relaties nog niet zijn genormaliseerd zullen conflicten over prijzen en doorvoertarieven blijven voorkomen, ook over energiestromen uit Centraal Azië die al dan niet over Russisch grondgebied naar West en Centraal Europa worden vervoerd. Ook de landen in Centraal-Azie zijn zich in toenemende mate bewust van de marktwaarde van gas en olie en weten handig in te spelen op de concurrentie om de schaarse energiestromen tussen consumerende landen in Oost en West en schuwen er ook niet voor om de energiestroom, ook die van GOS-landen, te onderbreken om hun hogere prijseisen kracht bij te zetten. De normalisering in de relaties binnen het GOS en met buurlanden is afhankelijk van de stabilisering van de binnenlandse politieke verhoudingen en de relaties met zowel de landen van de EU als Rusland.

Een nieuwe dimensie aan het herschikken en normaliseren van de politieke en economische verhoudingen wordt gegeven door de intensivering van de energierelatie van Rusland en de Centraal-Aziatische landen met China, waardoor West en Centraal Europa steeds meer moet concurreren met China en Oost-Azië om schaarse energiestromen. Nog niet zo lang geleden werden de energievoorkomens van Rusland en Centraal-Azië in de EU vooral gezien als opgesloten leveranciers. De nieuwe pijpleidingen naar China bieden een nieuwe markt voor Russische en Centraal-Aziatische olie en gasstromen. De plannen van Rusland om Yamal te ontwikkelen houden ook aansluiting van de oostelijke pijpleidingen op dit nieuwe productiegebied in, waardoor nog meer dan vandaag, Europa zal concurreren met de binnenlandse consument in Rusland (zeker na 2011

als de Russische gasprijzen op Europese netback basis zullen worden vastgesteld) en de Chinese consument in het oosten.



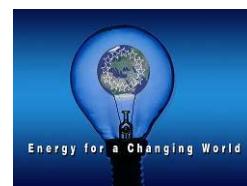
Deze nieuwe dimensie laat ook zijn sporen na in het nationale en EU energie beleid, hoewel Europa worstelt met het (eensgezind) invullen van het energiebeleid ten aanzien van Rusland en het aantrekkelijk maken van de Europese markt voor bijvoorbeeld LNG stromen elders uit de wereld. De energierelaties van de EU met Rusland, Centraal-Azië en op termijn ook China en de rest van Oost-Azië zijn onderwerp van studie in het CIEP.

De ontwikkeling van het EU extern energiebeleid en het voorzieningszekerheidbeleid blijven een centraal thema van CIEP en worden zowel onder thema A als B bestudeerd (zie bijlage).

### EU Beleidsoffensief

Op 10 januari 2007 presenteerde de Europese Commissie de nieuwe energiestrategie onder de naam 'Energy for a Changing World', waarin het energiebeleid voor 2020 uiteen wordt gezet (20% duurzaam, 20% efficiënter en 20% minder uitstoot in 2020). De plannen worden door Commissie voorzitter Barosso aangekondigd als een noodzakelijke industriële revolutie die nodig is om op termijn te komen tot een koolstofarme economie.

Het voornemen van een geïntegreerde benadering van het interne energie- en milieubeleid wist zich meteen vertaald in de ambitieuze doelstellingen van de nieuwe Nederlandse regering. Ook de Europese Council schaarde zich achter de ambitieuze beleidsvoornemens van de Commissie en een jaar van nieuwe discussies en studies volgde hoe de beleidsvoornemens omgezet konden worden in daden.



De discussie over de weg naar een duurzamere energiehuishouding miste echter een belangrijke dimensie, het externe energiebeleid. Deze bleef zich onverminderd richten op de relatie met Rusland,

terwijl discussies over de oliemarkt , zoals in de Verenigde Staten, nauwelijks werden gevoerd. De energierevolutie moet worden gerealiseerd in een periode dat de importen van fossiele brandstoffen, maar ook biobrandstoffen sterk toeneemt. De toenemende afhankelijkheid van geïmporteerde energie (inclusief duurzaam) en de korte en middenlange termijn gevolgen daarvan op de energierelaties in de wereld blijft een onderbelicht onderwerp op de Europese agenda.

Wel hoog op de agenda staan onderwerpen als marktwerking in de elektriciteit en gasmarkt, getuige de publicatie van het ‘derde pakket’ in september 2007. De inrichting van de energiemarkten kan echter niet los worden gezien van de importafhankelijkheid en de nieuwe marktstructuren die ontstaan in de rest van de wereld. Vooral de ontbinding van netwerken van de distributie en productieactiviteiten van Europese ondernemingen levert veel discussie in Europa op. Uit de commentaren blijken de verschillen van visie op de marktstructuur, de traditie van de nationale markten en de relatie met het buitenland.

De producerende landen laten namelijk in toenemende mate hun zeggenschap gelden op de voorwaarden waarop investeringen gedaan kunnen worden in productie en handel van energie in hun landen en streven naar een grotere markttoegang. Zij doen dit door verticaal te integreren in de consumerende markten, terwijl Europese ondernemingen graag meer eigen productie willen ontwikkelen in het buitenland om de toevoer veilig te stellen. In de Europese voorstellen komen de voorzieningszekerheid, marktwerking en verduurzaming samen, hetgeen ook blijkt uit de agenda en publicaties van CIEP. De onderzoeksthema’s schuiven hier nadrukkelijker dan voorheen in elkaar.

### **Geopolitiek en Energie**

De zorgen over de ontwikkelingen in de internationale energiemarkten bleven niet beperkt tot Europa. Ook in de Verenigde Staten en Azië nemen de zorgen toe, vooral ten aanzien van de groeiende importafhankelijkheid van olie, de prijs en vooral de positie van olie uit het Midden Oosten. Het beleid in China, Japan maar ook de Verenigde Staten worden tegen het licht gehouden en, in tegenstelling tot de EU, vooral belicht vanuit voorzieningszekerheid en energieveiligheid. Het klimaatbeleid en de inrichting van de eigen markt is een minder benadrukt thema dan in de huidige EU discussie.

In juli 2007 werd in de VS een belangrijke studie gepubliceerd door de National Petroleum Council, met een groot draagvlak in de energie- en veiligheidsgemeenschap. De analyse over

energieafhankelijkheid stemmen overeen met de analyse van de EU, maar de oplossingen wijken af. Dit heeft deels te maken met de ruimere binnenlandse energievoorkomens. De kolenvoorraden in de VS zijn groot. Ook produceert de VS nog aanzienlijke volumes olie en gas, ondanks de groeiende importen. Verbetering van de energie-efficiëntie in transport, industrie, huishoudens en elektriciteitsopwekking kunnen veel opleveren. In de Verenigde Staten worden belangrijke wetten voorbereid om de afhankelijkheid van geïmporteerde olie te verminderen, terwijl voor de elektriciteitssector alternatieven voor gas worden aangedragen.



Vooral de stimulering van biobrandstoffen voor de transportsector valt op. De inzet van maïs voor de energievoorziening stuwt de prijzen omhoog en Mexico merkt meteen de sociale gevolgen van concurrentie tussen de voedsel- en energievoorziening op als de grondstof voor de populaire tortilla's omhoog gaan. Deze discussie neemt in hevigheid toe naarmate duidelijk wordt dat energie een groter beslag gaat leggen op landbouwgronden.

De VS diversificeren de importen van olie weg uit het Midden-Oosten en importeren steeds meer uit Afrika. Daar ontmoeten de strategische energiebelangen van de VS en China elkaar. China, immers, is ook actief in het diversificeren van de olieherkomst. De grote afhankelijkheid van olie-importen uit het Midden-Oosten baart de regering zorgen. Nieuwe oliestromen worden opgang gebracht uit Centraal-Azië, Afrika en zelfs Zuid-Amerika, waar het weer de VS ontmoet. Ook Japan en Korea maken zich zorgen, hoewel zij blijven geloven dat hun koopkracht een belangrijke aantrekkingskracht zal blijven uitoefenen op olieproducenten. De depreciatie van de dollar en de appreciatie van de Yen en Euro hebben inderdaad de prijsstijging van olie in nationale valuta weten te beperken.



Met de hogere olieprijzen en de toegenomen concurrentie om toegang tot olie en gasbronnen en markten tussen grote consumerende landen als VS, EU, China, Japan, neemt de kans op belangentegenstellingen en conflicten toe.

### **Duurzame toekomst**

De geïntegreerde benadering van energie en klimaatbeleid die in toenemende mate heeft geleid tot het ineen schuiven van de drie onderzoeksthema's van het CIEP (EU elektriciteit en gasmarkt; voorzieningszekerheid, geopolitiek en geo-economie; en duurzame ontwikkeling, zie onder), noopt toch tot extra aandacht voor de duurzame energiesector. Er is al gememoreerd aan de toenemende concurrentie om landbouwgrond als gevolg van de opkomst van eerste generatie biobrandstoffen voor de transportsector. Echter ook in de elektriciteitsopwekking bestaan dilemma's om het aandeel van duurzame energie te verhogen. Het bijstoken vindt voornamelijk plaats in kolencentrales waardoor men voor het dilemma kan komen te staan dat er meer kolencapaciteit nodig is om het aandeel duurzaam te verhogen. Dit terwijl kolen als de meest intensieve uitstoter van CO<sub>2</sub> een grotere bijdrage aan de emissie leveren dan de andere fossiele brandstoffen. Opslag van CO<sub>2</sub> is dan ook nadrukkelijk aan de orde gekomen in de beleidsopties, terwijl deze technologie nog slechts in de kinderschoenen staat. Toch zal er veel inspanning op dit gebied verricht moeten worden omdat China weliswaar steeds meer olieimporteert, maar toch vooral een koleneconomie blijft. Ook nucleaire opwekking van elektriciteit heeft zich in 2007 nog nadrukkelijker op de beleidsagenda geplaatst, ook omdat landen als China, India, Iran zich hiervoor interesseren. Daarmee zijn ook de geopolitieke kwesties weer actueel omdat energieonafhankelijkheid en non-proliferatie een punt zijn geworden van discussie.



### **Personeel**

In het begin van 2007 kwam Jan-Hein Chrisstoffsels het CIEP als onderzoeker versterken. Zijn specialisatie ligt vooral op het gebied van energiebeleid in Azië. Micha Wortelboer nam in 2007 de CIEP administratie ter hand. In het najaar kwam Tom Smeenk als onderzoeker bij het CIEP werken. Hij werkt vooral aan een proefschrift over de strategie van gastransportroutes uit Rusland en Centraal Azië. In het najaar vertrok Christoph

Tönjes, na meer dan 5 jaar CIEP onderzoeker te zijn geweest. Hij werkte vooral aan de gas- en elektriciteitsmarkten in de EU. In 2007 trad Hans Maters terug als CIEP fellow en kwamen Luc Werrink en Dirk Bendorp het CIEP als fellow versterken. Ook het fellowship van Mehdi Parvizi Amineh en Kurt Radtke kwam ten einde.

### **Diversen**

CIEP medewerkers geven jaarlijks zo'n 150 lezingen in binnen- en buitenland. Ook verschijnt een column van Coby van der Linde in EnergieNederland en in de European Energy Review.

Coby van der Linde is verder Hoogleraar Geopolitiek en Energiemanagement aan de Universiteit Groningen en lid van de Algemene Energieraad. Zij is ook lid van de Raad van Advies van Winterhall NL.

Lucia van Geuns is lid van de Raad Aarde en Klimaat van de KNAW en lid van het WEC NL bestuur.



### **Bijlagen**

#### *Betrokken instellingen*

Het in 2001 gestarte Clingendael International Energy Programme (CIEP) is op 1 januari 2005 aan haar tweede project periode begonnen. Deze periode loopt van 2005 tot het eind van 2008. Elf van de twaalf betrokken instellingen van de eerste projectperiode (vanuit het bedrijfsleven; Shell Nederland, Gasunie (eerst ongedeeld, dan Gasunie en Gasterra), NUON, NAM, ING Barings, Vopak Oil Logistics Europe & Middle East B.V., Rotterdamse Havenbedrijf, Energie Beheer Nederland en Oranje-Nassau Groep en vanuit de overheid het ministerie van Economische Zaken en het Ministerie van VROM) blijven het CIEP ook in deze tweede periode ondersteunen. Daarnaast zijn er een aantal nieuwe instellingen betrokken bij het CIEP; uit het bedrijfsleven: Essent, Eneco, Wintershall, Total Nederland, RWE en Ministerie van Buitenlandse Zaken.

#### *Functie*

CIEP doet onderzoek, verzorgt korte opleidingen en vervult een forumfunctie voor overheden, non-gouvernementele organisaties, het bedrijfsleven, de politiek, de academische wereld, de media en andere belanghebbenden in het energiedebat. Door het verrichten van onderzoek, het geven van publieksvoortlichting en het verzorgen van

opleidingen en lezingen levert het CIEP een structurele bijdrage aan de maatschappelijke discussie over de internationale politieke en economische ontwikkelingen in de energiesector (olie, gas, duurzame energiebronnen en elektriciteit). Energie speelt een zeer belangrijke rol in de internationale politiek en diplomatie. De energievoorziening is van strategisch belang voor zowel consumerende als producerende landen en heeft in het verleden herhaaldelijk geleid tot internationale spanningen. Tevens heeft CIEP een functie als kenniscentrum. Het onderzoek en de activiteiten van CIEP concentreren zich rond drie thema's.

### Onderzoeksthema's 2<sup>e</sup> periode

A. *regulering (liberalisering en privatisering) van energemarkten binnen de Europese Unie, ih.b. de EU gas- en elektriciteitsmarkt.* De liberalisering van deze markten is al enige tijd gaande maar nog niet afgerond. Het marktontwerp is nog steeds onderwerp van intense discussies tussen de lidstaten. De schepping van een vrije Europese energemarkt roept vragen op over de soort en mate van concurrentie in de EU markt, de aansluiting met de structuur van andere markten en het reguleringsregime in producerende landen en ook steeds meer de relatie met lange termijn vraagstukken als voorzieningszekerheid en klimaat. Onder dit thema wordt ook onderzoek gedaan naar prijsvorming op internationale gasmarkten en de concurrentiekracht van de EU ten opzichte van Azië en VS om nieuwe gasstromen aan te trekken.

B. *de internationale economische en geopolitieke context van de olie- en gasmarkten, met bijzondere nadruk op de voorzieningszekerheid van energie van de Europese Unie.* Uitgangspunt bij dit thema is de sterk toenemende energie importafhankelijkheid van de Europese Unie. Tegelijkertijd zal het (olie e gas) aanbod op de internationale markten steeds meer afkomstig zijn uit een beperkt aantal landen. Ook andere (economische) grootmachten als de V.S., Japan en China worden met gelijke problemen geconfronteerd. Dit maakt toenemende concurrentie tussen consumerende landen en/of regio's waarschijnlijk. Daarnaast bestaat er zorg over de politieke stabiliteit van een aantal exporterende landen van olie en gas en baart ook het investeringsklimaat in een aantal landen zorgen. Deze ontwikkelingen hebben ertoe geleid, dat in consumerende landen energie voorzieningszekerheid weer hoog staat op de politieke agenda. Centraal staat dan ook de vraag welke politieke en economische ontwikkelingen bedreigend zijn voor de energiezekerheid van de Unie en met welk beleid de voorzieningszekerheid

van de EU kan worden geoptimaliseerd. Hier ligt ook een verbinding naar thema A, de regulering van de EU energiemarkt. De ontwikkelingen omtrent het Europese energiebeleid worden nauwlettend geanalyseerd. Binnen dit thema wordt er ook studie gedaan naar het beleid van specifieke producerende en consumerende landen (zoals China, Rusland en Iran) en regio's (Kaspische Zee). CIEP neemt ook deel aan het Clingendael-brede Azië project waarin het CIEP de energiecomponent van het project voor haar rekening neemt. De sterke groei in olieconsumptie in Noordoost-Azië staat centraal in een studie samen met het IIAS, die tot in 2007 doorloopt. Het CIEP zal zich met name concentreren op de betekenis van de actievere rol van landen als China in het zeker stellen van energievoorraden voor de olie- en gasmarkt en opkomende producerende landen in Centraal-Azië en Afrika, waarbij het accent ligt op de geopolitieke betekenis van deze regio's voor de internationale energemarkten, en op veiligheid. Ook de rol van Rusland staat in dit project centraal, terwijl de Russische gasindustrie ook nauw gevolgd wordt vanuit thema A.

C. Het *derde onderzoeksthema richt zich op de relatie tussen energie en duurzame ontwikkeling.* De belangrijkste onderwerpen binnen dit thema zijn klimaatverandering en ontwikkelingsvraagstukken in minerale economieën, hoewel ook aandacht wordt besteed aan innovatie, energie-armoede, (sociaal) verantwoord ondernemerschap en internationaal energie en klimaatbeleid. De onderwerpen hebben sterke correlaties met onderwerpen uit de andere twee thema's. Het succes van het beleid t.a.v. klimaatverandering is afhankelijk van een tweetal factoren. Ten eerste, of nieuwe technologie succesvol kan worden geïmplementeerd (innovatie) en ten tweede, of de internationale gemeenschap zal slagen in het ontwikkelen van een gezamenlijk en coherent klimaatbeleid. De CO<sub>2</sub>-emissies in de wereld zullen naar verwachting stijgen, wat bij een ongewijzigd beleid ingrijpende consequenties heeft. Hoewel de opbouw van CO<sub>2</sub> in de atmosfeer voor een groot deel voor de rekening komt van de ontwikkelde landen, zullen snel groeiende economieën van landen met een grote bevolking, zoals China, India en Brazilië, de bulk van de emissies veroorzaken in de toekomst. In dit licht bezien, kunnen klimaatsverandering, internationale betrekkingen, innovatiebeleid, economische groei in ontwikkelingslanden en de reductie van energiearmoede in de wereld niet los van elkaar worden gezien.



### Appendix 3: 2007 external lectures by CIEP Staff

14 December 2007 NUON Coby van der Linde, Amsterdam	15 November 2007 Olie is het allemaal Lucia van Geuns, debate in ‘de Balie’, Amsterdam
13 December 2007 The role of the Regulator, perspectives in the EU market Jacques de Jong, E&Y, Dusseldorf	12 November 2007 Main Issues about Establishing an Effective Regulator; Outlook to the Future of European Energy Regulation Jacques de Jong, Energy training programme South-East Europe, Ljubljana,
12 December 2007 The Power of Russian Gas, Jacques de Jong, Jacobs Energy Conference, Bremen	5 November 2007 Energy Politics Lucia van Geuns, course CIRED, Paris
11 December 2007 Splitsing energiebedrijven, <i>omgaan met de gordiaanse knoop na 20 jaar geharrewar</i> Jacques de Jong, EZ, The Hague	25 October 2007 IGU Conference Coby van der Linde, St. Petersburg
17 December 2007 World energy resources: Geopolitical challenges Lucia van Geuns, Belgium Defence College, Brussels	25 October 2007 The EU Internal Gas Market; restructuring, performance & application Jacques de Jong, Paneldiscussie Nederland Piek, Groningen
30 November 2007 Energie en Europa Lucia van Geuns, KNAG onderwijsconferentie, Tilburg	20 October 2007 Olie op de polen Lucia van Geuns, debat Festival Scientific ’07, Amsterdam
27 November 2007 World Climate Conference Coby van der Linde, Rotterdam	17 October 2007 Regulating the Dutch power market Jacques de Jong, Vietnamese Regulatory agency, The Hague
23 November 2007 Diversification and Investment Strategies for Gazprom Tom Smeenk, European Doctoral Seminar on Natural Gas, Moscow	16 October 2007 EDI Lustrum Coby van der Linde, The Hague
21 November 2007 National Energy Forum Coby van der Linde, Amsterdam	12 October 2007 University Nijmegen Coby van der Linde, Nijmegen
21 November 2007 International Energy Markets Lucia van Geuns, GoGreen event HHS, The Hague	12 October 2007 Developments in the international energy markets Lucia van Geuns, TU Delft course ‘Offshore engineering’, Delft
20 November 2007 Energy Delta Convention Coby van der Linde, Groningen	9-10 October 2007 Energy and Geopolitics Lucia van Geuns , Shell learning event, Aberdeen
20 November 2007 CSP Impact Event Coby van der Linde, Groningen	3 October 2007 Transitie naar duurzame energie Lucia van Geuns, NUON Seminar, Nyenrode

- 2 October 2007  
Utrechtse Vredesdagen  
Coby van der Linde, Utrecht
- 27 September 2007  
Efact Congress  
Coby van der Linde, Tilburg
- 26 September 2007  
Energy and the Middle East  
Lucia van Geuns, Panel Min of Foreign Affairs event, The Hague
- 25 September 2007  
A stable future for clean coal investments?  
Stephan Slingerland  
Panel session, European Clean Coal Conference – “Optimizing the generation mix”, Berlin
- 25 September 2007  
Energy Markets  
Lucia van Geuns, Master Energy and Environment Law, Catholic University of Leuven, Leuven, Belgium
- 18-21 September, 11 October 2007  
“The EU Internal Gas Market, restructuring, performance & application”; “The EU Model & the German Electricity Market”  
Jacques de Jong, Training Course Regulating Energy (Inogate, EU), Kiev
- 21-22 September 2007  
Security of Energy Supply in East-Asia  
Jan-Hein Chrisstoffels, International energy conference, Brussels.
- 21 September 2007  
Energy & sustainability: universal access issues  
Jacques de Jong, FSR Workshop on Energy & Sustainability
- 21 September 2007  
Eurogas Annual Conference  
Coby van der Linde, Brussels
- 13 September 2007  
Energy 2020 Conference  
Coby van der Linde, Austria
- 6 September 2007  
MGPB Petroleum Masters  
Coby van der Linde, Delft
- 25 July 2007  
“Restructuring the power industry”; “Regulation & Energy Supply Security”; “2007 EU energy policy”  
Jacques de Jong, 2007 ERRA Summer School, Budapest
- 12 July 2007  
EU Energy and security issues  
Jacques de Jong, E-control Journalisten seminar, Loisium-Langenlois, Austria
- 11 July 2007  
EU energy policy  
Jacques de Jong, Intensive seminar EU, Brugge, Belgium
- 25 June 2007  
Summerschool Masterclass Energy Delta Institute  
Coby van der Linde, Groningen
- 21 June 2007  
Lange termijn visie op de markt van fossiele brandstoffen  
Lucia van Geuns, Electrabel Seminar ‘De brandstofmix van de toekomst’, Amsterdam
- 18-20 June 2007  
“The Third EU package for the Internal Energy Market”; “Liberalisation in EU Energy Markets”  
Jacques de Jong, Third Erra Training for new Commissioners, Budapest
- 14 June 2007  
Geopolitics of energy  
Lucia van Geuns, CtdD symposium “The Rising Power of China”, Nyenrode
- 6 June 2007  
Energy Markets, Regulation & Competition  
Jacques de Jong, lecture at TU Delft
- 6 June 2007  
Developments on the International Energy Scene  
Lucia van Geuns, AiChE Colloquium “Future Sources of Energy”, The Hague
- 31 May 2007  
Internationale energie veiligheid  
Lucia van Geuns, D66 Platform Internationale Veiligheid, The Hague
- 29 May 2007  
Twenty Years in European Energy Law: retrospective and future  
Jacques de Jong, 20th European Energy Law Seminar, Noordwijk
- 24 May 2007  
Energy Security and International Relations Forum  
Coby van der Linde, Berlin
- 21 May 2007  
European Foreign and Security Policy  
Lucia van Geuns, Panel Journalist Seminar, Brussels

25 April 2007

Energy for a changing world – EU's Energy Policy  
Lucia van Geuns, Royal Netherlands Embassy,  
Beijing (China)

23 April 2007

Kyoto, Lissabon of Moskou ?  
Jacques de Jong, Klimaat – en energiebeleid na de  
Europese Raad; Clingendael

18 April 2007

Energy for a changing world – EU's Energy Policy  
Lucia van Geuns, workshop Center of China's  
Transitional Relations (CCTR), Hong Kong

18 April 2007

EU Russia energy relations  
Susann Handke, workshop at Center on China's  
Transnational Relations (CCTR), Hong Kong

22 March 2007

The geopolitics of bioenergy  
Stephan Slingerland, Workshop "Bioenergy and the  
Bioeconomy", Cambridge

14 March 2007

Ontwikkelingen op de internationale oliemarkt  
Lucia van Geuns, NUON Seminar, Nyenrode

14 February 2007

Ontwikkelingen op de internationale oliemarkt  
Lucia van Geuns, NUON Seminar, Nyenrode

8 February 2007

Transatlantische Commissie Onderwijsdag  
Coby van der Linde, Utrecht

29 January 2007

Three aspects of energy supply security  
Jacques de Jong, EU Strategic Energy Review,  
Brussels

25 January 2007

European Investment Bank  
Coby van der Linde, Luxemburg

19/21 January 2007

Global energy issues and dilemmas  
Jacques de Jong, Energie & Sicherheit in und für  
Europa, Evangelische Akademie Loccum;

15-16 January 2007

Competition versus supply security in gas  
Jacques de Jong, The Economics of Energy  
Markets, Toulouse

**Appendix 4:  
Energy lectures by CIEP staff for Clingendael courses**

12 December 2007 Cursus Internationale politiek Lucia van Geuns	29 March 2007 Leergang ZO Europa LZOD Christoph Tönjes
13 November 2007 Cursus Internationale politiek Lucia van Geuns	8 March 2007 Diplomates Asean countries Susann Handke
30 October 2007 Cursus Internationale politiek Lucia van Geuns; Jan-Hein Chrisstoffels	15 February 2007 Diplomates Iraq Lucia van Geuns, Jacques de Jong, Susan Handke
18 October 2007 Cursus EU commissie ambtenaren Jacques de Jong	30 January 2007 Leergang Nieuwe Lidstaten (LNL) Christoph Tönjes
18 October 2007 Leergang Buitenlandse Betrekkingen Lucia van Geuns	
17 October 2007 Cursus Internationale veiligheid Lucia van Geuns	
5 October 2007 Hogere Defensie Vorming Christoph Tönjes, Jan-Hein Chrisstoffels	
4 October 2007 Cursus Europe for Students Lucia van Geuns, Jacques de Jong	
3 - 7 October 2007 (2 days) Cursus Chinese Diplomates Lucia van Geuns, Stephan Slingerland and Susann Handke	
3 October 2007 Leergang Oost-Europese Diplomaten (LOD) Christoph Tönjes, Syijn van den Heuvel	
14, 27 February, 25 September, 2 October 2007 Leergang Topmanagement Defensie Coby van der Linde	
25 May 2007 Leergang Centraal-Aziaten (LCA) Coby van der Linde, Susann Handke	
9 May 2007 Diplomates Pakistan en Bangladesh Christoph Tönjes	
3 April 2007 Diplomates Indonesia Lucia van Geuns, Susann Handke	

